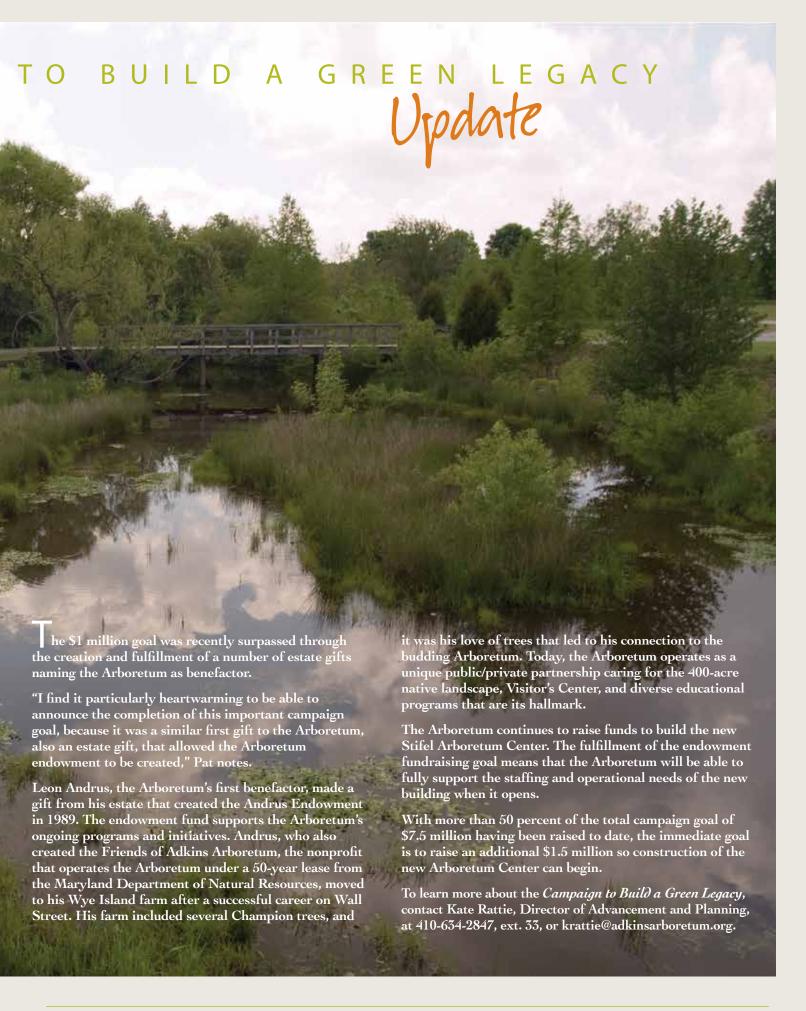


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# THE CAMPAIGN Arboretum Surpasses Endowment Goal A total of \$1,150,000 has been raised for Adkins Arboretum's operating endowment fund, meeting a key goal of the Arboretum's Campaign to Build a Green Legacy, reports Pat Bowell, chair of the Arboretum Capital Campaign Committee.

Cover drawing by Lee D'Zmura



Adkins Arboretum is operated by the not-for-profit Adkins Arboretum, Ltd. under a 50-year lease from the Maryland Department of Natural Resources.

Adkins Arboretum, a 400-acre native garden and preserve, fosters the adoption of land stewardship practices for a healthier and more beautiful world.

Native Seed is published three times a year and is distributed free to members. To become a member, visit adkinsarboretum.org.

12610 Eveland Road, P.O. Box 100 Ridgely, MD 21660 410-634-2847, 410-634-2878 (fax) info@adkinsarboretum.org adkinsarboretum.org

#### **HOURS**

10 a.m. to 4 p.m. daily except Thanksgiving and Christmas

#### ADMISSION

\$5 for adults \$2 for students ages 6-18 free to children 5 and under Admission is free for members.

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ear Members and Friends.

As I write this letter, some crimson leaves still cling to the trees in fall's full glory, and the thinning canopy opens to a brilliant late October blue sky. The leaves that have fallen onto the Arboretum's forest floor are bright and golden. It is an absolutely dazzling time to be in nature because she is bejeweled, dancing to a strong rhythm, and her performance cannot be ignored. Yet those that accompany me along this walk react so differently.

Some are indifferent, while others eagerly join me in their amazement that we can be yet again mesmerized by a fall that repeats this same production year after year. Whatever the conversation, most Arboretum visitors' attention cannot be drawn away from what surrounds them, and they must comment on this fabulous performance. Yet for a few, this annual stage production mostly goes unnoticed.

Having walked with many through these woods, my observation is that those that respond enthusiastically about nature's theater have a childhood memory that is evoked by a walk in the Arboretum woods. As if a guardian angel has just tapped them on the shoulder or the classroom teacher just asked a question for which they have the good fortune of knowing the answer and so their arm is raised and waving rapidly to win the teacher's attention. There is no reluctance or second thought because they are suddenly on alert and must tell about these positive experiences from their youth that bring total delight when ignited again. And their delight becomes my delight. I know I have met a kindred soul.

Nothing can bring me a greater sense of pride in what the Arboretum promises our community than knowing we are giving our children a positive and memorable experience in nature. This gift means that these youth will seek out nature, be sensitive to the need to protect nature, share nature with their own children, and relish time in nature because of a childhood experience in nature that is unforgettable. And not unforgettable in its grandeur and awe, like a once-in-a-lifetime pilgrimage to one of the most magnificent Seven Wonders, but unforgettable because it is recognized as part of growing up, everyday, familiar, predictable, and safe.

If Adkins Arboretum can be that for you and your family, we will have achieved our greatest mission. Please visit the Arboretum often to relive the joys of your childhood and help build these good memories of being in nature for your family. This year, be resolved to give the gift of nature.

My best,

Ellie Altman, Executive Director

P.S. If you would like to take an Arboretum walk and share your memories of nature with me, please call me at 410-634-2847, ext. 22 or e-mail me at ealtman@adkinsarboretum.org.

#### A LASTING LEGACY

#### Bequests touch the lives of others for generations to come.

The lasting impact of bequests—both large and small—has helped to shape Adkins Arboretum.

Bequests have been one of the most powerful types of gifts made to the Arboretum since its creation more than 30 years ago. In fact, the very first gift—the gift that created the Arboretum—was a bequest from Leon Andrus in 1989. Andrus, a successful New York stockbroker, retired to the Eastern Shore. Upon his death at age 101, his bequest created the Andrus endowment fund to support the Arboretum's programs and activities.

While giving by bequest costs nothing now, it can give an immediate feeling of satisfaction to know that your future gift will live on.

A charitable bequest is an easy and significant way to make a gift to the Arboretum. By means of your will or other estate plan, you can name Adkins Arboretum as the beneficiary of a portion of your estate, or of particular assets in your estate.

There are many reasons to make a bequest. A bequest allows you to honor a loved one while providing critical support to the Arboretum.

#### TYPES OF BEQUESTS

#### CASH BEQUEST

Adkins Arboretum receives a specific dollar amount from your estate.

#### BEQUEST OF PROPERTY

Adkins Arboretum receives specific assets, such as securities, real estate, or tangible personal property (for example, works of art or antiques).

#### RESIDUARY BEQUEST

Adkins Arboretum receives all or a percentage of the remainder of your estate after the payment of any specific bequests and expenses.

#### RETIREMENT PLAN

Adkins Arboretum is designated as a beneficiary of the remainder of your IRA or qualified pension or profitsharing plan.

#### GIFTS THAT PAY YOU INCOME

You can establish an Arboretum-managed trust or annuity through a bequest. This enables you to arrange for a tax-wise gift to pay income to your spouse, children, or other beneficiaries for life or a term of years, after which the assets pass to the Arboretum.

#### **LEAD TRUST**

A lead trust can be established through a bequest. The Arboretum receives income for a term of years from the trust, after which the assets pass to your beneficiaries, often at a much-reduced tax cost.

#### **HOW TO MAKE A BEQUEST**

Following is Sample Language for a Bequest to Adkins Arboretum:

"I give (\_\_\_\_\_\_ dollars or \_\_\_\_\_ percent of the residue of my estate) to Adkins Arboretum, an educational, charitable corporation (for its general purposes), or (for the benefit of <name of program or initiative>) of Adkins Arboretum."

#### BENEFITS OF A BEQUEST

#### FEDERAL ESTATE TAX SAVINGS

An outright gift to Adkins Arboretum from your estate—whatever the amount, and whether it is expendable or for endowment—is entirely free from federal estate taxes. This means the Arboretum is able to use the full amount of the bequest, whereas if it were left to an individual, a significant amount might go to federal estate taxes. Also, bequests generally are not subject to state inheritance or estate taxes.

#### OTHER ADVANTAGES OF BEQUESTS

You may create a separate fund named for yourself or in the name of someone you wish to honor. Named funds remain visible in the Arboretum community because of the people and activities they support. This visibility also encourages others to give. It is important that you consult with a member of the Arboretum staff regarding minimums for named endowed funds.

For more information about how to make a bequest to Adkins Arboretum, contact Kate Rattie, Director of Advancement and Planning, at 410-634-2847, ext. 33, or krattie@adkinsarboretum.org.

#### Maryland Native Plant Society News

The Eastern Shore Chapter of the Maryland Native Plant Society will meet Tuesday, February 25 at 7 p.m. in the Arboretum Gallery. The meeting's guest speaker is Joan Maloof, author of *Teaching the Trees* and *Among the Ancients*, founder and director of the Old Growth Forest Network, and Salisbury University Professor Emerita. A book signing and refreshments will follow. Admission is free, and all are welcome.

On Saturday, May 3, Wes Knapp, Eastern Region Ecologist/Botanist of the Maryland Wildlife in Heritage Service, will lead a walk at an exceptional sand ridge community in Worcester County. Participants will meet at the Arboretum and caravan to the site. Space for this free trip is limited to 10. Contact Robyn Affron, Eastern Shore Chapter Chair, at raffron@adkinsarboretum.org for more information or to RSVP.



# The Arboretum Welcomes New Trustees

Three new members have joined the Arboretum Board of Trustees. **Kelly Hardesty Phipps**, of Centreville, MD, served two terms on the Arboretum Board before becoming president of the Queen Anne's County Garden Club in 2010. Active in numerous civic organizations, including Queen Anne's County Garden Club, Corsica River Yacht Club, St. Paul's Church, Queen Anne's County Mental Health Committee, and Queen Anne's County Master Gardeners, she is assistant manager of a family-owned restaurant, The Narrows. In her previous term, she was instrumental in expanding the Arboretum's annual gala, *Magic in the Meadow*, to be a successful fundraising event.

Darlene Housley, of Chestertown, MD, served on the Arboretum Board from 2001 to 2007 and was instrumental in expanding the Arboretum's community events, most notably the Candlelit Caroling Celebration. A retired lawyer, she is active in many civic organizations, including Emmanuel Episcopal Church, Kent County Historical Society, and the Kent County Garden Club. Her special interests include gardening and historic preservation.

Michael Jensen, of Chestertown, MD, is president and owner of Unity Landscape Design/Build, a landscape design and construction business, and Unity Church Hill Nursery, a garden center and nursery in Church Hill, MD. After studying landscape architecture at Temple University, he launched his business more than 20 years ago with the investment of a single pick-up truck. Today Unity Landscape Design/Build provides design services in addition to permitting, shoreline erosion control and living shoreline installation, and landscape installation and maintenance for residential and commercial properties.

## American Beech

(Fagus grandifolia) is Adkins Arboretum's 2014 Native Tree of the Year



"I frequently tramped 8 or 10 miles through the deepest snow to keep an appointment with a beech tree, or a yellow birch, or an old acquaintance among the pines." That was Thoreau in the mid-1880s. I, in the twenty-first century, frequently stop my car to gaze at the majesty of the American beeches that line the entrance to the Arboretum's South Entrance. I suspect they are original trees planted in the early days of the Arboretum. They have been purposely placed and given enough room to spread and mature into their best beech selves: smooth gray bark and a wide rounded crown.

American beech (Fagus grandifolia) has been named the Adkins Arboretum Tree of the Year for 2014. A large deciduous tree common to all of eastern North America, it slowly reaches 50 to 80 feet tall—and maybe over 100 feet tall in a forest. The identifying feature of this tree is its smooth bark. It is the quintessential forest. Many loves have been etched "4 ever" on the trunk of this tree. The most famous carving found was made by Daniel Boone in Tennessee: "D. Boone, Cilled a Bar, on Tree, In Year 1760." The tree was taken down in the 1930s after being struck by lightning.

As a member of the beech family (Fagaceae), American beech is closely related to oaks and chestnuts. Since the demise of the American chestnut, it has become one of the most important food crops for birds and mammals. However, a beech will not start producing its large quantities of beechnuts, or mast, until it reaches about 60 years old. It is an adaptable tree to many soil types and moisture but prefers well-drained organically rich soils and grows well in the shade of larger trees. The pointy leaf buds become dark green leaves with distinct veins and toothed margins. In fall, the yellow leaves

stay with juvenile trees through the winter, becoming lighter and lighter until the new leaf buds push off the old leaves in late winter—a harbinger of spring.

Beech trees have a symbiotic relationship, living together with a plant called beech-drops (Epifagus virginiana). Beechdrops is a parasitic plant that gets its food from the beech by 'stealing' the sap absorbed from the beech tree through a specialized root structure. Beech-drops is interesting in that it is a flowering plant that has no leaves and produces no chlorophyll. It is often a curiosity seen with beech trees.

The Native Americans and colonists dried or roasted beechnuts and also used them as a passable coffee substitute. The wood is fine grained and almost white. Early uses included water wheels and barrels for various liquids. Beech is a favorite for furniture (bentwood rockers), butcher blocks, instruments, and toys.

But with all these attributes comes the beech's biggest challenge. Beech bark disease is a malady that involves a scale insect and a fungus. It was first reported in the late 1890s in Halifax, Nova Scotia, and has been moving steadily south. The fungus enters the bark where the scale insect has damaged it (or where bears have clawed it or kids have carved initials on it), and the tree will succumb within a few years. There is no control for the fungus, only control of the scale and, of course, natural resistance and genetic variabilities.

Come celebrate the American beech at the Arboretum. Some of the largest beeches found are on the North Tuckahoe Valley Trail. Take a walk in the woods, and be sure to look up.

# From the Bookshelves

By Arboretum Librarian and Maryland Master Naturalist Carol Jelich

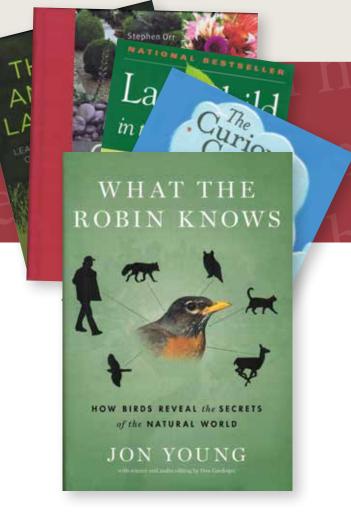
What the Robin Knows: How Birds Reveal the Secrets of the Natural World, by Jon Young. Houghton Mifflin Harcourt, 2012.

Do you know what it means when you hear a particular bird song in the distance or nearby? When you go for a walk, are you a bird plow, or are you a fox walker? Have you ever seen a gull wake-hunting? You will know the answers to these questions and more after reading What the Robin Knows.

As Jon Young explains, "all living creatures seem geared to one issue: eating and avoiding being eaten long enough to produce as many offspring as possible. That's what it's all about." With these critical outcomes in play, the songs of birds are not random displays of wasted energy, but rather always serve some purpose. Bird language and behavior interpret the natural environment—the presence of food, of enemies, of potential mates. As we listen to the birds and learn their language, we can become more attuned to and in harmony with the natural world around us.

Five basic categories of bird song are defined: songs, companion calls, territorial aggression, adolescent begging, and alarms. The categories are explored with scientific research and the author's personal experiences as he learned 'deep bird language' and guided students on field walks.

One of my favorite stories is how the author was made aware of a colleague in the woods when she was trying to avoid detection, testing his skills. He was alerted by an unusual pattern of scratching by a towhee on the forest floor. He noticed that the scratching rhythm was punctuated by abnormally long silences. Young stared toward the sound but did not see anything. When his colleague appeared some time later, she admitted that he had been staring directly at where she had stopped, hidden in the brush. In another story, the author and a group he was leading were able to walk through a large flock of wild Canada geese without disturbing them into flight, by using appropriate body language and walking style.



This book not only provides a window into the natural world through the language of birds, it also offers a way for the reader to learn the language. In the first of two appendices, the author advises you to find a "sit spot" —somewhere convenient that you can visit frequently and sit for at least 40 minutes to observe all around you. Start a journal where you record your observations. Use field guides to learn the birds and their predators that are common to your region. Advice on what behavior to look for and how to learn various species' patterns is included in this section.

A second appendix is linked to an online audio collection of bird sounds at www.hmhbooks.com/ whattherobinknows and at BirdLanguage.com, so that the reader can both read about and hear the different songs. End notes and an extensive reference list complete the book.

In the last newsletter, Master Naturalist Anna Harding reviewed David Haskell's *The Forest Unseen*. When the author was here for the Fall Symposium in September, he mentioned that he had recently read *What the Robin Knows* and enjoyed it. Members of the Arboretum Book Club also enjoyed this book when we read and discussed it last summer. It is a very good companion book to *The Forest Unseen*, further encouraging the reader to find a good spot in nature, whether in the woods or on a porch, to visit and return, to sit, observe, and listen.

### VOLUNTEER OPPORTUNITIES

The Arboretum's volunteers are a committed, energetic, and talented group involved in all aspects of the Arboretum—from maintenance to program development, from propagation to fundraising. They generously donate their skills, knowledge, and experience and are essential to the Arboretum's smooth operation.

As a young not-for-profit organization with a small staff, the Arboretum could not offer its current programs, events, and activities without volunteers. Their contributions make an important and significant difference.

For more information about volunteer opportunities, contact Ginna Tiernan, Adult Program Coordinator, at 410-634-2847, ext. 27 or gtiernan@adkinsarboretum.org.

#### **CALLING ALL VOLUNTEERS!**

Are you interested in sharing your love of nature with visitors? The Arboretum is seeking volunteers to help with the Visitor's Center front desk. Introduce visitors to all the Arboretum has to offer! Contact Robyn Affron, Visitor Services Coordinator, at raffron@adkinsarboretum.org.

#### MARYLAND MASTER NATURALIST PROGRAM Coming This Fall

In fall 2014, the Arboretum will offer the Maryland Master Naturalist Program for the Coastal Plain. This program for the Eastern Shore engages citizens as stewards of Maryland's natural resources and ecosystems through science-based education and volunteer service in their communities. First offered in 2011, Maryland Master Naturalist training also serves as the Arboretum docent training program. The program meets monthly from October to July.

Participants will learn about Maryland's natural history, flora and fauna, principles of ecology, human interaction with the landscape, the science of science, and teaching and interpretation. Following completion of the program, trainees must complete 40 hours of volunteer work for the host.

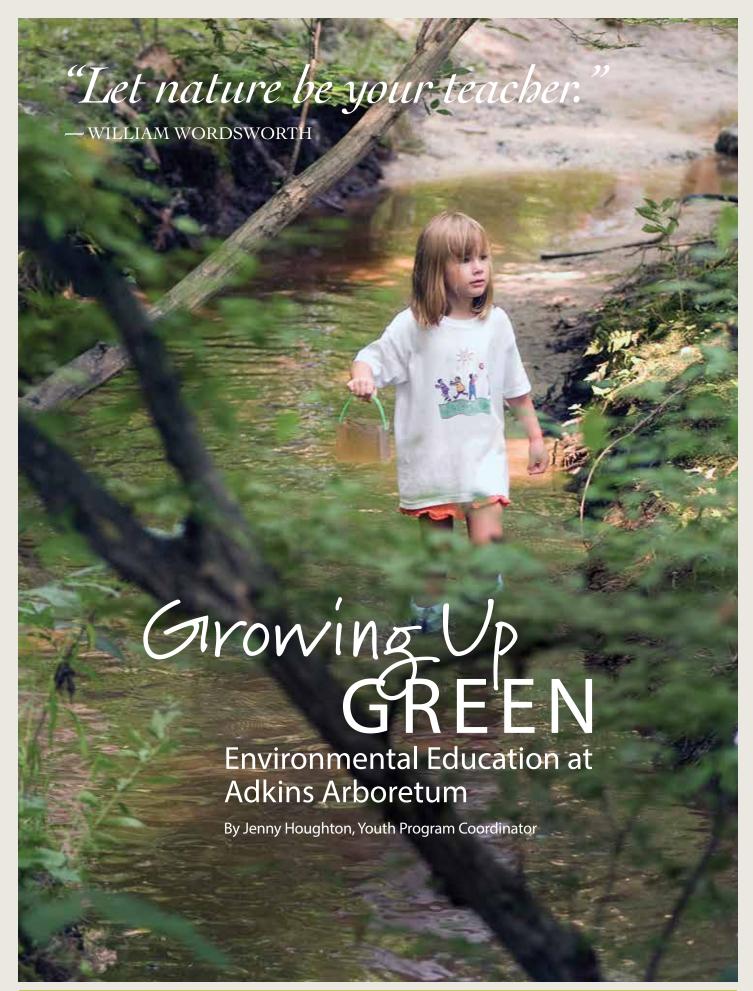
For more information about this unique opportunity, contact Ginna Tiernan, Adult Program Coordinator, at 410-634-2847, ext. 27 or gtiernan@adkinsarboretum.org. To submit an application for the Maryland Master Naturalist program, visit http://extension.umd.edu/masternaturalist.



#### A∂KINS ARBORETUM



Sweet Bay Gifts, located in the Visitor's Center lobby, has a new look and new amenities. Café tables that overlook the meadow are a welcoming spot for relaxing while children engage in preschool or homeschool programs. Coffee service and Wi-Fi are also offered. Stop by to browse the latest selection of jewelry, clothing, logo items, books, and nature-inspired gifts for all ages.



Visit the Arboretum on a warm spring day, and you might come across kindergartners dipping nets into the wetland, eighth graders sifting through stream sediment in search of macroinvertebrates, or third graders using binoculars to find birds in the meadow.

Such sights are the result of years of comprehensive curricular development on the part of the Arboretum's education staff, in tandem with exciting developments within the Maryland State Department of Education.

In 2011, Maryland became the first state in the country to add environmental literacy to its graduation requirements. To accomplish this, local school systems have infused multidisciplinary environmental education programs within current pre-K through twelfth grade curriculum. As part of the Environmental Literacy graduation requirements, students are expected to participate in at least one meaningful outdoor education experience each year.

At the same time Environmental Literacy Standards were being adopted, the Maryland State Department of Education was promoting STEM (Science, Technology, Engineering, Mathematics) education as "an approach to teaching and learning that integrates the contents and skills of science, technology, engineering, and mathematics." According to MSDE, the purpose of STEM education is to "prepare students for post-secondary study and the 21st century workforce," with a focus on inquiry, logical reasoning, collaboration, and investigation.

In early 2013, Maryland became the fourth state to adopt Next Generation Science Standards. These voluntary, internationally benchmarked K–12 standards were developed by the National Research Council, the National Science Teachers Association, the American Association for the Advancement of Science, and Achieve, Inc., an organization promoting standards-based education. Next Generation Science Standards are designed to make science more cohesive from grade to grade, with a greater emphasis on critical examination of scientific evidence and hands-on learning.

Enter Adkins Arboretum. With its 400 acres of meadow, wetland, stream, and forest habitat, schools would be hard-pressed to find a better venue to combine the hands-on approach of Next Generation Science Standards with the meaningful outdoor experience required by Environmental Literacy Standards and the inquiry-based investigation called for by STEM education. This could explain why the Arboretum's pre-K through twelfth grade environmental education programs engaged some 750 students last spring alone, marking a dramatic increase in the number of visiting schools as compared to previous years.

The Arboretum's education department continues to refine and expand its pre-K through twelfth grade environmental education programs, in part responding to continued changes in the state curriculum. A multidisciplinary "Nature's Story in the Underground Railroad" program for students in grades 4 through 8 is an example of this expansion. The unique, inspiring Underground Railroad program ties together elements of social studies, science, language arts, theatre arts, music, and fine arts to convey the interplay between nature and the dangerous journey toward freedom.

From white oaks to wetlands to watersheds, Adkins Arboretum is a place where children grow, learn, and learn to love nature. For more information about the Arboretum's youth programs, contact Jenny Houghton at 410-634-2847, ext. 21, or jhoughton@adkinsarboretum.org.



### Mary Jo Kubeluis Volunteer of the Year



"For me, the Arboretum is a sacred place."

As a child in Ohio, she accompanied her father on nature walks and finds that even though the Eastern Shore's topography differs greatly from that of her childhood home, "when I first walked in the woods at the Arboretum, it reminded me of walking in the woods with my father as a child," she says. "Leading public walks is my favorite thing to do. There are so many different aspects to discuss: how native plants help the Chesapeake Bay, how the forest acts as a filter for water, and the natural beauty of taking

rom volunteer to docent to Trustee, Mary Jo Kubeluis is a premier ambassador for Adkins Arboretum. Whether leading a walk or planning an event, her commitment and enthusiasm know no bounds. For her tireless energy, her unwavering dedication, and her ceaseless passion for the Arboretum and its mission, Mary Jo was named the Arboretum's Volunteer of the Year for 2013.

Following careers in nursing and real estate, Mary Jo moved to McDaniel, MD, in 1999 with her husband, Al. Her interest in nature and gardening led her to enroll in a Master Gardener course. She hadn't heard of the Arboretum when she was approached to volunteer at one of its semiannual plant sales, but she recalls that she "was hooked a soon as I walked in the woods." Mary Jo jumped with both feet into volunteering at the Arboretum, becoming a docent and eventually joining the Board of Trustees, first as a volunteer liaison and then as a full-time Board member.

As a Trustee, Mary Jo has been instrumental in planning the Arboretum's annual Magic in the Meadow gala and the inaugural Native Garden Tour in 2012. While her work as a Trustee provides critical support for the success of the Arboretum's fundraising efforts and its mission-driven programming, Mary Jo reveals that the activity that gives her the most pleasure is leading guided walks.

a walk in the woods. I find that leading walks allows me the opportunity to talk about all of those things, as well as share the beauty of the Arboretum with visitors."

Mary Jo's commitment to and care of the Arboretum inspires both staff and Trustees. "If you need a nurse, I hope you are blessed with one as fine as Mary Jo," says Executive Director Ellie Altman. "Gentle, thoughtful, generous, dedicated, and reliable are only a few of her characteristics that quickly come to mind. She is a gem of a volunteer who is passionate about all things Adkins Arboretum. We are delighted to be able to honor her as Volunteer of the Year. It is long overdue."

While Mary Jo is thrilled with this honor, she is more thankful still for a place where she can take a walk, immerse herself in nature, and enjoy its subtle beauty. "Though I am grateful to the Arboretum for its educational experiences, as well as for the companionship and friendships I have found there, what I love most is going there and looking at so much beauty. For me, the Arboretum is a sacred place."

Mary Jo will be honored in January at the Arboretum's Volunteer Appreciation Luncheon.



Celebrating Natives, the Second Annual Native Garden Tour, Highlights Gardens of Queen Anne's County

Saturday, May 17, 2014

The tour will highlight seven gardens in the Centreville and Queenstown areas, including the Queen Anne's County Free Library rain garden in Centreville. The library will act as the central location for check-in and day-of-tour ticket purchase.

The tour not only will showcase the beauty of the featured gardens but will emphasize their importance in a bio-diverse landscape. Enjoy the gardens for their attention to using native plants in the landscape and for sustainable features

such as erosion control, rain barrels, rain gardens, organic gardening, and meadow development. Queen Anne's County Master Gardeners will be present at each garden to interpret these elements of the home landscape.

The Native Garden Tour will take place from 10 a.m. to 4 p.m., rain or shine. Tickets are \$20 in advance and \$25 the day of the tour. Advance tickets may be reserved at adkinsgardentour.org or at the Arboretum Visitor's Center.



Photos by Barbara McClinton

Celebrating Natives is another facet of the Arboretum's mission of reaching out to the public through such different channels as the Native Plant Nursery, a generous offering of native trees, shrubs, and perennials, the twice-yearly garden design classes featuring landscape architects and other professional designers who offer their expertise in bringing native plants into home gardens, and numerous classes and speakers throughout the year to help those interested in understanding the importance of native plants in the Chesapeake landscape.

# Native Plant Lore

#### Shinrin-Yoku: The Healing Practice of Forest Bathing

By Anna Harding, Maryland Master Naturalist

You didn't come into this world.

You came out of it like a wave from the ocean.

You are not a stranger bere.

-ALAN WATTS

Forest bathing? Nature as medicine? Science proving that a mindful walk in the woods can affect our physical, emotional, and psychological health? Welcome to Shinrin-yoku.

Shinrin-yoku is a Japanese term that means "forest bathing" or "taking in the forest atmosphere."

A new part of the "slow nature" movement, the benefits and effects forest bathing has on humans is being scientifically proven through the "Therapeutic Effects of Forests" project launched in Japan in 2004. Forest bathing, or forest medicine, the newest "wellness science," gives us permission to become part of a place, to let nature enter our bodies with all five of our senses "receiving," and to be influenced positively by it.

Yoshifumi Miyazaki, a scientist in the Japanese study, said that "During everyday life a feeling of comfort can be achieved if our rhythms are synchronized with those of the environment." That sentence reminded me of a question that ignited my curiosity, posed by David Haskell (author of *The Forest Unseen*) at the Arboretum's symposium in September:

"What would it mean if there were no separation between ourselves and nature, but instead an ethic of belonging?"

All of us have experienced the feelings of delight, enjoyment, and relaxation that can occur on a walk in the woods. Over 25 years ago in Japan, scientists began measuring these responses with scientific equipment in designated forests and in labs that is now giving them some hard data.

It has been discovered that substances called phytoncides, which are organic compounds found in trees, can trigger health and relaxation and decrease stress in people who walk mindfully in a forest. Some of the scientific results were achieved by introducing people to the odor of wood, the sound of stream water, and the scenery of the forest. It is being proven that aromas in nature can change us. That we can carry the forest within us. What else do the senses tell us?

Haskell suggests they give us a "peek through our blindness." He says that beauty increases not just by being in beautiful places, but by paying close attention to what is around us. "Studying the impact of nature on the brain is a scandalously new idea," says Richard Louv, author of *Last Child in the Woods*. The studies over the past several decades have given insight into the healing effects of being in wild and natural areas. We are gaining scientific clarity about how nature influences the human body and brain.

Scientist Miyazaki and his colleague Juyong Lee, of Chiba University in Japan, are telling us what it can mean and how we are affected by this experience. The proven benefits of Shinrin-yoku include lowered blood pressure (-1.4 %), lowered heart rate (-5.8%), less anger, less depression, lower anxiety, increased vigor, and reduced cortisol levels, which are the markers for stress in the body (-12.4%).

In his talk, David Haskell also asked, "How can I make this experience of being in nature relevant to my life? What can it mean to have these experiences?" What could be more relevant than learning how to enhance our health and well-being by performing a particular action as simple and delightful as a mindful walk in the woods?

Forest bathing is now a cornerstone of preventive health care and healing in Japanese medicine. Because it is widely accepted that stress is the precursor to disease in our bodies and minds, current interest in stress control and the powerful adverse effects of stress on our bodies and minds are what instigated the studies in Japan. Forest therapy, forest medicine, forest bathing is a new way to appreciate

the healing power of nature, our connection to it and its benefits.

I was in the woods at Adkins a few weeks ago experiencing Shinrin-yoku on a very slow, sensory walk on the trails. Families passed me with kids happily skipping and hopping along, several muscular bikers sped past, and others walked their dogs or watched for birds through binos. All of these are wonderful ways to experience and enjoy the Arboretum. However, Shinrin-yoku is not doing any of the above.

Evidence is mounting that to get the most out of a walk in the woods, you need to be present in it, and not distracted. Shinrin-yoku is a slow, intentional walk in the woods, without speaking or photographing or identifying plants or exercising. It is noting what our five senses tell us as we very mindfully place one foot in front of the other.

The next time you need rejuvenation and relaxation, define a period of time and drive to Adkins
Arboretum. Begin your walk with a few good, deep breaths at the forest trailhead. Then step slowly and mindfully onto one of the paths. Take a leisurely walk, mindfully inhaling fragrances, hearing different sounds, feeling sensations on your skin, seeing the natural beauty. Stop, look around, and focus on one sense at a time. Immerse yourself in the forest as if you were slowly lowering yourself into a delicious bath of hot, aromatic water. Plan to soak in it a while.

You might notice a relaxed, happy frame of mind, your neck letting go of chronic tension, your mood brightening. You are so glad you came.

Pick up some soil and inhale its fragrance; squash some juniper berries and breathe in the phytoncides. Watch the movement of the wind in the treetops. Notice the sounds of birds.

Run your hand over a mossy pillow and savor all the extraordinary sensual pleasures of the forest just as it is. And just as you are.

Welcome to forest bathing!

Thousands of tired, nerve-shaken people are beginning to find out that going to the mountain is going home. Wilderness is a necessity.

-JOHN MUIR

#### Resources/references:

- outsideonline.com/fitness/wellness/Take-Two-Hours-of-Pine-Forest-and-Call-Me-in-the-Morning. html?page=1
- shinrin-yoku.org
- ncbi.nlm.nih.gov/pmc/articles/PMC2793347/



#### **MEMBERSHIP FORM**

By becoming a member of the Arboretum, you are making a significant contribution to the conservation of the natural heritage of the Chesapeake Bay. For your convenience, you may join online at adkinsarboretum.org.

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Make checks payable to Adkins Arboretum and mail to: Advancement Department, P.O. Box 100, Ridgely, MD 21660 Adkins Arboretum is a nonprofit organization. Contributions are tax deductible to the fullest extent allowed by law.

☐ Individual \$50	
☐ Household \$75	
☐ Grandparent \$75	
☐ Contributor \$100	
☐ Supporter \$250	
☐ Sustainer \$500	
☐ Leon Andrus Society	
☐ Garden Club or Nonp	rofit Organization \$100
☐ Business \$500	
Membership dues	\$
Additional contribution	\$
Total enclosed	\$
I would like to pay by cred	dit card:
Account #	
Exp. date/	_ CCC
Signature	



PO Box 100 Ridgely, MD 21660



Arbor Day Run	April 5					
Native Plant Nursery Opening Weekend	April 11–13		1			
National Public Gardens Day	May 9		NOS COLL.			
Native Garden Tour	May 17	100	Alle			M
Shakespeare in the Meadow— Romeo and Juliet	May 30 and 31, June 1					Y
Living in the Trees, Speaking to the Times—A Celebration of Art and Music	September 13				15	
Fall Native Plant Sale	September 12–14					
Smithsonian Museum Day	September 27				1	1
Magic in the Meadow	September 27	12 July 1				
Tent Symposium	September 28					1
Holiday Wreath Sale	December 6			100		
Holiday Wroath Salo	December 6	The state of the s			1000	