

# Native

The mission of Adkins Arboretum is to promote the appreciation and conservation of the native plants of the Delmarva Peninsula.

Between the Ocean and the Bay  
Discover Our Native Land

## SEED

VOLUME 11 NUMBER 2 SPRING 2006

### Can Trees Cool our Warming Atmosphere?

By Sylvan Kaufman,  
Conservation Curator

*When you walk into a forest on a hot summer's day, the air feels cooler and you can stop shading your eyes from the glare of the sun. Strong trunks tower above you, and spreading branches support a plethora of green leaves of all shapes and sizes. Last year's leaves lie moldering on the ground, returning their carbon to the earth.*

Most of the forests in the eastern United States are less than 100 years old, and young trees mix with old ones as the forest matures. Many of these forests grow over marginal farm fields abandoned long ago. Other younger forests were planted by tree farmers raising a crop of pines or hardwoods to harvest in 20 to 50 years. Forestry continues to provide an income for more than 18,000 people in Maryland, whether the trees are used for lumber, firewood, or pulpwood.

In the U.S. and abroad, trees are increasingly noted for playing another important role, that of storing carbon to compensate for carbon dioxide produced by the burning of fossil fuels. When fossil fuels burn, the carbon reacts with oxygen to form carbon dioxide gas, which is released into the atmosphere. Other gases produced by burning fossil fuels, such as oil and coal, include methane and nitrous oxide. These gases, called greenhouse gases, trap heat in the atmosphere and lead to increasing atmospheric temperatures. Although it is difficult for scientists to determine precisely how much of the increase in temperatures is human-caused versus part of a natural cycle, they can calculate that greenhouse gas emissions have risen 30 percent for carbon dioxide, 50 percent for methane, and 15 percent for nitrous oxide since the beginning of the Industrial Revolution.

There is little doubt that the consequences of even a small increase in temperature could cause enormous changes to the environment as we know it. In our region, sea level rise is the most noticeable consequence, with many smaller Chesapeake Bay islands disappearing under rising

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Illustrations by  
Barbara Bryan and  
Marion Price.



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

*The Arboretum's mission is to promote the conservation and appreciation of plants native to the Delmarva Peninsula.*

*Native Seed is a publication of Adkins Arboretum.*

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**HOURS**

10 a.m. to 4 p.m. daily  
(except major holidays)

Admission is \$3 for adults,  
\$1 for students ages 6 -18, and  
free to children 5 and under.  
Admission is free for members.

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## Dear Members and Friends,

In business, whether nonprofit or for profit, these questions are inevitably raised: Who is your target audience? What do you define as your service area? Do you know the demographics of your visitors? Certainly these are not unimportant questions to consider in planning for any endeavor, applying for funding, measuring success, and judging accountability. But I always find them disagreeable, for by definition, if there is a target audience, there is an audience that is excluded. Within a realm of reasonableness (we are not marketing the Arboretum to indigenous populations of the Amazon River basin), the Arboretum is striving to reach a broad audience from diverse backgrounds with diverse interests. I delight in discovering the rich and varied routes people have taken to find Adkins Arboretum. While it is sometimes the result of seeing a sign on Route 404 and taking a turn for a two-mile ride on Eveland Road to the Arboretum's front gate, more often it is from other circuitous routes.

A Washington, DC, couple traveling to escape the city for a weekend has learned the interesting back roads to the beach to avoid traffic and the monotony of well-traveled roads. They take a break at Adkins Arboretum to see what's new in the gift shop and the art gallery or to seek advice for an unusual gardening challenge. Actively pursuing a birding hobby, a Talbot County resident seeks information about creating better habitat in her yard to attract more birds. The love of birds becomes a budding gardening pursuit that leads that person to volunteer at the Arboretum to share her passions.

Children bring parents, and parents bring children. Young parents, who enjoyed a youth spent exploring nooks and crannies in the wild that surrounded their childhoods, are eager to share their love of nature with their children by enrolling them in programs or enjoying discoveries on a walk.

There is little doubt that if someone ranked the best places locally to walk a dog and to jog, the Arboretum would be at the top of the list. In the spring and fall, North Carolina County High School's cross country track team members build their stamina by running through the Arboretum's meadows and woods.

People visit to regain some peace and perspective, to restore their health, and to recover from loss. A New Jersey artist discovered the Arboretum when she was a student at the Maryland Institute of Art and her work was selected for the annual art competition. Every other year she returns to create sculpture on site as part of the annual environmental sculpture invitational. And some discover the Arboretum through the Internet. They are looking for a special gift for a Maryland friend who gardens or to make a contribution in memory of a family member, now deceased, who lived nearby.

New residents to the area, who are eager to meet people and become involved in their new community, call weekly to ask about opportunities for learning and volunteering. People come because their love for another arboretum draws them to visit any and all arboreturns they discover along their travels. And for some, it is just the sign on the road that brings them through the Arboretum entrance, if only to ask, What is this arboretum? Well, where shall I begin? It means many things to many people. It is more than trees.

Thank you to all of you who support the Arboretum as members, visitors, volunteers, joggers, hikers, birders, gardeners, nature lovers, children, parents, grandparents, travelers, shoppers, neighbors, artists, and dog lovers. You have made a very special place to share with people of all walks of life and interests, our targeted audience.



Ellie Altman, Executive Director



(TREES continued from page 1)

waters. In parts of the Arctic, permafrost—land that should remain frozen year round—now thaws during summer months, releasing methane as it decays, and ice sheets and glaciers melt at increasing rates, contributing to sea level rise.

In school we all learned that plants take up carbon dioxide as part of photosynthesis, converting that gas into carbohydrates stored in the leaves and roots and stems. So surely planting trees means that more carbon dioxide will be stored, absolving us from our wasteful use of fossil fuels. It's a nice thought, but scientists measured that in a single year, people burned the equivalent of 400 times the total amount of plant matter produced throughout the world in that year, not just on farms and in forests, but even including all the plankton produced in the ocean in a year. We won't significantly reduce emissions of greenhouse gases without reducing the amount of fossil fuels we use.

This doesn't mean that forests, and trees, don't matter. Although in the U.S. forest cover is remaining fairly constant, globally we lose approximately 40 million acres of forest per year, mostly from tropical countries. Forests in the U.S. are acting as carbon sinks (taking up more carbon dioxide than they release) because new forests have been taking over abandoned agricultural lands. Tropical forests appear to be in equilibrium, neither releasing nor absorbing excess carbon dioxide, but as more of the forests are burned in the conversion to agriculture they will become a significant source of carbon dioxide emissions. Managing forests to conserve existing storage of carbon means reducing deforestation rates, protecting existing forests, and managing forests to protect them against catastrophic fires, pests, and diseases.

Forests can also potentially be grown and managed to increase carbon storage. The merits of reforestation and afforestation (creating new forests) depend on your definitions and on who is measuring. Will planting 1,000 acres of eucalyptus on a plantation in Brazil trap as much carbon dioxide over the long term as that naturally regenerating forest of maples and oaks in the northeastern U.S.? It depends on the kind of trees that are growing, where they grow, what the weather patterns are like, how many years they are left to grow, and many other factors that scientists are only beginning to test.

Young trees grow quickly, rapidly accumulating carbon, whereas growth in mature trees slows considerably and finally comes to equilibrium between gains in carbon and losses through losses of branches and other woody parts. In a mature

forest, the soils also store a great deal of carbon. This would seem to argue for cutting mature trees and letting new fast-growing trees take their place if the intent is to maximize carbon uptake. But it depends on what will become of the wood from those trees, how much debris is left behind to rot, and how much soil disturbance occurs. If the wood is used for lumber, the carbon might stay contained for decades or even centuries as the frame of a house or a piece of furniture. If it is used to make paper or burned as firewood, the carbon will be released back into the atmosphere much more quickly.

Plantations have their own set of environmental issues related to being used as carbon sinks. Most plantations are managed with inputs of chemicals and fertilizers that reduce effectiveness when factored into the size of the carbon sink. Plantations could be effective as carbon sinks if they were harvested on a longer rotation and if inputs of fertilizer were reduced. What use the wood is put to will again determine how long the carbon is ultimately tied up.

There is increasing interest in using plantations as a source of biofuel, a potentially renewable energy source compared with fossil fuels. In theory, the new growth of plants for biofuel would offset the carbon released from the burning of the biofuels. Biomass could also be used to replace low carbon-content materials like cement, steel, and plastics that require a lot of energy to produce. This substitution of renewable carbon-based sources should reduce greenhouse emissions from fuels burned in the production of these energy-intensive materials.

Although forests aren't the whole solution to offsetting greenhouse gas emissions, ignoring their value for storing carbon storage would be very short-sighted. The complexities in determining how to manage forests for this new value placed on them is leading to a better understanding of how forest ecosystems work and what their likely response to rising carbon dioxide levels and temperatures will be. Potentially we will come away with more and better managed forests, but we have to ensure that the other values forests provide, such as preserving species diversity and protecting watersheds, aren't forgotten.

#### References:

Conniff, R. 2005. "As a Remedy to Global Warming, Do Forests Matter?" *Environment*: Yale. [http://www.yale.edu/forestry/downloads/environment\\_yale\\_fall05.pdf](http://www.yale.edu/forestry/downloads/environment_yale_fall05.pdf)

U.S. Environmental Protection Agency's Global Warming Resource Center  <http://yosemite.epa.gov/oar/globalwarming.nsf/content/ResourceCenter.html>

## Adkins Arboretum 2006 Events

### Soup 'N Walk

February 18, March 18, April 15, June 17, July 22, Sept. 16, Oct. 21, Nov. 18, 11 a.m. - 1 p.m.

### Arbor Day 5K Fun Run & 1 Mile Fun Run/Walk

Saturday, April 29, 9 - 10:30 a.m.

### Spring Plant Sale

Friday, May 5, 10 a.m. - 4 p.m. (members only)

Saturday, May 6, 9 a.m. - 1 p.m.

### Spring Garden Symposium

Friday, May 19, 9 a.m. - 3 p.m.

**Fall Plant Sale**, Saturday, September 9, 9 a.m. - 1 p.m.

### Halloween Haunted Hayride

Friday, October 20, 8 - 10 p.m. & Saturday, October 21, 7 - 10 p.m.

**Fall Family Festival**, Saturday, November 11, 11 a.m. - 3 p.m.

**Holiday Greens Sale**, Saturday, December 2, 10 a.m. - 4 p.m.

**Candlelight Caroling Walk**, Saturday, December 9, 5:30 - 9 p.m.

**Guided Nature Walks**, Saturdays, 11 a.m. (April - November)



## A Community Garden Takes Hold

By Amy Blades Steward

When a small group of citizens in St. Michaels, MD, decided to tackle a vacant lot adjacent to the new St. Michaels Library and turn it into a Bay Wise garden, they had no idea of the support that would come forward to help make their dream a reality. Meeting every week for a year, a group of 13 St. Michaels citizens, including a number of Master Gardeners, transformed a bleak 120-foot by 80-foot space, approximately half of a town block, into a beautiful, serene natural space for reading and reflection. The Carpenter Alley Reading Garden was created around the Master Gardeners' mission of providing education to the public on subjects related to environmental horticulture. Their vision was a garden that would incorporate environmentally sound practices and innovative gardening techniques, including a rain garden and a variety of native plants, that would offer residents a place to read and learn.

From the beginning, the Carpenter Alley Reading Garden Committee received support and encouragement from the Town of St. Michaels, which owns the property at Freemont Street and Carpenter Alley; the St. Michaels Community Center; and the St. Michaels Library. After working through the permitting process, the Committee finally began work in November 2004 to remove several diseased and insect-ridden trees, as well as unsightly plantings. While amending the soil, Committee members discovered what would be the most significant challenge in implementing their plan. Nancy Beatty, Committee member, Master Gardener, and Adkins Arboretum docent, remembers, "As we began to work with the soil, we couldn't believe how poor it was. We swore that there had to be another town underneath it because of the trash, rocks, bricks, and asphalt we found while digging by hand. It took pickaxes to break part of it up."

Phase one of the project included grading the site, installing the underground irrigation system, amending the soil, and planting the signature willow oak at the center of the garden. A number of local businesses contributed in-kind services to the creation of the garden space, including Brady Tree Service, a division of Bartlett Tree Experts; Coastal Landscapes; and Tyler Contracting.

Phase two of the project included planting additional trees and shrubs, and adding oyster shell paths and garden lighting. Grants from the Chesapeake Bay Trust and the Department of Natural Resources Forest Service provided plantings, while Lawn Irrigation Systems provided support for the gardens lights.

In October 2005, the Committee organized the garden's grand opening and its first fundraiser. Over \$4,000 was raised at the event through the sales of plants and garden items. The Committee's fundraising brochure, "Color Me Green," continues to bring in support for the garden, which in the third phase of the project will receive garden benches; a footbridge; a pergola designed by Committee member Joanne Buritsch; and furniture for the children's garden area, which has already been installed. The project's total cost is projected at \$50,811. Almost half of the funds needed have been raised to date. The Committee hopes to host another Garden Fair in October 2006 to help finish the garden. *(continued)*

Before—St. Michaels Library



After



Beatty adds, “This has been a most rewarding project. The Town of St. Michaels is delighted with what we have accomplished and the improved appearance of the property is continuing to improve the neighborhood. Most of all, it’s been amazing to demonstrate how well native plants adapt to the soil they were intended for. Despite the poor soil in the garden, the plantings are doing extremely well. It is a great public-private partnership that will result in educating citizens about how they really can contribute to the Bay’s health by creating green spaces with native plants.” The project’s success is a tribute to the power of gardens not only to beautify, but also to strengthen partnerships and friendships, and to build community pride.

In addition to Arboretum docents Nancy Beatty and Mary Jo Kubeluis, members of the Carpenter Alley Reading Garden Committee include Joanne Buritsch, Nancy Carroll, Beth Jones, Val Kenn Gray (chairman), Patty Joiner, Russell Kacher, Sheila Mason, Morris Osborn, Betsy Taylor, Barbara Walsh, Mary Lou Whelan, and Louise Woods. 🌿



## New Members Appointed to Board of Trustees

Pictured left to right are new board member David Whaley of Denton, a vice president for Provident State Bank; Ellie Altman, Arboretum executive director; Susie Nuttle of Chestertown, president of the Arboretum Board of Trustees; and new board member James Campbell of Centreville.

## Listen Up!

### Adkins Arboretum’s New Audio Tour Promises to Entertain

Spring is a great time to take the Arboretum’s new audio tour. Make new discoveries about plants that are emerging along the Arboretum’s wooded stream banks: moss, skunk cabbage, and spring beauties. Enjoy 35 mini-lessons by walking the Arboretum paths and listening to the voices of Eastern Shore natives, Arboretum staff, ecologists and volunteers. Rent an audio tour player for \$2.

## Greening the Arboretum

Meet the Arboretum’s new Green Team. Volunteer docent Michelle Lawrence is spearheading the Green Team volunteers to help the Arboretum expand its current commitment to earth-friendly practices. In all aspects of the Arboretum operations, the nursery, the Visitor’s Center and the grounds, the Green Team volunteers will be examining opportunities to recycle, reuse, and conserve energy. Your ideas are welcome. Contact Michelle Lawrence at 410-827-3939 or mdolanl@verizon.net.

### *The Arboretum welcomes and gratefully acknowledges our new members.*

- Ms. Sharon Addison
- Mr. and Mrs. Sydney Ashley
- Mr. and Mrs. John Banghart
- Mr. and Mrs. Perry Bolton
- Mr. and Mrs. Mark Bower
- Mrs. Alice Bowie
- Mr. and Mrs. Harrison C. Bristoll, Jr.
- Ms. Cindy Browning
- Ms. Heather Buritsch
- Mr. and Mrs. Cary Burnell
- Mr. and Mrs. Robert Burris
- Mr. Eric Callaway
- Mr. and Mrs. Charles T. Capute
- Ms. Nora Carey
- Mr. and Mrs. John Clampitt
- Mr. David Doehler
- Ms. Ruth Dominick
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- Mr. and Mrs. Mickey Elsberg
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- Mr. and Mrs. Rick Gorlieski
- Mr. and Mrs. William Griffin, Jr.
- Ms. Barbara Griffith
- Mr. and Mrs. Mike Henry
- Miss Ellery Cason Hickey
- Mr. Roderick L. Hickey, IV
- Ms. Charlotte Holmgren
- Mr. Frederick L. Houghton
- Mr. George Jamar
- Ms. Joyce A. Kinnecom
- Ms. Martha Kirkpatrick
- Mr. David Lauer
- Mr. and Mrs. Neil R. LeCompte
- Mr. and Mrs. Tim Leverage
- Mr. and Mrs. James Lovell
- Ms. Janet Mackey
- Mr. and Mrs. Boyd Madary
- Mr. and Mrs. Joseph Maurelli
- Mr. and Mrs. Michael Mayo
- Mr. Ken McDonald and Ms. Gail McConaughy
- The Dawn Mies-Keyes Family
- Ms. Karen S. Miles
- Mr. and Mrs. William Millar
- Ms. Ritze Miller
- Mr. and Mrs. Clement C. Moore
- Mr. Rick Morton
- Ms. Jennifer Mott
- Ms. Gale P. Nashold
- Mr. and Mrs. Richard Paulson
- Mr. Robert M. Phipps
- Ms. Robin Pilli
- Ms. Marilyn Ransom
- Ms. Jessica B. Rice
- Mr. William Romano
- Mr. James Saylor
- Ms. Jennifer Selfridge
- Ms. Charlotte Staelin
- Mr. and Mrs. William Staggs
- Ms. Tammy Stofa
- Mr. and Mrs. William Stubee
- Ms. Jean Sucharewicz
- Mr. and Mrs. William L. Susen
- Ms. Ruth Thompson
- Mr. and Mrs. Howard Townsend
- Mr. and Mrs. Edward N. Trevelyan
- Dr. and Mrs. Charles Trout
- Mr. and Mrs. John Vail
- Mr. Fox Vernon and Ms. Ann Gretter
- Ms. Jennifer Wagner
- Mr. and Mrs. Ed White
- Ms. Nancy Wilkinson
- Ms. Nancy Wohlforth and Ms. Denice Lombard

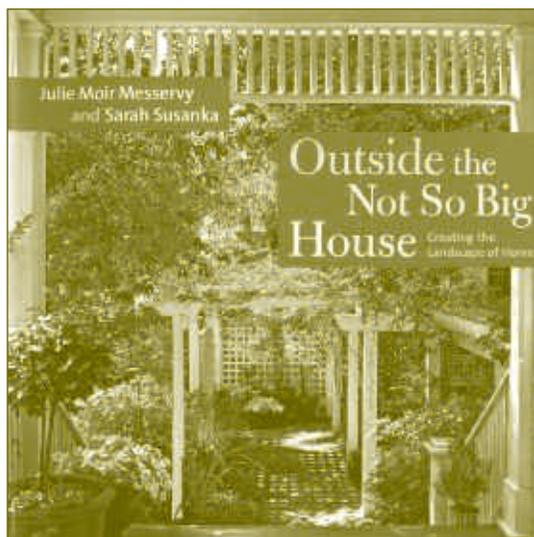


willow  
*Salix sp.*



## From the Bookshelves

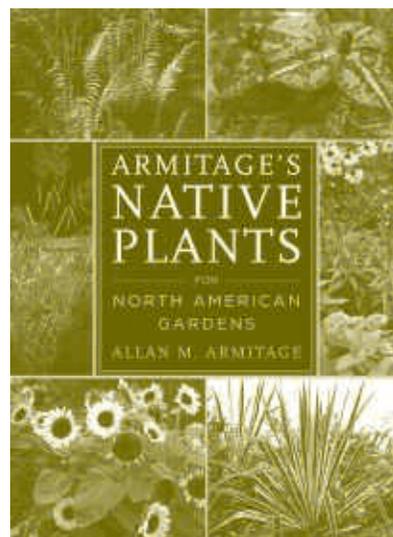
By Ruth Barnett, Arboretum Volunteer Librarian & Queen Anne's County Master Gardener



Those of you who attend the Spring Garden Symposium on May 19 will hear two very special speakers. Julia Moir Messervy and Allan Armitage have both won national awards for their work in landscape design and horticulture. If their recent books are any indication, they will have important messages for designers and gardeners.

Julia Moir Messervy studied landscape design as a student with Japanese garden master Kinsaku Nakone in Kyoto, Japan. She developed a vision in her work that incorporates the landscape surrounding a house as an integral part of the experience of "home." Her previous books, *Contemplative Gardens*, *The Inward Garden*, and *The Magic Garden*, emphasized that the design of a garden is a personal journey that expresses each gardener's inner self. Her most recent book, *Outside the Not So Big House: Creating the Landscape of Home*, was published earlier this year. It is written in partnership with Sarah Susanka, an architect who is a leader of a movement that emphasizes "build better, not bigger" in the "not so big" homes that she designs. She believes in quality over quantity in residential architecture—specifically that smaller, carefully crafted homes should reflect the lifestyle and spirit of their inhabitants.

Now, combined with the talent of Julia Moir Messervy, this concept is extended to the boundaries of the homeowner's lot, creating spaces that suit their lifestyle and including elements in paths, views, and water features that create a place that is home both outside and inside. The book, which has wonderful photographs by Grey Crawford, covers twenty examples of this vision and includes homes of all sizes located throughout the United States. Materials used are natural and simple, creative ideas are abundant and practical. I am personally inspired to place an arbor and trellis walkway through our side yard as pictured on the cover!



Dr. Allan Armitage, a professor of horticulture at the University of Georgia, has written nine books about annuals, perennials, and other herbaceous plants. His newest book, *Armitage's Native Plants for North American Gardens*, is a volume of 160 plant genera, from Aziza to Zizia, that is abundantly illustrated with photographs. Each entry includes a description and information on habitat, hardiness, maintenance, and propagation. If there are cultivars for the species, they are described. Since Dr. Armitage is a teacher, he also includes the etymology of the plant, which is always interesting. This book does not intend to be all-inclusive, but it does include descriptions of natives that are generally available through nurseries or on the Internet, and a listing of these resources. He has also provided useful plant lists for various conditions, such as shady, wet, or dry areas, as well as deer-resistant plants. Written for the average gardener interested in using sturdy and attractive native plants, this book is a welcome addition to a gardener's library. Dr. Armitage's sense of wry humor will be a treat for participants at this year's garden symposium.

# Adkins

## ARBORETUM 2006 SPRING PROGRAMS & EVENTS

### EVENTS

## 2006 Garden Symposium



Adkins Arboretum will sponsor its 2006 Spring Garden Symposium, "Creating Native Landscapes by Design," on **Friday, May 19, from 9 a.m. to 4 p.m.** at Chesapeake College in Wye Mills, MD and at the Arboretum in Ridgely, MD. This year's symposium will feature two nationally known speakers: **Dr. Allan Armitage**, award-winning author, speaker, and horticulturist, and **Julie Moir Messervy**, acclaimed landscape designer, author, and lecturer on outdoor sanctuaries that feed the spirit. Both will speak about their new books, which were published in early 2006. *Native Plants for American Gardens*, published by Timber Press, is Dr. Armitage's first book on native plants. He will share his appreciation for ornamental plants. Julie Moir Messervy's new book, *Outside the Not So Big House*, is co-authored with residential architect Sarah Susanka. She will explore removing traditional design barriers between the home and its surroundings to produce a unified design—the landscape of home.

The morning segment at Chesapeake College will also include concurrent sessions on creating rain gardens, a primer on soils, and native plants and beneficial insects. The afternoon segment at Adkins Arboretum will feature demonstrations on trellis construction with natural materials, natural dyes, and bonsai with native plants. Guided walks will be held throughout the afternoon, as will a native plant sale and art exhibit. Participants may register online at [www.adkinsarboretum.org](http://www.adkinsarboretum.org). For further information, call the Arboretum at 410-634-2847 or [info@adkinsarboretum.org](mailto:info@adkinsarboretum.org).

## Plant Sale Preview Walk

Wednesday, May 3, 1 - 2 p.m.

Free

Join Conservation Curator Sylvan Kaufman to see what plants will be offered at the Arboretum's Spring Plant Sale. Participants will walk among the plants, discuss what's new, and revisit some old favorites. Bring your gardening and plant questions to share with the group. The preview walk is a great way to learn your way around the Plant Sale and to make a list of your top choices! Plants will not be for sale until May 5 (Member's Sale Day) and May 6 for the general public.

## Spring Native Plant Sale

Friday, May 5, 10 a.m. - 4 p.m. (Members only)

Saturday, May 6, 9 a.m. - 1 p.m. (Members and general public)

Spring's glory will be on display at the Arboretum's ninth annual Spring Native Plant Sale. Items for sale will include flowering trees and shrubs, unfurling fern fronds, pastel perennials, and green spears of grasses. Natives such as the fringe tree, wild indigo, bushy goatsbeard, foamflower, and blazing star make colorful additions to home gardens. The sale benefits the Arboretum's education programs and provides the public with an opportunity to become acquainted with Delmarva's native flora. Members of the Arboretum receive a 10 percent discount on plants.

sweet gum  
*Liquidambar styraciflua*



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### SPRING WILDFLOWER WALK

**Thursday, May 11, 1 - 2:30 p.m.**

**Fee: \$10 members, \$12 general public**

Join Arboretum docent and Delaware Master Gardener Beverly Gemmill to learn the secrets of spring wildflowers. Spring beauty, Jack-in-the-pulpits, bluebells, and Solomon's seal enjoy the early spring sunshine before the trees leaf out. Come walk the Arboretum paths and discover the interesting tales of these beautiful flowers.

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### DISCOVER THE BEAUTY AND BENEFITS OF WETLAND PLANTS

**Monday, May 29, 1 - 2:30 p.m.**

**Fee: \$10 members, \$12 general public**

Have you been wondering what species you might plant to create your own rain garden, or how to deal with that soggy corner of your yard? Dozens of wetland plant species, all native to the Delmarva Peninsula, can be used to beautify your property and provide food and cover to attract desirable wildlife. From the boardwalk at the Arboretum's Visitor's Center, we will take a closer look at some of these wetland plants (no waders necessary!) and talk about some methods of managing a small wetland. The course will be taught by Leslie Hunter-Cario, nursery manager at Environmental Concern Inc. in St. Michaels, who oversees all aspects of the wetland plant nursery.

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### BACKYARD COMPOSTING

**Thursday, June 8, 1 p.m. - 2:30 p.m.**

**Fee: \$10 members, \$12 general public**

Are you interested in learning the basics of composting, or maybe getting a little more information on the C/N ratio and its importance to the compost process, or knowing when the compost process is complete? If the answer is yes, then join Master Gardener and Arboretum docent Bill Smith as he provides introductory information on turning your backyard refuse into "black gold" for your garden. In addition, Bill will share with you his own backyard experiences as a "composter" and will offer some insights from his experience as a volunteer at the recently established backyard compost demonstration site, New Beginnings, in Cecil County, MD.

*Pre-registration is required for all programs.*

*Call 410-634-2847, extension 0 or email*

*info@adkinsarboretum.org for additional information.*

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### NATIVE BEES AND OTHER POLLINATORS

**Thursday, June 15, 1 - 2:30 p.m.**

**Fee: \$10 members, \$12 general public**

Join University of Maryland Extension Apiculturalist Michael Embrey to learn about the diverse insect world that pollinates crops and other plants. Participants will learn how to attract pollinators to their gardens and about the perils faced by native bees and honeybees. With summer's flowers beginning to bloom, this is the time to look for these beneficial insects in your backyard! Mike Embrey is based at the Wye Research and Education Center.



blue flag iris  
*Iris versicolor*



2005 summer campers decorate garden pots.

## Creative Kids Camp is Back!

The Arboretum's forests, meadows, and Children's Garden still resonate with the laughter and squeals of campers attending Creative Kids Camp. As the summer months approach, Arboretum staff and volunteers anticipate the potential that will be revealed in each new camper who attends the 2006 camp series. Will we see young scientists or artists, explorers or revelers? One thing is certain—their enthusiasm for the outdoors and love of discovery will inspire and delight us.

The 2006 Creative Kids Camp will offer two Funshine Garden sessions: "Camp Bumblebee" for preschoolers, and "Camp Paw Paw" for ages 6 to 8. Preschoolers will have another opportunity to grow with the Arboretum through "Camp Pollywog," which is bound to be an amphibious adventure alive with the magic of slippery croakers. Campers ages 9 to 12 will get "hands on and feet wet" at "Camp Egret," where the ways of the watershed will be revealed. For more information about camp dates, times, and fees, or to register for camp, contact the Arboretum for a brochure or visit [www.adkinsarboretum.org](http://www.adkinsarboretum.org) for details. Be sure to register early, as space is limited.

### Interested in becoming a camp counselor?

The Arboretum is looking for a few hearty volunteers to work as counselors. You must be at least 16 years of age and willing to work a full week of camp. Training will be provided. To apply or inquire, call Coreen Weilminster at the Arboretum 410-634-2847, extension 0 or e-mail [cweilminster@adkinsarboretum.org](mailto:cweilminster@adkinsarboretum.org).

## Children's Programs

Classes are open to children ages 3 to 5. Pre-registration and payment are required at least three days before each program. Enrollment is limited, so early registration is recommended. Classes begin promptly at 10 a.m. For further information or to register, call 410-634-2847, extension 0. Fee is \$4 per class for members, \$6 per class for the general public and includes a snack and a craft.

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### RAINBOW OVER THE ARBORETUM

**Monday and Tuesday, May 8 and 9, 10 - 11:15 a.m.**

Red, orange, yellow, green, blue, indigo, violet. What colors can we find in the Arboretum gardens? We will make our own rainbow, and then use our knowledge to go color sleuthing around the Arboretum. Children can expect a full spectrum of learning and fun.

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### HOP, HOP, SPLASH

**Monday and Tuesday, May 15 and 16, 10 - 11:15 a.m.**

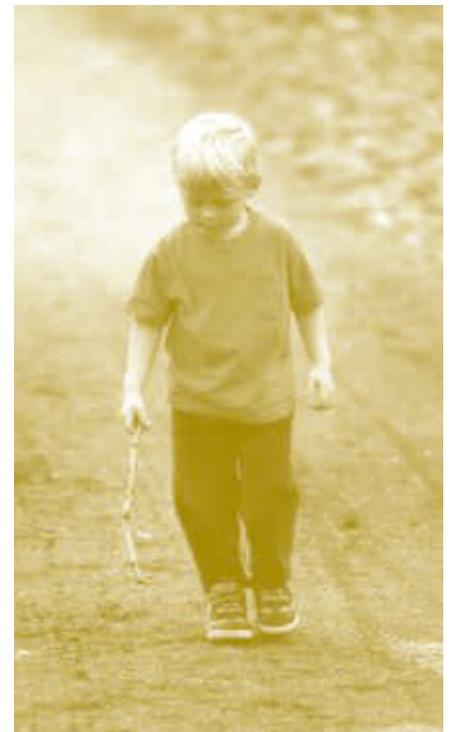
Frogs, kids, and fun! The frogs are back, and so is the chance for some messy fun. Come dressed to get dirty as we learn about our amphibious friends. We will make a froggy craft, have a froggy snack, and enjoy some froggy fun!

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### SUMMER MAGIC

**Monday and Thursday, June 5 and 8, 10 - 11:15 a.m.**

Summer means long days and short nights. Who visits our gardens while we sleep? Let's enjoy a daytime walk, learn about some nighttime visitors to our gardens, and plant seeds for a flower that blooms in the night in a glow-in-the-dark pot!



A young Arboretum visitor studies a twig.

## Soup 'n Walks

June 17 and July 22 (note new date!), 11 a.m. - 1:30 p.m.

Pre-registration is required.

Fee: \$10 members, \$12 general public

Enjoy the colors of the forest in late spring and early summer by joining Arboretum docents for a guided walk, followed by a delicious bowl of soup, some good conversation, and a brief presentation about nutrition. Nutrition talks will focus on the vegetables and fruits, beans, whole grains, and fats that are recommended for a healthy diet. In June, docent Julianna Pax will feature the Indian cucumber (*Medeola virginiana*), an interesting plant that starts out the year with one whirl of leaves, but gains another smaller whirl of leaves when it is ready to flower. The roots are white and have an appealing taste similar to the garden cucumber. It is best used as a trail snack unless found in large quantities, for the roots are small and gathering too many can damage the population. In July, Julianna will feature cardinal lobelia and early goldenrod.

## Art Exhibits at the Arboretum

Talbot County botanical artist Lee D'Zmura's solo exhibit, Botanical Art, will run through May 26. This is an exquisite show of delicately crafted watercolors that convey detailed nuances of the life, texture, and color of plants. This summer's invitational environmental sculpture opens June 5 and will bring a dozen artists from throughout the Mid-Atlantic to create site-specific works of art on the Arboretum grounds. Centreville artists Mary and Howard McCoy will curate the show, which runs through July. The public is invited to a reception for the artists on Saturday, June 24 from 3 to 5 p.m.



Skunk cabbage by Lee D'Zmura.

## Adkins Arboretum Arbor Day Fun Run and Fun Walk

Saturday, April 29, 9 a.m. - 10:30 a.m.

Join fellow nature enthusiasts to celebrate Arbor Day and the Arboretum's 25th Anniversary at a 5K Fun Run and a 3K Fun Run/Walk. Catch a glimpse of the beginning of spring on the Arboretum's scenic paths. For registration information, contact Laura Sanford at Adkins Arboretum 410-634-2847, extension 26 or lsanford@adkinsarboretum.org.

## Field Trips

### MT. CUBA CENTER

Tuesday, May 23, 9:30 a.m. - 3:30 p.m.

Fee: \$50 members, \$60 general public

The former estate of Mr. and Mrs. Lamot du Pont Copeland in Greenville, DE, is now open to the public by appointment. This stunning woodland garden celebrates plants native to the Piedmont. This extraordinary garden features extensive plantings that are at their peak springtime. After an early lunch at a local restaurant, we will enjoy a guided tour of Mt. Cuba with one of their knowledgeable docents. Fee includes transportation, lunch, and entrance fee.

### TERRAPIN PARK AND WYE ISLAND— EXPLORE QUEEN ANNE'S COUNTY

Wednesday, May 31, 9:30 a.m. - 2 p.m.

Fee: \$15 members, \$20 general public

Come out and explore the parks in our own backyard. This is the first in a series of field trips touring the parks of regional counties on the Delmarva. For this field trip, we first travel from the Arboretum to Terrapin Park on Kent Island to explore diverse wetland and coastal forest communities. Next stop is Wye Island Natural Resource Management Area, where we will picnic creekside and then visit a giant holly tree more than 250 years old and the largest existing old growth forest remnant on Maryland's Eastern Shore. We will cover about 3 miles of easy walking trails during the day. The trip will be led by Conservation Curator Sylvan Kaufman and Arboretum docent and Queen Anne's County resident Michelle Lawrence. Bring your own bag lunch. Snacks and beverages will be provided. Transportation from the Arboretum by van will be provided with an additional pick-up stop at the Rt. 404/50 Park and Ride lot at 9:45 a.m. Carpooling may be arranged for those preferring to meet at Terrapin Park at 10 a.m.

# CALENDAR OF PROGRAMS AND EVENTS

## APRIL

						1 <b>Guided Nature Walk</b> 11 a.m.
2	3 <b>Lee D'Zmura Exhibit Begins</b>	4	5	6	7	8 <b>Guided Nature Walk</b> 11 a.m.
9	10	11	12	13	14	15 <b>Guided Nature Walk</b> 11 a.m. <b>Soup 'n Walk</b> 11 a.m. - 1:30 p.m.
16	17	18	19	20	21 <b>Artist's Reception</b> 5 - 7 p.m.	22 <b>Guided Nature Walk</b> 11 a.m. <b>Earth Day Poetry</b> 12:30 - 3:30 p.m.
23   30	24 <b>Preschool Program</b> 10 - 11:15 a.m.	25 <b>Preschool Program</b> 10 - 11:15 a.m.	26	27	28	29 <b>Arbor Day Fun Run and Fun Walk</b> 9 - 10:30 a.m. <b>Guided Nature Walk</b> 11 a.m.

## MAY

	1	2	3 <b>Plant Sale Preview Walk</b> 1 - 2 p.m.	4	5 <b>Spring Native Plant Sale</b> (Members Only) 10 a.m. - 4 p.m.	6 <b>Spring Native Plant Sale</b> 9 a.m. - 1 p.m. <b>Guided Nature Walk</b> 11 a.m.
7	8 <b>Preschool Program</b> 10 - 11:15 a.m.	9 <b>Preschool Program</b> 10 - 11:15 a.m.	10	11 <b>Spring Wildflower Walk</b> 1 - 2:30 p.m.	12	13 <b>Guided Nature Walk</b> 11 a.m.
14	15 <b>Preschool Program</b> 10 - 11:15 a.m.	16 <b>Preschool Program</b> 10 - 11:15 a.m.	17	18	19 <b>Garden Symposium</b> 9 a.m. - 4 p.m.	20 <b>Guided Nature Walk</b> 11 a.m.
21	22	23 <b>Mt. Cuba Center Trip</b> 9:30 a.m. - 3:30 p.m.	24	25	26 Lee D'Zmura's exhibit ends	27 <b>Guided Nature Walk</b> 11 a.m.
28	29 <b>Discover the Beauty and Benefits of Wetland Plants</b> 1 - 2:30 p.m.	30	31 <b>Terrapin Park and Wye Island Trip</b> 9:30 a.m. - 2 p.m.			

# CALENDAR OF PROGRAMS AND EVENTS

## JUNE

				1	2	3 <b>Guided Nature Walk</b> 11 a.m.
4	5 <b>Preschool Program</b> 10 - 11:15 a.m.	6	7	8 <b>Preschool Program</b> 10 - 11:15 a.m. <b>Backyard Composting</b> 1 p.m. - 2:30 p.m.	9	10 <b>Guided Nature Walk</b> 11 a.m.
11	12	13	14	15 <b>Native Bees and other Pollinators</b> 1 - 2:30 p.m.	16	17 <b>Guided Nature Walk</b> 11 a.m. <b>Soup 'n Walk</b> 11 a.m. - 1:30 p.m.
18	19	20	21	22	23	24 <b>Guided Nature Walk</b> 11 a.m.
25	26	27	28	29	30	

## Recent Federal Grant Awards Bring New Opportunities

With spring comes change. This spring, the Arboretum will explore new opportunities for promoting the appreciation and conservation of the native plants of the Delmarva Peninsula through two new exciting environmental initiatives. Three new federal grants will provide partial funds for a new landscape restoration project and the Arboretum's education program for school-age children. The National Park Service awarded Adkins Arboretum a \$120,000 Chesapeake Bay Gateways Program ([www.baygateways.net](http://www.baygateways.net)) grant to provide partial support for the redesign of its entrance to model the best in Bay-friendly stewardship practices and teach visitors the importance of the conservation of native plants. In 2001, the Arboretum received recognition as a Chesapeake Bay Gateway Site, which made the Arboretum eligible to compete for this National Park Service grant program. The Chesapeake Bay Gateways Network connects you with the Chesapeake Bay and its rivers through 154 exceptional parks, wildlife refuges, museums, sailing ships, historic communities, trails and more. Gateways are the special places where you can experience the Chesapeake Bay region's natural and cultural heritage.

With additional funding from the National Fish and Wildlife Foundation totaling \$25,000, the Arboretum's asphalt parking lot will also be removed and relocated as part the redesign of its entrance. The site of the previous parking lot will be restored as a native meadow. The project will reduce sediment and pollutant runoff and use a natural drainage system, including vegetative swales and buffers and filtration gardens of native trees, shrubs, grasses, and perennials. In addition, it will serve as an educational tool for demonstrating the value and effectiveness of bio-retention techniques, as well as the importance of native meadows in providing wildlife habitat.

To provide watershed and stewardship education for the students and teachers of Caroline, Kent and Queen Anne's counties, the Arboretum received a \$34,319 grant from the NOAA Chesapeake Bay Watershed Education and Training Program. The project, entitled Linking the Land to the Water, will target fourth through eighth grade students and will involve field trips with themes about our native landscape and its impact on the health of the Bay. The Arboretum Children's Program Coordinator Coreen Weilminster is developing and directing this program which has been received with excitement by area educators.

## A Centerpiece for the Garden, Wild False Indigo

By *Sylvan Kaufman, Conservation Curator*

My favorite color is blue, so perhaps it is no surprise that I would be partial to wild false indigo (*Baptisia australis*). It acquired the name false indigo because it was used as a substitute blue dye for true indigo, a species found in the tropics. A member of the pea family, this leguminous plant thrives in poor soils since it associates with a bacteria species that helps supply it with nitrogen. Unlike the leguminous plants you might be familiar with from your garden, such as delicate sweet pea vines or bush beans, false indigo is a sturdy perennial plant that looks like a small vase-shaped, 3- to 4-foot shrub by late spring. From late May into early June it produces long spikes of deep blue flowers that are beautiful in arrangements. The clover-like leaves have a blue-green color that adds interest to the garden even after the flowers fade. The seed pods are also ornamental, starting out as light green inflated pods and maturing to black. The seeds rattle around loosely in the mature pods, providing great fun for kids.

False indigo naturally occurs from southern New York south to northern Georgia and Tennessee, growing in open woods, thickets, and along stream banks. False indigo prefers dry to moist well-drained soils and full sun. Although it will grow in part shade, it may become leggy in this environment. Once established, it is very drought tolerant because it forms a long taproot. It does not, however, like to be moved once established. The clumps will expand in diameter, so leave 2 feet or so around the plant.

Because of its size, false indigo works well as an accent in a perennial garden or could be used mingled with a border of sun-loving shrubs. For the ever-fashionable blue garden theme, you could combine it with blue-eyed grass (*Sisyrinchium angustifolium*), actually a member of the iris family, blue star (*Amsonia species*), bluemist flower (*Eupatorium coelestinum*), Jacob's ladder (*Polemonium reptans*), and 'Bluebird' smooth aster (*Aster laevis*).

You could also combine it with the low-growing yellow-flowered whorled coreopsis (*Coreopsis* spp.), whose green feathery foliage would contrast nicely, and plant the tall-growing Helen's flower (*Helenium autumnale*) next to it for yellow color later in the season.

If you want to try false indigo in a shrub border, remember that you will need to cut it back to the ground in late fall, so plant some shrubs around it that will give some winter structure to the garden. You might try planting it in front of chokeberries (*Photinia* spp.) and the evergreen inkberry (*Ilex glabra*).

False indigo is infrequently found in natural areas of Maryland. More common is its relative, wild indigo (*Baptisia tinctoria*), a yellow-flowered *Baptisia*. White indigo (*Baptisia alba*) is another species found occasionally on the Delmarva; it has been crossed with false indigo to create a cultivar called 'Purple Smoke' because of the dusky purple color of the flowers.

Learn more about *Baptisia* and other ornamental native plants at the Spring Native Plant Preview Walk on Wednesday, May 3, 1 to 2 p.m., with Conservation Curator Sylvan Kaufman. (See page 2 of the newsletter insert.) 

false indigo  
*Baptisia australis*



# Volunteer Opportunities

## Teach, Interpret, Explore, Plant, Enjoy!

### UPCOMING SPECIAL EVENTS

Volunteers are needed for the Arboretum's first **Arbor Day 5K Run on Saturday, April 29** and to **prepare for the Arboretum's Spring Native Plant Sale on May 6**. Plant sale preparation starts early in April at the native plant nursery.

### VOLUNTEER OPPORTUNITIES

#### Nursery Work Crew

Tuesdays are volunteer days at the native plant nursery. Help plant, water, weed, label, prune, and collect seeds. Learn about sustainable gardening practices and the use of native plants. Volunteers and staff work April–December to prepare for the spring and fall native plant sales.

#### Weed Warriors

Work with the Arboretum's Conservation Curator to manage and remove noxious invasive plants that threaten the survival of Delmarva's native plants. Training is provided and hours are flexible. Weed warriors are trained in identification and methods to control plants.

#### Grounds Work Crew

Assist with maintaining the woodland and meadow paths and other maintenance projects. Volunteers are needed to help maintain paths, cut brush, and help with small construction projects. Volunteers can take on a project independently or work as part of a volunteer crew. Get a good workout and help keep the Arboretum looking its best! Tool, equipment, and safety instruction is provided.



Intern Carrie Hovland and a student find insects.

#### Educational Programs for Children

Be creative and help teach children about the environment and native plants. Classes are offered for children of all ages. Volunteers can assist instructors, as well as plan and teach classes.

#### Summer Children's Camps

**Funshine Garden Camps**, June 19–23, July 10–14, and July 24–28, will offer young gardeners an opportunity to work in the Arboretum's Children's Garden, learn about native plants, and get their hands dirty while developing a green thumb. Other camp themes will involve amphibious adventures, art, and wisdom from the watershed. The 2006 camp sessions are planned for three age groups: ages 3 to 5, 6 to 8, and 9 to 12.

#### Visitor's Center Greeter

Help staff the Visitor's Center and greet and orient visitors.

#### Membership Promotion Team

Join a team of volunteers working to promote the benefits of Arboretum membership.

#### Individual Volunteer Projects

Imagine and propose your own volunteer project. Ongoing projects include creating educational publications and teaching the public about native plants, sustainable horticulture, and gardening practices.

#### Partner Programs

The Arboretum continues to welcome volunteers from partner programs in the Master Gardener community and the Legacy Leadership Institute for the Environment (LLIE). Inquire about volunteer opportunities for community organizations and community service days for local area businesses.

*For more information, volunteer schedules, and application forms, contact Erica Weick, Coordinator of Volunteer Programs, at 410-634-2847, extension 27 or at [eweick@adkinsarboretum.org](mailto:eweick@adkinsarboretum.org). Application forms can also be obtained at the front desk or downloaded at [www.adkinsarboretum.org](http://www.adkinsarboretum.org). Click on the Volunteer link to access the forms.*



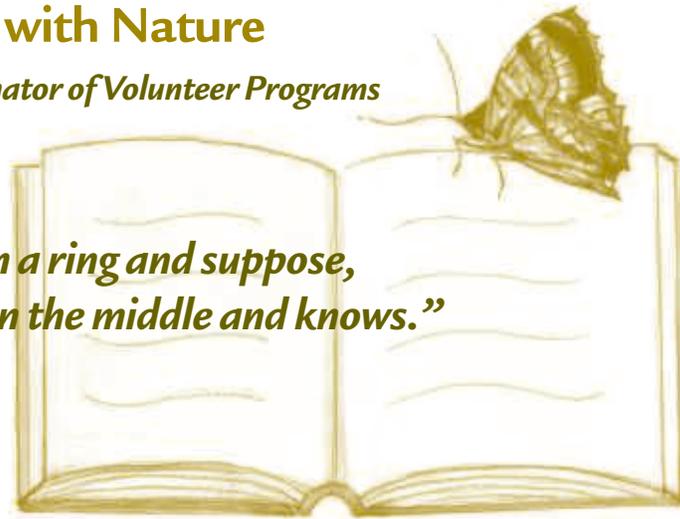
Program Manager Laura Sanford assists a camper in the Funshine Garden.

## Journal Writing with Nature

By Erica Weick, Coordinator of Volunteer Programs

**“We dance round in a ring and suppose,  
But the Secret sits in the middle and knows.”**

—THE SECRET SITS, ROBERT FROST



Robert Frost wrote these two lines of poetry way back in 1936. As one of the best North American nature poets, he is well known for his lyrical and pastoral work. What I did not know was that he had a keen interest in the discoveries of science, read all issues of *Scientific American*, and attended lectures given by physicist Nils Bohr at Amherst College, where they both taught.

High school students participating in a science and literature project have suggested that in this short poem Frost is referring to the Rutherford-Bohr nuclear model of the atom—that series of experiments that changed “our” modern conception of the atom and launched us into the “nuclear age.”

Far-fetched suggestions? Not so if you imagine the story of the “Secret” as the all-knowing nucleus surrounded by scientists who continue to dance around with theories and only suppose. A play with words and a play with the nature of poetry? Yes, and as a poet, Robert Frost is simply observing natural phenomena and recording it in his own poetic words.

As a botanical institution, the Arboretum invites visitors to explore nature as scientific inquiry through research, record keeping, observation, and writing. Both the language of journal writing and the language of science are full of metaphors as ways to explain the known universe. The word “journal” derives from the Greek and means “daily.” Much like a scientist, a journal writer keeps a record of the surrounding natural world. Journal writing, then, is the practice of observation and daily recording of the natural world around us.

How do we record the silence and peace that we experience when we take walks in the forest and pause to listen to the birds and find enchantment in the busy noise of the creek? How do we explain ourselves when we talk to trees or close our eyes and imagine conversations with birds? The majesty

of the trees in the forest creates places we want to explore, where we come to enjoy the solitude and seek inspiration in a bird chirp high up in the canopy or in a tiny ephemeral flower hiding under the leaf litter in early spring.

Journal writing with nature is also about observation, recording, and discovery of a different nature—how do we learn to see with new eyes? It is a great way to ask new questions, to find new ways to explore the natural world through words and through drawing.

Journal writing can be a unifying experience. We can observe nature by taking notes, making drawings, photographing, and sketching, and then reflect upon that nature. In the end, we are reflecting inevitably about our own nature in time. In this way, journal writing becomes the bridge between our outside and inside worlds.

The skill of writing, like the skill of drawing, requires constant practice, so start the habit of writing in your journal every day. Practice daily and make it a habit to date your notes. Use active verbs, and start your sentences with “I feel,” “I see,” “This tree looks like,” “It reminds me of...”

The next time you walk in the forest or in the meadow, bring pen and paper to record what you see, including where you are, what time of day it is, and what season it is. Magnifying glasses, binoculars, and a camera can lead you to the tiny, and the almost unseen.

If you are uncertain about how to start, use a writing prompt as a guide. Suggestions:

- *Walk into the forest and search for your metaphorical tree of life and draw it! Write about the branches, the canopy, the roots, the leaves and imagine them as relationships in your life.*
- *Sit quietly by the water, think of one worry you have today, throw a pebble in the water and write about your worry.*
- *Imagine you are an atom in a leaf in the forest and write a letter about your travels.*

Call Erica Weick at 410-634-2847, extension 27 for more information. If you have an interest in starting your own group of nature journal writers, we can provide instructions and a starter kit for your group.

### Resources:

Leslie, Clare Walker and Charles E. Roth, *Keeping a Nature Journal: Discover a Whole New Way of Seeing the World Around You*, Storey Publishing, 2003, an illustrated nature journal.

McEwen, Christian and Mark Statman, editors, *The Alphabet of Trees*, a guide to nature writing, Teachers and Writers Collaborative, 2000, a superb collection of essays on writing with nature.

Aldo Leopold, *A Sand County Almanac, with essays on conservation from Round River*, Oxford University Press.

Jane Goodall Roots & Shoots Program—[www.rootsandshoots.org](http://www.rootsandshoots.org).

Carson, Rachel, *Silent Spring*, Boston, Houghton Mifflin Company, 2002.

Johnson, Cathy, *The Naturalist's Path: Beginning the Study of Nature*; Walker Publications, NY; 1991; Paperback, [www.cathyjohnson.info/naturalist.html](http://www.cathyjohnson.info/naturalist.html).

Thoreau, Henry David, *Walden*, <http://eserver.org/thoreau/waldenxp.html>.

# Native Plant Lore

## The Tasty Tuckahoe

by Beverly Gemmill,  
Delaware Master Gardener  
and Arboretum Docent

The arrow arum (*Peltandra virginica*) is a tropical-looking native plant that grows in wetlands at the Arboretum, as well as in swamps, bogs, ditches, and slow-moving freshwater streams. Its dark green arrow-shaped leaves, which can grow up to a foot long and six inches wide, top stems that reach to two feet tall. These same plants growing farther north have been seen to grow up to seven feet tall!

This handsome plant, cousin to the skunk cabbage and Jack-in-the-pulpit, blooms in May and June. Its blossom is a yellow-colored spike called a spadix, with male stamens on the upper end and the female pistils below, completely covered by a tapering, leaf-like spathe. The arrow arum does not self-pollinate but depends on insects to pollinate it. The primary pollinator of the arrow arum is the chloropid fly (*Elachiptera formosa*), which is attracted by the fragrance of the mature flowers. The flies feed on the pollen, mate, and find a place to lay their eggs on the spadix, all the while spreading pollen from male to female flowers. The fly's larvae hatch and feed on the rotting spadix. The fruits that develop after pollination are grape-sized black or greenish black berries that grow in clusters and ripen in the fall. As they are dislodged from the stem, they can float many miles until becoming saturated and sinking. If the berry sinks into a hospitable environment, it will grow into a new plant. This hardy perennial needs slowly moving, low-pH fresh water with low salt concentrations, and roots in humus-rich soil to thrive.

The arrow arum growing near banks of streams helps prevent erosion, its thick roots stabilizing the sediments while its leaves and stems absorb the force of waves. Grown in a garden, it is especially attractive on the edge of ponds with other wetland natives such as buttonbush (*Cephalanthus occidentalis*), elderberry (*Sambucus canadensis*), pickerelweed (*Pontederia cordata*), rice cut grass (*Leersia oryzoides*), soft rush (*Juncus effusus*), and tall blue vervain (*Verbena hastata*).

Wood ducks, rail, and muskrats eat the berries, but few animals and birds eat the plant because it contains high concentrations of calcium oxalate, a chemical very irritating to the mucus membranes and toxic to humans when eaten raw. The large leaves, however, provide good cover for aquatic creatures.

When not in bloom, it is easy to confuse the arrow arum for the arrowhead (*Sagittaria latifolia*), due to similarly shaped leaves. To identify the plant, look carefully at its leaves. The veins of arrowhead radiate from where the stalk joins the leaf, for the length of the leaf, whereas the arrow arum has three prominent veins, two of which radiate backwards.

Tidewater American Indian children knew that when their parents began to dig a deep pit and collect a huge pile of firewood, they would have to help dig and clean the "tuckahoe," the Native American name for arrow arum. The rhizome-like root needed to be roasted, dried, and pounded into flour, and then was used to make bread. In the 17th century, Captain John Smith wrote that the roots were not dug and stored but dug fresh as they were needed, and even after the long preparation, the flour made from the roots tasted bitter. The Native Americans disagreed, however, and knew it as the tasty "tuckahoe."



arrow arum  
(*Peltandra virginica*)

## Adkins Arboretum Gift and Tribute Program

The Arboretum's Tribute Program provides an opportunity to make a meaningful gift that will be an enduring tribute to honor family or friends. All tribute gifts are tax-deductible and support the Arboretum's mission of promoting the appreciation and conservation of the native plants of the Delmarva Peninsula through its educational, research, cultural, and recreational programs.

Donors may choose to honor or memorialize loved ones at the following contribution levels:

**Tribute Benches** (\$3,000)—Individuals may donate a custom-designed bench by Chestertown, MD furniture maker Robert Ortiz to the Arboretum as a tribute to a loved one. The name of the honored individual will be engraved on a plaque at the base of the bench. A donor may choose a location for placement of the bench along an Arboretum path.

**Tribute Books** (\$250)—Donations toward a book or books are placed in the library book fund to be used by the librarian to select a book or books for the Arboretum's collection. A commemorative bookplate naming the person being honored or memorialized will be placed inside the book's front cover.

**Memorial Contributions**—Friends and family can make a donation to Adkins Arboretum to honor or memorialize someone special. The donation will be placed in a fund to support the Arboretum's educational programs.

First-time tribute donors at the \$1,000 level and above will receive a one-year family membership to the Arboretum. For further information, contact Ellie Altman at 410-634-2847, extension 22.



## Arboretum Book Sale

It's time to pack up those nature and gardening books that you don't want anymore, but can't bear to toss out. Someone else is bound to treasure them at the Arboretum's second annual used book sale, held in conjunction with the Spring Native Plant Sale on May 5 and 6. Donate your used books and make room for those you will find at the sale! This is a great opportunity to clean out your book collection and support the Arboretum. Donated materials in usable condition may include books, gardening magazines, pamphlets, handbooks, field guides, nonfiction, fiction, poetry related to gardening, landscape design, natural history, conservation, animals, and plants.

Valuable and rare books will be offered on a separate table for a special price, or may be added to our library. Any items remaining after the sale will be donated elsewhere. Items should be dropped off at the Arboretum by May 3 and labeled "For book sale." Include your name and address for acknowledgment purposes. For further information, contact Carol Jelich at the Arboretum or e-mail [librarian@adkinsarboretum.org](mailto:librarian@adkinsarboretum.org).

### 2006 Summer Reading Suggestions:

*Underground* by Yvonne Baskin

*Book of Bees* by Sue Hubbell

*Last Child in the Woods* by Richard Louv

## MEMBERSHIP FORM

By becoming a member of the Arboretum, you are making a significant contribution to the conservation of the Delmarva Peninsula's natural heritage.

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Phone \_\_\_\_\_ Fax \_\_\_\_\_

email \_\_\_\_\_

Make checks payable to **Adkins Arboretum** and mail to:  
 P.O. Box 100, Ridgely, MD 21660  
 Adkins Arboretum, Ltd. is a non-profit organization. Contributions are tax deductible. [www.adkinsarboretum.org](http://www.adkinsarboretum.org)

I would like to receive information about volunteer opportunities.

- Individual \$35
- Family \$50
- Contributor \$100-249
- Supporter \$250-499
- Sustainer \$500-999
- Non-profit organization or agency \$75
- Small Business \$200
- Corporation \$500
- Leon Andrus Society \$1000+

Additional contribution \_\_\_\_\_

**Total Enclosed**

I would like to pay by credit card:

Number \_\_\_\_\_

Exp. date \_\_\_\_\_

Signature \_\_\_\_\_



*Margan Glover, Arboretum docent, leads a tour.*

## 2006 Arboretum Docent Training Program

Arboretum docents have many stories to tell—they learn to weave scientific facts about native plants into stories about plant neighborhoods, relationships between plants and animals, and who was here on the land before there was an Arboretum.

Docents make friends with a core number of native plants that live in each of our plant communities, meadows, transitional thickets, bottomlands, uplands, young forests, and wetlands. They become well versed in the history of the Arboretum, so as to better carry on their important role as Arboretum ambassadors and as translators of the Arboretum experience.

The Arboretum's 2006 eight-week docent training program will be offered Thursdays, September 21 through November 9. Sessions are held from 9 a.m. to 2 p.m., and cover ecology and biodiversity, plant communities, native plants, geology, and soils. Participants learn plant identification and uses, creative interpretative tour techniques, and, of course, storytelling.

Applications for the docent training program can be obtained by calling 410-634-2847 or can be downloaded at [www.adkinsarboretum.org](http://www.adkinsarboretum.org). Contact Erica Weick, Coordinator of Volunteer Programs, at 410-634-2847, extension 27 or at [eweick@adkinsarboretum.org](mailto:eweick@adkinsarboretum.org) for more information and to schedule an interview.



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P.O. Box 100  
Ridgely, MD 21660  
410-634-2847, [www.adkinsarboretum.org](http://www.adkinsarboretum.org)



Address Service Requested

## Saturday Guided Walks

11 a.m., April - November

Enjoy a walk through the Arboretum meadows and woods led by a volunteer docent. Walks are offered free to members and free with admission, rain or shine, each Saturday at 11 a.m., April through November. In April and May the highlight of your walk will be emerging spring ephemerals; and in June and July you will enjoy the lush and cool forest dominated by viburnums and paw paw.



## Group Tours and Adkins Arboretum 'On the Road' Programs

Call to schedule your docent-guided group tour or an Adkins Arboretum on the Road presentation in your community. For further information, contact Erica Weick, Coordinator of Volunteer Programs, at 410-634-2847, extension 27 or [eweick@adkinsarboretum.org](mailto:eweick@adkinsarboretum.org).

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