TWINLEAF NEWSLETTER

WINTER 2017 | VOLUME 24, ISSUE 4



Restoring Founders' Pond, A Gem in Our Landscape

Founders' Pond, one of the Preserve's most notable and beloved features, is undergoing extensive restoration measures. The pond, which lies at the intersection of the Fern and Gentian Trails, was initially developed in 1950; a small dam diverted water to the pond from a Pidcock Creek tributary, creating water flow. When the dam failed several years ago, it was removed. "With the loss of water flow and years of silt deposition during flood events, the pond became unsuitable as a functioning aquatic plant community," explains Miles Arnott, Executive Director. Preserve staff, Naturalists and other experts agreed that the pond should be restored to serve the flora and fauna that called it home for so long.

The restoration began in mid-August, when Rick Fonda, Grounds Manager and a group of volunteers began the painstaking process of revitalizing Founders' Pond. "When digging started in August, we had already rescued plants likely to be disrupted by the work and relocated them to the Nursery," says Rick.

After three grueling 10-hour days, about 80 cubic yards of heavy clay fill was removed from the pond. The formerly shallow depression is now about five feet deep at its max.

"I have to confess I was surprised at the volume," continues Rick. "I now realize that the pond was intended to be much deeper than I've ever known it to be in my four years here." The increased depth will contribute

to a cooler water temperature and greater dissolved oxygen content, resulting in a more diverse and resilient habitat.

The next phase of this project includes repairing damage to the trails around Founders' Pond (inevitable due to the heavy equipment traffic during the digging) and replanting the pond edge itself. When complete, Founders' Pond will be a testament to the continued commitment of Preserve staff and volunteers to our mission.

Thank you to T.J. Francisco, Tom Francisco, Chris Holzner, Jim Newbold, Steve Swanson and Les Swartley for their devotion to this project. Special thanks to Mt. Lake Pool and Patio of Doylestown, PA, for lending muchneeded earth moving equipment.

Bowman's Hill Wildflower Preserve

Twinleaf Newsletter

Published 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: bhwp.org Email: bhwp@bhwp.org

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

Visitor Center &

Twinleaf Book & Gift Shop Open Tuesday through Sunday, 9 am – 5 pm Open Memorial Day and Labor Day Closed Thanksgiving Day and Christmas Eve through January 1.

Admission

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

Staff

A. Miles Arnott, Executive Director Jessica Federman, Communications Coordinator Jake Fitzpatrick, Nursery Manager Rick Fonda, Grounds Manager Amy J. Goldstein, Membership Coordinator Susan Harrington, Administrative Assistant Kelly Joslin, Education Coordinator Jason Ksepka, Curator Jo Ann Mitidieri, Visitor Services Coordinator Regina Moriarty, Volunteer Coordinator Sue Owens, Bookkeeper Scott Sharff, Development Assistant Maggie Strucker, Pocket Habitat Coordinator Kellie A. Westervelt, Development Director

Mission

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 non-profit Bowman's Hill Wildflower Preserve Association, Inc., in cooperation with the Pennsylvania Department of Conservation and Natural Resources. 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

Nature is embraced by a rejuvenating silence during the winter. Trees have shed their leaves; perennial plants have sequestered the last of their sugars and nutrients down to their roots. Overwintering birds focus on foraging for seeds and berries while striving to conserve energy until the warmth of spring returns. A walk through the Preserve in winter is a peaceful and reflective endeavor. It is a chance to see the Preserve in a different light and to experience nature's tranquil beauty.

While it is quiet, cold and snow-covered outside, the Preserve's staff and volunteers are busy and bustling inside; the fires of planning, programming and creativity burn brightly in our Visitor Center.

Our popular Winter Lecture Series offers exciting topics and informative, engaging speakers for eight Sundays in January and February. The Land Ethics Symposium, scheduled for March 15, 2018 and held in partnership with Delaware Valley University, is an excellent opportunity for professionals and novices alike to learn more about what our peers are doing to inspire action and change behavior in order to be better stewards of the Earth.

When you visit the Preserve on any winter day, you are likely to find a Naturalist training session, as we teach a new group of curious minds about ecology, botany and the Preserve's rich history. You may come upon a meeting of the volunteer Gala Committee as they plan our biggest fundraiser of the year. You may find groups of staff and volunteers working on a variety of different projects—from the Native Plants in the Landscape Conference (at Millersville University in June) to branding, which helps us focus our message about the Preserve's mission. You may even happen to stop in on a day when the Board of Trustees is meeting to help guide our organization and oversee the progress of our ambitious strategic plan.

On the off-chance that you visit the Preserve on a day when there are no meetings in the Visitor Center, you will find the staff hard at work preparing for programs, writing grants, creating communications or sowing seeds in preparation for the burst of visitation and growth to come in the spring. You will find volunteers working in the greenhouses tending to new plants that will make their way to gardens in our area as part of natural communities that support healthy native plant habitats.

Your support as members, volunteers and donors is heartwarming—even on the coldest and darkest winter day. I encourage you to visit this winter for a restorative and mindful walk along our trails and to warm yourself by the glow of positive energy created by the staff and volunteers in the Visitor Center, who are working hard to make 2018 our best year yet.

Miles Arnott, Executive Director



Students Create a Pocket Habitat *Native plants find a new home at Christ the King Regional School.*

"Southern New Jersey has always been another world to me," says Maggie Strucker, the Preserve's Pocket Habitat coordinator. Traveling nearly 50 miles on the highway, past numerous stores and strip malls, she was not sure what to expect when she arrived at the site of the small school in Haddonfield. "I came upon a lovely little town," she remembers. "I was delighted to see a tree-lined neighborhood of charming houses and parks."

When she reached her destination, Christ the King Regional School, Maggie found an oasis of outdoor learning: carefully tended raised garden beds, a small orchard and the sunny site that might be a Pocket Habitat location. She was greeted by the STEM (Science, Technology, Engineering and Math) teacher John Emmons, who, along with support from the principal, faculty and staff,



was the hands-on visionary for this outdoor classroom. "It is always rewarding to meet that special teacher who realizes the value of learning outside of the classroom. His efforts were evident in the enthusiasm of the students I encountered while working with this school on planting day," recalls Maggie.

The proposed Pocket Habitat site needed work to remove brushy invasives and to prepare the soil for a new, thriving native plant garden. In the weeks that followed her first visit to the school, John and his students cleared the site (which was no small task), brought in quality soil and tilled the area to prepare for planting day. When that October day arrived, with the help of Preserve volunteers Bruce Beans and John Kopcha, the students cheerfully laid the paths, mulched the beds and carefully planted over 100 native plants.

"I have no doubt that this garden will have a bright future with the commitment and care of the teachers and staff of this school," says Maggie. "I also have no doubt that these lucky students will take what they have learned from their outdoor classroom and contribute their knowledge to benefit generations to come."

This program aims to replicate small meadows and other natural habitats in schoolyards and various public spaces throughout the region. It is in this living classroom, the Pocket Habitat, rather than inside four walls, that the greatest lessons can be found. To learn more about this unique Preserve program, visit bhwp. org/learn/into-the-community.

Land Ethics Award Call for Nominations



LEARN 🛁

The Preserve's Land Ethics Award honors and recognizes individuals, organizations, government agencies, community groups and business professionals who have made significant contributions to the promotion of native plants and have exhibited strong land ethics while promoting sustainable designs that protect the environment.

Nominees may be private individuals, businesses and design professionals, including landscape architects and site engineers, conservation and preservation organizations and local, state and federal agencies involved with environmental protection. School groups may also be nominated for relevant team projects. To download a nomination form and to read more about the Land Ethics Award and past recipients, visit http://bit.ly/BHWP-LEAward.



Continuing a Tradition of Education

The Preserve's forests, woodlands and meadows provide educational opportunities for local school children, respite for families, and refuge for nature. With your support, the Preserve will continue its 83-year tradition of service as an outstanding native plant education and preservation resource.

Please consider a gift to the Preserve's Annual Fund today. Your support sustains us—our living collection, educational programs and native plant nursery. We can't do it without you! **To contribute to the 2017 Annual Fund, visit bhwp.org/item/support-the-annual-fund.**





At the end of the year, flowers no longer bloom; leaves change color and fall from above. It may appear the plants are "done" for the season; however, their work is just beginning. "The transformation from flower to seed ushers in a new phase of the plant's life cycle," says Jason Ksepka, Preserve Curator.





Warm Up to Winter

The Preserve is spectacular during all seasons. There is so much to discover when the leaves have fallen; so much that is often hidden during the warmer months. Outside, delight your senses during the winter. Notice the texture of the trees or the scent of the disintegrating leaves in the crisp, cool air. Inside, enjoy the flurry of activity in the Preserve's Bird Observatory or learn something new about nature during the popular Winter Lecture Series in January and February. There is always something to explore here.

Gifts From Nature



HOLIDAY GIFT MEMBERSHIP SPECIAL

Give the Gift of Nature to a new Member - and save 25%.





Discover the assortment of

items perfect for nature lovers of all ages. Members save 10% on Shop merchandise.

WINTER LECTURE SERIES

Purchase a punch card that grants admission to each of this year's exciting talks and save 20% on the full series.

Preserve Explorers: Flower-to-Tower Hike

On a balmy Sunday morning in October, our members donned their most rugged footwear for a Naturalist-guided hike from the Preserve to Bowman's Hill Tower. Donna Shumpert, Volunteer Naturalist, pointed out a variety of autumn flowering plants and the many seeds that local wildlife enjoy during the colorful fall season. Surrounded by the sounds of the birds and rustling leaves, our travelers enjoyed refreshments at the end of the hike. "It was wonderful to hear our members talk about the upcoming Owl Prowl and other Preserve happenings," says Amy Goldstein, Membership Coordinator.

If you are interested in participating in an event like this during the winter, please contact Amy at membership@bhwp.org.



Recommended at the Twinleaf Book & Gift Shop

This season, take a brisk walk on the Preserve trails and plan your spring garden. Imagine the birds and pollinators you want to attract to your garden, too. Before you leave, visit the Twinleaf Book & Gift Shop to warm up; browse our large selection of books to help you realize those plans. "Our staff and Naturalists selected these titles to inspire you and to help you create a native garden that wildlife will love," says Jo Ann Mitidieri, Visitor Services Coordinator.

The Humane Gardener: Nurturing a Backyard Habitat for Wildlife by Nancy Lawson

The detailed chapters in The Humane Gardener address planting for wildlife by choosing native species; providing habitats that shelter baby animals, as well as birds, bees, and butterflies; creating safe zones in the garden; cohabiting with creatures often regarded as pests; letting nature be your garden designer; and encouraging natural processes and evolution in the garden.

Gardening for the Birds: How to Create a Bird-Friendly Backyard by George Adams

You may already have a bird feeder in your yard, but you can attract a wider range of species—and they will stay longer—if you create a bird-friendly landscape. Gardening for the Birds shows you how to do just that.



With the right mix of native plants, arranged to mimic natural ecosystems, you will provide birds with food, water, shelter and nesting places. Instead of just visiting your garden to snack, birds will call your garden home. With hundreds of native plants, extensive seasonal bloom and fruiting charts and suggested techniques for creating a balanced ecosystem, this book helps you turn any space into a haven for a fascinating variety of birds.





The Twinleaf Book & Gift Shop offers a unique collection of nature-themed gifts, t-shirts and books for all ages. All proceeds from the Shop are used to further the Preserve's mission. Preserve Members receive 10% off regularly priced merchandise all year long.



Eagle Scout Member Enhances Preserve Exploration

As part of his Eagle Scout project, Preserve Member Sam Stanell has replaced the stairs from the Azalea Trail to the Pidcock Creek dam. The old wooden steps were rotting and unsteady due to tree roots. Sam raised money for all project materials and organized weekend work crews this fall. Together, Sam and his team added steps, set them level and packed stone grit between them. "Thanks to their hard work, the Preserve now has new steps with an improved, safer design," says Rick Fonda, Grounds Manager.



NATURE ADVENTURE SUMMER CAMP

Tuesday, July 24 – Friday, July 27, 2018 10 am – 3 pm Ages 9 – 12 Members: \$175*; Non-members: \$195*

We are thrilled to partner with Delaware River Canal State Park to offer a camp full of adventures in nature. Budding young scientists will explore the marvels of nature. They will play amidst more than 100 acres of ponds, meadow and forests while learning about birds, ecology and the natural and cultural history of our region. Campers will also learn to orienteer, geocache and kayak on the Delaware Canal. Registration opens January 9, 2018.

*A \$75 deposit will hold your registration and full balance is due three weeks before camp begins.



The Next Step in Growing Local

The Native Plant Nursery is growing! Before the end of the year, the Preserve's new 16' x 25' propagation greenhouse will be ready for use. "This expansion is a step forward in our efforts to grow as many local provenance plant species as possible," says Jake Fitzpatrick, Nursery Manager. "Our new space will accommodate special propagation practices—such as cuttings and expand the number of local species we propagate on-site."

This construction project, funded with a grant from Pennsylvania Department of Community and Economic Development Greenways, is spearheaded by previous Nursery Manager, Robert Mahler, propagation volunteer Jeffrey A. Buckwalter and a dedicated team of propagation and DIY volunteers. "We are so lucky to have a great group of volunteers with the wits and wherewithal to make this project a success," adds Jake.



Curator's Notebook

This time of year, many people are preparing their gardens for the winter lull. "Autumn is my busiest time of year," explains Jason Ksepka, Preserve Curator. "Now is the time to collect seed of new material for the Preserve." Read Jason's accounts of collecting seeds for the Preserve this season.

THE SEARCH FOR FIREWEED



A close friend of mine, Steve Covacci, brought to my attention that the beautiful fireweed (Chamerion angustifolium), formerly Epilobium angustifolium, has all but disappeared from our area. Further north, this plant is still common and has a circumboreal range across the northern latitudes of North America, Europe, Russia and more. After contacting several botanists, we found that there is only one known location of this plant in Pennsylvania and none in New Jersey. With some research and perseverance, though, Steve found three more locations in Pennsylvania; we recently

visited two of them together. During our trip, we spoke with a local landowner who explained that the deer are the main reason that fireweed is disappearing. His fireweed is behind a fence on his property, which protects the plants. He generously shared seeds from his garden, which I am excited to grow at the Preserve and in the surrounding area in the coming year.

SAVING THE BUTTERNUT

Butternut (*Juglans cinerea*) is a close relative of the familiar black walnut (*Juglans nigra*). Unlike the walnut, the butternut is not common in our forests. It is an attractive tree with delicious nuts that are eagerly eaten by people and wildlife. Many species of insects are able to feed on this tree, as well. Unfortunately, there is an invasive fungal disease, native to Asia, called butternut canker (*Sirococcus clavigignenti-juglandacearum*) that is killing off the butternut trees. Because



of my personal interest in this species, and because it is not currently present at the Preserve, I have decided to locate more trees and grow out as many seedlings as possible, with the help of partners. With enough trees growing, they may, perhaps, develop a natural resistance to the fungus and remain in our forests for years to come. To that end, I have gathered about 50 pounds of nuts from a tree in New Jersey and three Pennsylvania sources. I hope to have captured an acceptable genetic diversity to produce strong seedlings to plant out – and that a few of them can resist the canker.

WORKING TOGETHER TO PRESERVE RARE SPECIES



Some of the more interesting collections made this year would not have been possible without collaborations with landowners, friends and agencies. For example, redring milkweed (*Asclepias variegata*) is exceptionally rare in Pennsylvania; a local source provided seed from this plant. Tim Draude donated seed

of shooting star (Primula amethystina, formerly Dodecatheon amethystinum) from what may be the only population of this plant in Pennsylvania. This species is so elegant; it will be exciting to see it growing at the Preserve. Pennsylvania Department of Conservation and Natural Resources (PA DCNR) donated seed from the rare northern nodding trillium (Trillium cernuum) from one of its properties. While this species will take a long time to establish at the Preserve, we look forward to seeing it in bloom years from now. We also added more specimens of northern prickly ash (*Zanthoxylem americanum*) to the collection in order to increase the presence of this species in the region. This will help to solidly establish the uncommon and beautiful giant swallowtail (*Papilio cresphontes*) butterfly, as its caterpillars feed on the leaves of this species and those of wafer-ash (Ptelea trifoliate).

GROW



Shooting star (Primula amethystina) formerly Dodecatheon amethystinum





Volunteer Voice: Lynn Holzner

"My husband, Chris, and I had driven by the Preserve for many years, always on the way to or from somewhere else. One day, the meadow just looked so inviting that we stopped in and realized immediately what a special place this is," remembers volunteer Lvnn Holzner.



For almost four years, Lynn has been one of the friendly faces to greet visitors in the Twinleaf Book & Gift Shop; she also participates in special events like the plant sales and deer drives. "In 2016, I joined the Spring Wildflower Gala Committee. This past year, I became the point person for the gala's Auction Committee. I'm looking forward to leading the Auction Committee again for the 2018 gala." For Lynn, the staff, volunteers and visitors enhance her experience as a volunteer at the Preserve. "The people here are just plain nice!"

The beauty of the Preserve continues to captivate her. In the spring, she especially enjoys seeing the Virginia bluebells in bloom. Ferns, particularly sensitive ferns, are her favorite plants; that's why she loves the Fern Trail. "It is so peaceful and quiet. I always get a feeling of being 'away from it all' whenever I walk it," Lynn explains. "The Marsh marigold Trail is a favorite of mine, too. It's where the first signs of spring appear, like skunk cabbage, spring beauty and trillium. They are a welcome sight after the cold dreariness of winter."

Every visitor, volunteer and staff member finds a place on the property that is particularly special for them. For Lynn, this spot is Founders' Pond. "A couple of years

ago, after there had been a lot of rain, Chris and I were thrilled to see dozens of frog eggs floating on the surface of the pond. The surrounding vegetation was lovely and lush, too. Between the eggs and the plants there was a very primordial feel to the pond that was enchanting." And since learning more about the importance of native plants through their involvement with the Preserve, Lynn and her husband have transitioned about 25 percent of their lawn to native plant areas, including planting a small meadow.

Being a part of the Preserve community has changed Lynn's life. She appreciates how it changes life for others, too. "One day a woman, obviously dressed for work, rushed in and almost immediately said, 'I want to join!" Lynn recounts. "She told me she had driven by many, many times; but this day, she decided to stop. After parking at the lower parking lot, she was so struck by the beauty of the walk up to the Visitor Center that, by the time she arrived, she knew she wanted to be a member. It's hard not to be inspired by a place that so instantly inspires others." This sounds like a familiar story.

Welcome Kellie Westervelt, the Preserve's New Development Director

Welcome to Kellie Westervelt, who joins the Bowman's Hill Wildflower Preserve team as Development Director. With over 25 years of experience in the non-profit sector, Kellie has worked on local, regional, national and international scales for organizations focused on biodiversity conservation. Her experience ranges from organizational development, fundraising, and strategic planning to natural resource management and ecological restoration. She began her career with the Florida Park Service and later joined the American Littoral Society to oversee the Cape Florida Project, an ecological restoration of a coastal park leveled during Hurricane Andrew. She has since served as Habitat Director for the Delaware Estuary Program, Development Director for The Wildlands Network, and Executive Director for the Florida Native Plant Society.

Kellie has served on numerous boards including the Society for Ecological Restoration International and the Environmental Fund for Florida. Some of her publications include educational curricula such as Plant-A-Seed, reference materials such as A Guide to the Natural Communities of the Delaware Estuary, and more recently "From Adversity to Diversity," a chapter on Cape Florida's restoration published in The Human Dimensions of Ecological Restoration by Island Press.

"I look forward to working with the Preserve's staff, leadership, volunteers and members to grow our support and advance our mission," says Kellie of her new role. Originally from the Philadelphia area, Kellie is thrilled to be back. "It feels like I've come full circle. It's great to be home."



Bowman's Hill Wildflower Preserve Gala Celebrates Its 15th Year



Top row, left to right: Jacqui Griffith, Julia Klossner, Tricia Reines, Heather Lovell, Donna Lacey, Sally Henriques, Steve Swanson. Bottom row, left to right: Lynn Holzner, Betsy Falconi, Trisha Ritter, Dot Gaboda, Jane Yeuroukis, Gillian Brindley (Gala Co-Chair), Sandy Weisbrot (Gala Co-Chair), Sue Eveland. Not shown: Deborah Agnew, Dee Bowman, Allison Hamilton, Alison Hargreaves, Pat Ludwig, Bill McDowell, Sue Shaffer, Francine Verwiel, Susan Vigilante.

The Bowman's Hill Wildflower Preserve's 15th annual Spring Wildflower Gala, a black tie and muck boots event, will take place on Saturday, April 28, 2018.

The gala, a celebration of spring, offers guests the opportunity to explore the stunning spring wildflower beauty of the Preserve with an intimate evening woodland walk along the trails. This premier event will feature a gourmet menu of spring-themed ingredients, as well as spirited live and silent auctions.

This year's gala theme is "Protecting the Gem," which highlights the need to rebuild and replace critical sections of the Preserve's deer exclusion fence. The Preserve is able to grow and display a wonderful diversity of over 700 species of native plants because of a ten-foot high deer fence that encloses most of the Preserve's property. The fence is the Preserve's only defense against the herds of deer that seek to invade and devour the living collection of native plants. The deer fence was first installed in 1993, but the ravages of time and nature have taken their toll, and this perimeter protection is now compromised. The funds raised at this year's Gala will be used to rebuild and repair the fence, so that the priceless collection of native plants will be preserved for future generations to learn from and enjoy.

Miles Arnott, Executive Director, explains, "While it is certainly true that Bucks County deer are a famous part of our natural landscape, it remains the Preserve's mission to protect the extraordinary native plant population on our 134 acres as a showcase for the diversity of our region's flora, and as a testament to future generations of our commitment to the ethical management of otherwise wild, unblemished land."

Sandy Weisbrot, Gala Co-Chair, adds, "This year's theme says it all: 'Protecting the Gem.' Anyone who has ever planted anything understands the damage deer can do! It is critical that the Preserve is able to protect the area's native plants."

loop trail for visitors.



The Annual Spring Wildflower Gala features woodland walk, cocktails, gourmet dinner, music, auction and dancing.

The gala is the organization's largest fundraiser, raising almost \$150,000 at last year's event. The funds from last year's event are being used to transform a 20-acre area at the corner of River Road and Aquetong Road from woods to a meadow. That area of the Preserve, which was extensively damaged by a microburst storm in the summer of 2016, will be populated with pollinator-friendly native plants, creating an important habitat for a variety of wildlife species. The revitalized portion of the Preserve, which will be called Aquetong Meadow, will also feature a new

This year's gala is co-chaired by Gillian Brindley and Sandy Weisbrot with the support of Committee members and the Preserve staff. Committee members include Deborah Agnew, Dee Bowman, Sue Eveland, Betsy Falconi, Dot Gaboda, Jacqui Griffith, Allison Hamilton, Alison Hargreaves, Sally Henriques, Lynn Holzner, Julia Klossner, Donna Lacey, Heather Lovell, Pat Ludwig, Bill MacDowell, Tricia Reines, Trisha Ritter, Sue Shaffer, Steve Swanson, Francine Verwiel, Susan Vigilante, and Jane Yeuroukis.

Tickets for the Spring Wildflower Gala will be available in March. Please contact Development Director Kellie Westervelt at 215.862.2924 ext. 105 or development@ bhwp.org for more information on attending, sponsoring or donating auction items to this event.



Spruce Up for Spring: Earth Day Work Day

Our annual Earth Day Celebration will be held on Saturday, April 7, 2018, from 9 am – 1 pm.

This event features important hands-on activities that spruce up the Preserve in preparation for nature's extravagant spring display. The day will begin with hot coffee and project registration; then, we will head out onto the property and get to work. Your shift will end with a delicious lunch and great conversation about the morning's accomplishments.

The Preserve's Earth Day projects are suitable for groups, families and individuals. Contact Volunteer Coordinator Regina Moriarty at 215.862.2924 ext. 110 or volunteers@bhwp.org for more information or to register.

CALENDAR

Winter Lecture Series

Every Sunday in January and February; 2 – 3 pm

Members: \$8 per lecture; Non-members: \$12 per lecture

Pre-registration is strongly encouraged. Walk-ins welcome as space permits.

Seating for all lectures is general admission; please arrive early to get the seat of your choice.



THE HUMANE GARDENER: CULTIVATING **COMPASSION FOR ALL CREATURES Speaker: Nancy Lawson** Book signing to follow

Why do we call some insects "beneficial" while others are "pests"? Why are some plants considered "desirable" while others are "weeds"? In this myth-busting talk, learn how common growing methods divide the natural world into false dichotomies and perpetuate misperceptions about the wild species living among us. Discover practical ways to put humane gardening philosophies into action by protecting wild nurseries of animals large and small, eliminating unintended hazards to wildlife, nurturing plants that provide food and shelter, and humanely resolving conflicts with mammals and other commonly misunderstood creatures.

Nancy Lawson is the author of The Humane Gardener: Nurturing a Backyard Habitat for Wildlife. A columnist for All Animals magazine, Lawson founded Humane Gardener, an outreach initiative dedicated to cultivating compassion for all creatures, great and small, through animal-friendly landscaping methods. After an early career in newspaper journalism, she led the creative teams behind the awardwinning print and digital magazines of The Humane Society of the United States.



THE LIFE AND TIMES OF MARY VAUX WALCOTT Speaker: Marjorie G. Jones Book signing to follow

Spanning two centuries, The Life and Times of Mary Vaux Walcott tells the story of a remarkable lady whose life as an avid explorer, glaciologist, early photographer, Indian commissioner and renowned illustrator of North American wildflowers illuminates the worldview of intrepid women at the turn of the 19th century.

A member of the Writing Women's Lives seminar in New York City, Marjorie G. Jones is a graduate of Wheaton College, the Rutgers School of Law and the Graduate Faculty of the New School in New York City. She has taught history at numerous schools including Villanova University and in college programs at Sing Sing and Graterford prisons.



FABULOUS FERNS OF PENNSYLVANIA AND NEW IERSEY Speaker: Pete Bacinski

Ferns have inhabited our region for millions of years - long before the dinosaurs roamed the landscape. Today, most species are found in the tropics, but PA and NJ are home to a rich diversity of native ferns. This comprehensive program covers up-to-dateinformation on new names and taxonomic splits of more than 50 species of native ferns. We're sure you'll find it "ferntastic."

Pete Bacinski is a naturalist, photographer and field trip guide that has been 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.



JOHN JAMES AUDUBON: SEPARATING MAN FROM MYTH **Speaker: Matthew Halley**

The legendary ornithologist John James Audubon (1785–1851) began his studies of American birds as a teenager, on the banks of the Schuylkill River near Philadelphia. Few figures in American history have weathered as intense a scrutiny of their written work as Audubon. Nearly every scrap of his writing has been transcribed and debated in numerous biographies and articles spanning more than a century, each revisiting the same primary sources in search of a new angle, because no new material has surfaced in decades. Our speaker, Matthew Halley, recently discovered and transcribed several novel primary sources that provide a surprisingly fresh and intimate window into Audubon's character and story, and fill critical gaps in our understanding of the genesis of his masterpiece, The Birds of America.

Matthew R. Halley is a Ph.D. candidate and historian at the Academy of Natural Sciences of Drexel University, where he studies evolutionary biology and systematics of American birds. Halley, who has conducted field research in eight countries, is the editor of the Delaware Valley Ornithological Club's journal, Cassinia.

Advance registration is required for most programs.

REGISTER ONLINE AT BHWP.ORG/LEARN/CALENDAR

OR CALL 215.862.2924

Winter Lecture Series



HOW TO AVOID RAISING ANOTHER **BIRD'S CHICKS** Speaker: Dr. Todd Underwood

Dr. Underwood's lecture will explore brood parasitism, which is an unusual reproductive strategy in birds where females lay their eggs in other birds' nests and leave all parental care to these foster parents or hosts. Because raising parasitic young is costly to host birds, this favors the evolution of behavioral defenses against parasitism. Dr Underwood will focus on his experimental research on how and why some host birds can recognize and eject a parasite's eggs.

Todd Underwood earned a Ph.D. in Zoology from the University of Manitoba in Canada and is Professor of Biology at Kutztown University. He teaches courses including ornithology and vertebrate biology, and studies the behavior and ecology of birds. His research focuses on brood parasitism, the impact of alien plants on birds, bird feeder hygiene and the biology of birds that breed in nest boxes.

SPECIAL OFFER!

Purchase a ticket punch card for all eight Winter Lectures and save over 20%

Members: \$50 (full price: \$64) Non-members: \$76 (full price: \$96)

Each punch card entitles the holder to one admission per lecture and must be purchased in advance by calling the Preserve at 215.862.2924.

Speaker: A. Miles Arnott The Preserve is rich in history, from the unique geology that shaped the land millions of years ago to a chance meeting between two conservation-minded people in 1933 and beyond. Journey with Miles as he explores the many historical landmarks, both natural and cultural, that tell the story of Bowman's Hill Wildflower Preserve.

Miles Arnott has been the executive director of Bowman's Hill Wildflower Preserve since 2000. Miles holds a Bachelor of Science in Biology and Environmental Studies with a concentration in Plant Science from East Stroudsburg University. He also holds a Master of Science Degree in Botany from Tulane University, specializing in Plant Taxonomy and Pollination Ecology.



Speaker: Dr. Michael May

Did you know that birds aren't the only animals that migrate? Learn about the fascinating world of migratory insects from one of the masters in the field. Dr. Michael May will teach you that insect migration is more than just movement from one place to another. Learn what migration is, and why and when insects relocate.

Mike May grew up in Florida and began collecting insects at a young age. He retired from Rutgers but still keeps up research on dragonflies. 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.



CALENDAR

INSECT MIGRATION: MONARCHS & MORE

BOWMAN'S HILL WILDFLOWER PRESERVE THROUGH THE YEARS



THE BATTLE FOR SUBURBIA: DEER AND **INVASIVE PLANTS** Speaker: Dr. Janet Morrison

Forests in suburban landscapes face the dual challenge of overabundant white-tailed deer and invasion by non-native plants. This combination influences the abundance and diversity of the understory plant community, including tree seedlings that are the future forest canopy. To test the strength of these factors, a field experiment has been running since 2013 in six forests in central New Jersey that differ in deer pressure. Plant community responses to the combination of deer exclosure versus access and varying levels of non-native plant invasion are revealing striking differences between forests, between natives versus non-natives, and between woody versus herbaceous species.

Dr. Janet Morrison is Professor of Biology at The College of New Jersey, where she has taught and conducted research in plant ecology with undergraduates for 20 years. She earned a Ph.D. in Ecology and Evolution at The State University of New York at Stony Brook, followed by a two-year research position as Forest Ecologist at the New York Botanical Garden.

A note about winter weather: If we must cancel or postpone a program, we will disseminate the message via Facebook, our website and email. Please check those sources before venturing out in a storm.



Winter Programs

The Preserve offers learning opportunities for all ages to enjoy. Advance registration is required for most programs. See our complete listing of programs and register online at bhwp.org/learn/calendar.

SPECIAL EVENTS



18TH ANNUAL LAND ETHICS SYMPOSIUM: CREATIVE APPROACHES FOR ECOLOGICAL LANDSCAPING

Thursday, March 15; 8 am – 4 pm Location: Delaware Valley University, Doylestown, PA

Registration information will be available by January 1.

Aldo Leopold asked us to consider ourselves citizens of the land, not conquerors, whenever we seek to use or change it. This "land ethic" guides us in protecting our most precious natural resources. Open to all professionals and property owners with an interest in sustainable design and land management, the Land Ethics Symposium features relevant and thoughtprovoking presentations by regional and national experts. The event will be held on the beautiful grounds of Delaware Valley University, easily accessible by car or SEPTA. Continuing education credits are available.



MARK YOUR CALENDAR Spring Celebration

Nursery Grand Opening, Members-Only Lecture and Exclusive Nursery Shopping

Saturday, April 14, 2018



15[™] ANNUAL SPRING WILDFLOWER GALA

Saturday, April 28; 5 – 10 pm

Invitations will be mailed to Members in March. For more information about this unique event, contact Development Director Kellie Westervelt at 215.862.2924 or development@bhwp.org.

Don your "black tie and muck boots" for an elegant evening at the peak of spring splendor at the Preserve. Join us for an evening of cocktails, native wildflower walks, extraordinary silent and live auctions, dancing and a delicious dinner by Max Hansen Caterers. This year's Gala proceeds support the repair or replacement of critical sections of the Preserve's deer exclusion fence, the property's only protection from deer that seek to devour our priceless collection of native plants.

KIDS & FAMILY PROGRAMS



WINTER NATURE PLAY DAY Saturday, February 3; 1 – 4 pm Members: FREE; Non-Members: \$3

Drop in for an afternoon of play in nature! Our Visitor Center will be filled with fun and thematic self-guided activities, art projects and opportunities for a guided hike. This is a drop-in family program.

NATURE BUDDIES PROGRAMS

The Nature Buddies programs below are designed for children ages 3 through 7. Each program includes a story, an outdoor walk and a craft. Children must be accompanied by an adult. Walks are weather dependent; please dress for outdoor adventures.

WINTER BIRDS

Saturday, January 13; 10 - 11:15 am Members: FREE; Non-members: \$7 for one child with adult + \$3 for each additional child

Advance registration required by January 11.

ANIMAL TRACKS

Saturday, February 10; 10 – 11:15 am Members: FREE; Non-members: \$7 for one child with adult + \$3 for each additional child

Advance registration required by February 8.

OWL BABIES

Saturday, February 17; 1 – 2 pm Members: \$3 per child; \$5 per adult Non-members: \$4 per child; \$6 per adult

Who is on the nest in the dead of winter? Owls! Join Katie Martens, education specialist from the Delaware Canal State Park, as she reads Martin Waddell's classic book, Owl Babies. We will learn about amazing owl adaptations (including vision, flight, hearing and hunting tactics) and touch and see real owl artifacts. Appropriate for ages 3 and up.

FLASHLIGHT EGG HUNT

Saturday, March 24; 7 – 8:30 pm Members: \$12/child with non-paying adult; Non-members: \$15/child with non-paying adult

Space is limited. Advanced registration with payment required by March 20.

Learn about some of the animals that come from eggs. We'll read a story about oviparous animals, decorate a special basket, and head outside for a very special egg hunt, where a trail of goody-filled eggs has been left in the forest. Bring a flashlight and find some of those eggs to take home. It's going to be an EGG-citing time. Don't miss it! Ages 3 through 7 with an adult.

Program Highlights

TALKS, WALKS & LECTURES

WALK WHEN THE MOON IS FULL

Saturday, March 31; 7 – 8:30 pm Members: \$5, Non-members: \$7

There's something special about exploring nature at night. Bring your sense of adventure and join us for an evening full of folklore and stories under the light of the moon and stars.



WILDLIFE GARDENING: HOW TO MAKE MESSY LOOK GOOD WITH PAT SUTTON

Sunday, April 15; 1 – 4 pm Members: \$45; Non-members: \$50

Advance registration required by Tuesday, April 10.

Is your wildlife garden not living up to your expectations? Are you afraid of what the neighbors think? Are some of your plants misbehaving? Confused by what's what: weed or treasured native? Join naturalist Pat Sutton as she helps you answer these tough questions asked by novice and experienced gardeners alike.

Pat Sutton has keenly studied the natural world for 40 years, first as the Naturalist at the Cape May Point State Park and then as the Naturalist and Program Director at the Cape May Bird Observatory. A passionate advocate and wildlife gardener, Pat is now a freelance writer, photographer, educator and wildlife garden consultant.

NATURE EXPLORATIONS

(GBBC)

FREE to all

Join Michael O'Shea from Wild Birds Unlimited of Buckingham, PA, for a GBBC event at the Preserve. It's free, fun, and easy – and it helps the birds! This annual four-day event (February 16-19) engages bird watchers of all ages in counting birds to create a real-time snapshot of where birds are across the continent. Anyone can participate, from beginner bird watchers to experts. The GBBC takes place at the Bird Observatory in the Preserve's auditorium. Binoculars aren't necessary, but would be helpful.

ART, HEALTH & NATURE

February 14; 10 - 11 am Series Fee: Members: \$60;

Non-members: \$72

series to attend. Qigong ("chee gong") is an ancient self-care practice that is a component of traditional Chinese medicine. This course will focus on physical postures and movements, slow deep breathing and focused meditation as a way to circulate chi – or universal energy - for health and wellness. Qigong helps lower blood pressure, enhance the immune and lymphatic systems, improve balance and stability and loosen stiff joints. No experience is necessary; all that is required is an open mind and a willing spirit. Please wear comfortable clothes and shoes. This event is held inside.

Sandy Unger, MA, is a Qigong and Tai Chi Easy instructor certified through the Institute of Integral Qigong and Tai Chi (IIQTC) and is a member of the National Qigong Association. Sandy has received mindfulness training through University of Pennsylvania's Mindfulness Based Stress Reduction program. CALENDAR

THE GREAT BACKYARD BIRD COUNT

Saturday, February 17; 10 – 11 am

Advance registration is requested.

OIGONG: AWAKEN THE HEALER WITHIN

Wednesdays (6): January 10 through

Participants must register for the entire



HOLIDAY CARD MAKEOVER WORKSHOP

Saturday, January 13; 2 – 3 pm Members: \$8; Non-members: \$10

Space is limited. Registration required by Thursday, January 11.

With just a little cutting and folding, holiday cards and calendars can be made into beautiful little boxes. Bring your large folded cards (6 inches minimum, measured from the shortest side), old calendars and a long ruler, if you have one. Learn how to reuse these materials into cute little boxes, ready for regifting. Scrapbook paper also makes a nice box; if you have that, bring it along! Once you know how to make this craft, you'll be hooked on making these one-of-a-kind gift boxes.



MAKE-AND-TAKE: FROM NATURE WITH LOVE

Saturday, February 10; 1 – 3 pm Members: \$12; Non-members: \$15 All art materials included.

Space is limited. Registration required by February 6.

Since ancient times, people have used plants to heal and care for themselves. But did you know that many herbal remedies can still be found in your back yard? In this make-and-take session, you'll learn about botanicals used through history and make a healing lip balm to take home.



Winter Programs

KNOWING NATIVE PLANTS

Members: \$15; Non-members, \$20

Pre-registration is recommended.

Most presentations will be followed by an outdoor tour. Professional CEUs available.

PLANT IDENTIFICATION

Saturday, January 20; 1 – 3 pm

This indoor class will introduce you to the basics of identifying conifers and flowering herbaceous and woody plants using dichotomous keys. Ed Lignowski, Ph.D., former botany/plant physiology college instructor, will teach you the vegetative and reproductive morphological features and terminology needed to use a typical plant identification key. Emphasis will be placed on leaf and floral characteristics. This program will not include an outdoor tour.

TREES IN WINTER

Saturday, February 24; 1 – 3 pm

Although trees are dormant this time of year, they exhibit many interesting botanical features to examine. Join Ed Lignowski, Ph.D., to learn how to identify native deciduous trees and shrubs when they have neither flowers nor leaves. Participants will learn to use a dichotomous key based on characteristics of twigs, buds, and bark; discover how trees are preparing for spring growth; and find out how flowing sap is used to make maple syrup.

SIGNS OF SPRING

Saturday, March 24; 1 – 4 pm

The promise of spring is just around the corner. Meet the early flowering plants and learn how they have adapted to this potentially harsh time of year. This program will focus on early-blooming species such as snow trillium, skunk cabbage, and hepatica. We will attempt to identify spring-blooming species from the shoots that will just be poking through the soil.

GROWING NATIVE PLANTS

PROPAGATION FROM SEED

Saturday, February 24; 10 am - Noon Members: \$15; Non-members: \$20. All materials included.

Advanced registration required by Thursday, February 22.

Start your wildflower gardening early. Take advantage of Preserve Curator Jason Ksepka's expertise and learn how to start native wildflowers from seed. Jason will discuss interesting seed germination processes while you plant a variety of wildflower seeds in class to bring home and grow.



MAKE & TAKE TERRARIUM GARDEN

Saturday, January 27; 10 – 11:30 am Members: \$20: Non-members: \$25 All materials included.

Enjoy some green in the dead of winter with a unique terrarium workshop in our Propagation house. Participants will utilize native plants that overwinter in our Nursery to create their very own terrarium.

PROPAGATION PRIMER

Sunday, March 25; 1 – 2:30 pm Members: \$10; Non-members: \$15

Join our Nursery Manager, Jake Fitzpatrick, on a behind-the-scenes tour of our Propagation facilities. Then get your hands dirty and learn to how to properly pot plants and care for them. Participants will pot and take home a native plant.



Advance registration is required for most programs. **REGISTER ONLINE AT BHWP.ORG/LEARN/CALENDAR** OR CALL 215.862.2924

SPECIALTY WALKS

NATURE IN WINTER WALK

Saturday, January 27; 1:30 – 3 pm Members: \$5; Non-members: \$7

Advance registration required by Thursday, January 25.

Explore the Preserve in its winter brilliance with Education Coordinator Kelly Joslin. Enjoy the quiet beauty of our habitats while learning how plants provide winter food and shelter for birds and small mammals. We will investigate skeletal stems, diverse seed heads, buds that promise next spring's leaves and flowers and look for signs of wildlife on this very special walk. Please dress for cold weather.

COLLECTIONS WALK: PENN'S WOODS

Saturday, February 3; 1:30 – 3 pm Members: \$8; Non-members: \$10

Advance registration is required by Thursday, February 1.

The Preserve is home to more than 700 species of native plants. Join us for an informative walk as we take a look at rare, unusual, and/or unique favorites of our Curator, Collection Committee and Naturalists. This walk will feature the collection found within Penn's Woods. Please dress for the weather

BIRDING

FEEDING WILD BIRDS 101

Saturday, January 20; 10 – 11:30 am Members: \$5; Non-members: \$7

Do you enjoy watching the activity at your bird feeder? Do you look forward to sitting and watching your feathered friends, even for a few minutes? Bird watching can be a stress reliever; learn the tricks for getting wild birds to flock to your feeders.

Join us and Michael O'Shea of Wild Birds Unlimited for our Feeding Wild Birds 101 Workshop, designed to help you delve more deeply into the lives of the beautiful birds of the Delaware Valley. Learn how to identify both common and uncommon backyard birds; discover the secrets of preferred food choices and feeder types, as well as ways to attract more birds to your yard.

Winter Programs



BAGELS AND BIRDING FOR BEGINNERS Saturday, March 31: 8:30 – 10:30 am

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

Advance registration required by Thursday, March 29.

If you have wanted to begin watching birds, but did not know where to start, this is your opportunity to learn. Start your morning with bagels and coffee; then, learn the basics of field identification through visual and behavioral cues, as well as some common song recognition. We will head out to test our new-found knowledge in the field. Please bring binoculars if you have them.

RENEWING YOUR MEMBERSHIP IS AS EASY AS 1-2-3

Choose to renew in one of three easy ways.





Stop by our Visitor Center and renew in person.



Call 215.862.2924.

Questions?

Email membership@bhwp.org or call 215.862.2924.

Barbara and William Ford Thomas Adams Sarah Alderman **Rita Fowler** Judy Ambrose **Caroline Gallagher** Lucia Andrei Caroline Jones and Scott Gammon Anne Duckett Wagner and John Auchinleck Lisa and Ray Garvey William Barba lose German-Gomez Christopher Barber Franca Ghiselli Lorien Barlow GMG Insurance **Catherine Barrett** Maureen and Sean Graham Heather and Harris Kristen Greaney Bell-Termin Jacqui and Dave Griffith Kim and David Billingsley Barbara Gross Elissa and Daniel Bowen Melissa Gustofson Marcia Brice and Lola and Robert Haddow Wayne Martorelli Kirkwood Hall Barbara Bromley **Tia Hockenberry** Nancy Buenger Mildred Hopper The Butler Family Juanita Hummel Marin Ashley Byun Erin Hurley Pam Susie and John Cairns Suzanne and Harry Jenkins Jessica R. Campo Scott Katzman Pamela and David Carvin Anina and Sean Kellman Corliss Cavalieri and **Ginny Kelly** Matt Sandler Carol Kiefer Alex Chen He Ok Kim Steve Chernoski Gregory A. Clark Clarence King Monica Knopf Christy and Mike Cojerian Gretchen S. Kolb Daniela and James Cole Ellen Labrecque **Robert Coleman** Kathy Corby Lynn Lang Jennifer and Anthony Leitner Mae Cox Ruth Levan Deborah Crow Patti and Steve Levenberg Cheryl and Tom Curbishley Christine Barbiere and Jessica Darlington **Robert Livingston** Joanne Dauphars Paul F. Lynn Joann De Raismes Teresa Lynn Colleen and John Dey Carol Manz **Roger Ehrich** Jennifer Mayle Jo Ann Engels Cynthia McCusker Audelina Fadako Samantha McFarlane and Amy and Andrew Faga Kyle Scarborough Matthew Fantazier Maria and Dennis The Federman Family McGowan/Michael Stepniak Eleanor and Ronald Fell Michael McHuett **Cindy and Tim Fells** McKeon & Associates Wendy Zoll Fillgrove Illona McSparin and David Ringer Emily and Jared Flesher

CALENDAR

Welcome to Our New Members WE LOOK FORWARD TO SEEING YOU AT THE PRESERVE!

Amanda Miller Gail Muller Edward Murphy Nicolette Muslinski Mrs. C. S. Nichols Pauline E. Nijander Pam O'Brien Sarah Ocicki Paul Pagano Pearl and Julius Papp Julie and Hank Parry Hiten Patel Tamara Peffer **Christopher Phillips** The Powell Family Laura Presser Holly and Bob Roach Laura Rodel Barbara A. Roden **Riozuddin Sarwar** Elizabeth Scherer lim Schnobrich Kristin Schwarz Karin Last and **Remington Scott** Margaret and **Douglas Sheldon** Kathleen Snee **Anthony Soares Cindy Suter** Dorrie and David Tatarsky Tiara Telymonde and **Kyle Bender** Tents for Rent, LLC Linda Timlin Sara and Ryan Tiner Sharon and James Morales David Vorhees Darshan Wariabharaj Patricia Watson Barbara and Alex Waugh Nina Wiener and Lawrence Schiller Margot Winfree Jamie and Sean Wright Laura Youngster Tricia Zimic Thank you for your support.



) It may be time to renew! Check your mailing label for your Membership expiration date.

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TWINLEAF NEWSLETTER

Winter Lecture Series

Every Sunday from 2 – 3pm in January and February

Join us for an energizing and enlightening experience. Our popular Winter Lecture Series returns with presentations from renowned experts.

- Pete Bacinski, Naturalist
- Matthew Halley, Academy of Natural Sciences at Drexel University
- Dr. Todd Underwood, Kutztown University
- Dr. Michael May, Researcher and Author
- A. Miles Arnott, Bowman's Hill Wildflower Preserve
- Dr. Janet Morrison, The College of New Jersey

The 18th Annual Land Ethics Symposium

Thursday, March 15, 2018 Delaware Valley University

Professionals and property owners with an interest in sustainable design and land management are invited to attend. Professional CEUs are available.

- Melinda Daniels, Stroud Water Research Center
- Randolph A. Heffner, Aquascapes Unlimited, Inc.
- Steward T.A. Pickett
- Cary Institute of Ecosystems Studies
- Leslie Sauer
- Larry Weaner, Larry Weaner Landscape Associates

Learn more about these events and register online at bhwp.org.

Where Mind, Heart and Spirit Bloom

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

P.O. Box 685 1635 River Road New Hope, PA 18938-0685 Phone: 215.862.2924 Website: bhwp.org Email: bhwp@bhwp.org



