The purpose of the Delaware Native Plant Society (DNPS) is to participate in and encourage the preservation, conservation, restoration, and propagation of Delaware’s native plants and plant communities. The Society provides information to government officials, business people, educators, and the general public on the protection, management, and restoration of native plant ecosystems. The DNPS encourages the use of native plants in the landscape by homeowners, businesses, and local and state governments through an on-going distribution of information and knowledge by various means that includes periodic publications, symposia, conferences, workshops, field trips, and a growing statewide membership organized by the DNPS.

**How Can I Get Involved?**

The Delaware Native Plant Society is open to everyone ranging from the novice gardener to the professional botanist. One of the primary goals of the society is to involve as many individuals as possible.

The DNPS is working on some significant projects at this time. We have completed four reforestation projects in the Prime Hook area, at Blackbird Creek in New Castle County and Cedar Creek in Sussex County where we have installed tree tubes around newly sprouted seedlings, and are performing annual management of the sites. Help is also needed at our native plant nursery at the St. Jones Reserve with the monitoring and watering of plants along with many other nursery activities.

For more information, visit our website at www.delawarenativeplants.org. Our very informative, up-to-date website has all the contact information for the Society, along with a section on native plants, volunteering, and links to other environmental and plant related organizations.
Notes from Newcroft

One of the members of my Natural Selections book group recently recommended “American Canopy: Trees, Forests, and the Making of a Nation”.* Author Eric Rutkow ties the history of trees to the history of our country. From other reading I knew that the eastern part of the country had a much broader tree canopy when it was first settled than it does now. Rutkow researched the many ways in which we lost our trees starting with selling the white pine tree trunks to the British for their ship masts.

As a nature lover, I had read Aldo Leopold’s “Sand County Almanac” with its lavish layout and photographs of his Wisconsin farm. However, Rutkow details Leopold’s life and his new concept of what “wilderness” meant in 1921. His seminal ideas about conserving our wilderness lead eventually to the Wilderness Act in 1964 establishing a wilderness network of 9.1 M acres spread out over 54 sites. Today there are 110 M acres in 757 sites. How lucky we are to live in a country with such dedication to preserving our trees and natural history in spite of economic pressures that aren’t always in the best interests of conservation.

See page 6 of this issue for an article about the BBG’s (Brooklyn Botanical Garden) new Native Flora Garden. Just one example of current efforts to preserve our natural history. On a personal note, a friend’s son is Uli Lorimer who is curator of the BBG effort. BBG has planned for this new addition for a number of years. In 2009 Uli lead us on a tour of the Native Plant Garden and showed us the undeveloped land that would become the Native Flora Garden.

Cindy Albright
cindy@cindyalbright.com

*American Canopy” was published last year and will soon come out in paperback.
The spring lecture on the American Chestnut tree attracted a group of 19 people to the St. Jones Reserve on a beautiful, sunny day on March 9th. Jason Beale, manager of the Abbott’s Mill Nature Center gave a presentation on the Delaware Nature Society’s efforts to partner with the American Chestnut Foundation to bring their efforts to Delaware. The plan is to establish a “restoration” orchard of chestnut trees, an interpretive trail, and inventory remnants of existing trees.

Jason shared that the fungus that eventually destroyed the American Chestnut tree (Castanea dentata) was first identified in 1904 at the New York Botanic Garden although it was probably around before that time. By the 1950’s, the American Chestnut tree was ecologically extinct. The fungus eventually girdles the tree so that vital nutrients and water can no longer travel through cambium of the tree. You can still find old tree stumps and shoots that grow but rarely will any reach the 30-40 foot size to actually bear chestnuts. The chestnuts were valuable wildlife trees because they reliably set and dropped loads of nuts every year when their native cousins the oaks will bear heavy and light crops in alternate years.

The American Chestnut Foundation has used a “backcross” method of plant breeding to select the blight resistance of the Chinese Chestnut and transfer it to the American Chestnut tree. They now have what are called “Restoration 1.0” trees that are 1/16 Chinese Chestnut and 15/16 American Chestnut.

Bill McAvoy, a botanist with the Delaware Natural Heritage Program and past President of DNPS, gave an overview on the types of Chestnut trees both in Delaware and worldwide. There are 8-10 species of chestnut trees worldwide but only 3 types in the Delmarva region. The two most prominent were the American Chestnut and the Dwarf Chestnut (Castanea pumila). The three non-native species are Chinese Chestnut (C. mollissima), Japanese Chestnut (C. crenata), and the Spanish Chestnut (C. sativa).

DNPS is looking at how it can be involved in supporting the valuable work of the American Chestnut Foundation by assisting with the creation of a Delaware Restoration Branch. We will have more details on this as we do further research into what this would mean to DNPS and how we would implement such a joint effort.

Board Member Eric Wahl prepared a trio of tasty finger foods using European Chestnuts because American Chestnuts were not available. He was able to order the European Chestnuts on-line from Allen Creek Farms located in the state of Washington. The Chestnut spinach dip, Chestnut Snowball cookies, and Chestnut Apple Bread were delicious. Jason Beale and DNS volunteer Ed Crawford brought a selection of native and non-native Chestnut samples (nuts, wood, leaves, and twigs) along with several publications and sample documents relating to the American Chestnut Foundation and Restoration Branch chapters.

By Rick Mickowski

To learn more about the American Chestnut Foundation you can visit their website at www.acf.org. Also, NY State’s Chapter efforts.
**GARDENING WITH NATIVE PLANTS**

**RED MULBERRY (MORUS RUBRA)**

by Bob Edelen

**NATURAL HISTORY**

Nan and I enjoy attracting birds to our yard here in Harbeson. We put out feeders, water, bird houses, misters and native plants in hopes of attracting a wide variety of birds. So in trying to decide what native plant to write about for this column, I’m often researching a plant to see how it might fit into our landscape. Such is the case with *Morus rubra* or Red Mulberry. In reading through the numerous periodicals we subscribe to, I’m often impressed with outstanding photos of cedar waxwings, mockingbirds, Baltimore orioles and others eagerly devouring a mid-summer crop of mulberries — WOW, this must be the tree for us! In fact, many species of birds and small mammals eat the fruits of red mulberry. Bird consumers also include wild turkeys, wood ducks, bluebirds, indigo buntings, gray catbirds, eastern kingbirds, towhees, orchard orioles, brown thrashers, tanagers, vireos, woodpeckers, great crested flycatchers and more. Other consumers include opossums, raccoons, fox squirrels, and gray squirrels. The twigs and foliage are browsed by white-tailed deer, beavers consume red mulberry bark and it is the larval host of the red cloak butterfly. The red mulberry is a tree of the rich woods, bottom lands, fence rows and edges. Its range extends from southern New England west to South Dakota and south to Texas and Florida. The red mulberry is a tree usually attaining 40 to 50 feet in height and occasionally reaching 70 feet with a diameter of 4 feet. In forested areas the red mulberry will grow tall and spindly with few branches, but in the open it is generally short and stout with a broad round configuration and a mass of intertwined branches popular as cover for numerous wintering birds. In late April and early May with the unfolding of leaves, 2 inch long male catkins and 1 inch female catkins are formed. Red mulberry is primarily a dioecious plant, with male and female trees, but can be monoecious having both male and female flowers on the same tree. One inch jet black, blackberry like fruits ripen from late June through early August, and when fully ripe are soft, juicy, sweet and popular with birds, mammals, people, and neighborhood children!

**WHERE TO GROW**

The red mulberry grows well under a wide variety of conditions. Best growth occurs in the open, on moist, well-drained soils. It grows well on a variety of soils abundant fruit litters and stains sidewalks and automobiles, and children must be forgiven for tracking berry juice onto mom’s sparkling clean floors when they proudly come home with a pail full of freshly picked berries. However, because this relatively large, sweet fruit is a favorite food of most birds and some small animals, most of the fruits are eaten and dispersed by wildlife before they fully mature. Having said that, if you have an out of the way place in a wildlife habitat, the back of the yard, the center of a bed planted with other native plants, a wet area where nothing else will grow, or perhaps along a fence row with that irritating neighbor who has a swimming pool, then the rewards of wildlife in your yard will far overshadow the red mulberry’s liabilities.

**PROPAGATION AND CARE**

Seeds can be extracted from fresh fruits by mashing and soaking them in water. Viable seeds will sink to the bottom and pulp and empty seeds will float to the top where they can be skinned off using a common household strainer. Several rinsings and subsequent skimming will result in cleaned seeds that can be sown in fall without stratification or in spring following 30 to 90 days of stratification at 33° to 41° F in moist sand. Red mulberry can be propagated from stem cuttings or by budding, but these methods are complex, require greenhouse facilities and are not particularly recommended. However, red mulberry is a prolific root sprouter and can be reproduced by layering. Because the red mulberry is a favorite browse for deer, be sure to protect your new seedlings if you live in a rural community!

(continues on page 5)
Resources and Reviews

Gardening With Native Plants
(cont. from page 4)

LORE
The highest use of red mulberry is for its large, sweet fruits. In addition to their value to wildlife, the ripe fruits are eaten raw and have long been used in Appalachia for pies, jams, jellies, juice and wine. In the past, the fruits were valued for fattening hogs and as poultry food. The wood of the red mulberry is used locally for fence posts because the heartwood is relatively durable. Other uses of the wood include farm implements, cooperage, furniture, interior finish, and caskets. Native Americans used the fruits fresh and for beverages, breads and cakes, dumplings and preserves, and mixed dried fruits with animal fat for pemmican. Native Americans also used the plant medicinally as a worming agent, remedy for dysentery, laxative, emetic and ringworm. Choctaw Indians wove cloaks from the fibrous inner bark of young mulberry shoots. Finally, don’t be tempted to harvest your red mulberries before they are fully ripened! Unripe fruit and milky sap from all parts have low toxicity if eaten. Symptoms include hallucinations and stomach upset.

A Bipartisan Plan to Protect the Delaware River Basin
Excerpts from John Carney’s article in the 3/6/13 issue of the Coast Press

DE Representative John Carney introduced the Delaware River Basin Conservation Act with a bipartisan coalition of six Republicans and four Democrats from across the region. (This bill was first introduced by Congressman Mike Castle in 2010.) It would create a program in the U.S. Fish and Wildlife Service, devoted to improving existing restoration and conservation efforts at the state and local levels.

The DE River Basin spans four states and 13,500 square miles, providing clean drinking water to millions of people and roughly $26 billion in positive economic impact annually through ports, agriculture, hunting, fishing and tourism.

One way to make these improvements is by incentivizing stakeholders, from nonprofit groups and universities, to local governments and private industry to coordinate their efforts. The legislation does not add to the federal deficit because it does not authorize any new spending but would come from US Fish and Wildlife Service.
**New Native Flora Garden Grows Local**

When it comes to living and eating more sustainably, we’ve all heard, “Go local.” Brooklyn Botanic Garden will embody this edict when the Native Flora Garden expansion opens later this spring. The one-acre expansion features more than 150 plant species that evoke rapidly disappearing wild ecosystems in New Jersey, Long Island, the Catskills, and Staten Island, including coastal meadows and pine barrens. In fact, many of the species in the new plantings are classified as threatened or endangered. But remarkably, BBG sourced most specimens and seed from within a 100-mile radius of Brooklyn. By bringing the focus of plant-community conservation close to home, BBG hopes to inspire Brooklyn gardeners to branch out.

A call for urban biodiversity is at the root of this educational garden, says curator Uli Lorimer. Researchers tell us that cities across the country and the world are becoming “ecologically homogeneous”: When it comes to plant varieties, whether intentionally planted or spontaneously popping up, cities are beginning to look alike. The same 50 plant species can be found in almost every one of the world’s largest cities.

“The way things look in Brooklyn now has to do with how humans have interacted with the environment for hundreds, even thousands of years,” offers Uli. “But every day, unique local habitats are being lost. We’ve got to protect what little space is left.”

A stroll through the new Native Flora Garden expansion will serve to remind us that every scrap of green in our city—whether a community garden, tree bed, backyard, or crack in the sidewalk—is an opportunity to give native plants a chance at survival.

Here are some tips from Uli for “growing local” in the city:

- **Recognize and honor the plant communities already around you, but enhance them with native plants.**
- **If you grow native plants, or know someone who does, save seeds to exchange with your neighbors. Then, share seedlings. That’s really keeping it local!**
- **Get native plants and seed legally from reputable sources. If your neighborhood nursery doesn’t sell native plants, ask for them. And demand that they be locally and sustainably sourced!**
- **Every little piece of green helps. It may not be obvious, but on a larger scale your little native garden or container connects with those of your neighbors to create wild corridors for pollinators and birds.**
- **Embrace change as a constant—every tree lost to Sandy, for instance, is an opportunity for new growth.**
- **Remember that “low maintenance” doesn’t mean “do nothing”; the gardener of a native planting is always editing the garden behind the scenes.**
- **If you can, visit wild places just outside NYC—observe native plants truly at home.**
- **Once you’ve planted a native garden, watch for the wildlife it attracts. That’s what Uli’s doing at the new Native Flora Garden: “It’s a neat opportunity to observe who shows up.”**

For more information and sources for native plants, see below.

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**Nothing Fishy About Planting Natives**

In 2012 members of the Corporate and Community Environmental Stewardship Program (CESP) worked with the Partnership for the Delaware Estuary to improve their landscapes. They did so by making their landscaping more functional and more beautiful using native plant gardens. The following is a description of what one community did as Delaware Estuary environmental stewards.

**New Castle, DE** completed the first of three rain gardens near the Christina River located in Glasgow Park. It collects rain water running off the nearby road and walking path. New Castle County employees excavated the rain garden and volunteers came out in the pouring rain to plant native shrubs and perennials. Gardens will be installed at Christiana High School and Ashland Nature Center later this year. The county is also providing educational signage at project sites.


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See these BBG tip sheets and gardening articles: “Native Plants for New York City Rain Gardens,” “Go Native,” and “A Bird Habitat Garden—Plant Choices and Tips.”
DNPS 2013 Native Plant of the Year

*New York Ironweed*

By Rick Mickowski, DNPS member

New York ironweed (*Veronica noveboracensis*) is a member of the Aster family (*Asteraceae*). It is a tall, clump-forming perennial native wildflower growing 5–8 ft. in height. The slightly rough stems bear lance-shaped, deep green leaves. Small flower heads occur in large, loosely branched, flat-topped, terminal clusters. Flowers are all of the disk type and deep reddish-purple in color. This plant is common in wet open bottomland fields. It is found in moist soils in the wild but will flourish in regular or dry soil. It also tolerates clay and neutral to acidic conditions. For use in an ornamental garden, it is best suited for the back of the border or tight spaces. The flowers do attract butterflies and the seed heads attract birds.

The plants can be propagated by sowing the seeds in the fall or by providing cold stratification. Germination is usually low, so sow seeds thickly. The plant can also be propagated by softwood cuttings taken in last spring or by division of the clumps. Store the dry seeds in sealed, refrigerated containers. This species requires or benefits from a three month period of cold-moist stratification in the refrigerator.

On a personal note, I have collected seed along the Lewden Greene Park bike/walking along the Christiana River near my home in New Castle County. I have kept the 2011 seed in the freezer and also collected seed in the fall of 2012. I sowed a small flat of the 2011 seed on March 17th and a good number of the seeds were sprouting a week later. The 2012 seed has not been cold treated as of yet.

Early last summer, the New Castle Conservation District, through its landscape contractor, planted a variety of native plant plugs in a low wet swale area between the parking lot and Glasgow Avenue. New York Ironweed was one of the plant species used. The photo is of one of the plugs that bloomed last summer/early fall a few months after planting.

Look for New York Ironweed to be a featured plant at the DNPS native plant sale later this fall. We hope to announce a new September date for annual plant sale.

*Information for this article taken from the native plant database of the Lady Bird Johnson Wildflower Center.*

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Spring/Sumer 2013 Program Guide

*Register early for these excellent classes*

**Spring/Summer 2013**—Mt. Cuba Center  *Your pathway to native plants*

**Lecture in the Copeland Native Plant Series**  *Note: meeting location at Ashland Nature Center*

**The Great Oak Tour**  *Saturday, May 18, 9 am – 3 pm.* William Ryan, Botanist. Oaks are one of the best trees to plant in order to contribute to local food chains and ecological well-being. They are at the top of the list for plants that attract huge numbers of butterfly and moth larvae, which in turn feed birds and their growing families, not to mention their acorns, which feed lots of mammals and bird species. Get ideas on which species to plant, as we take you on a tour of the nearby coastal plain, piedmont, and serpentine barrens to find as many species of oak as we can. Learn identification tips, natural history, and what might work as a planting in your backyard backyard. Meeting location: Ashland Nature Center. Van transportation provided. Program #: U13-002-AS

**Spring 2013** —Adkins Arboretum  
Register for classes  [adkinsarboretum.org](http://adkinsarboretum.org).

**Spring 2013** —*Delaware Nature Society - Spring Native Plant Sale*
# Membership Application

**DELAWARE native PLANT SOCIETY**

## Member Information

**Name:**

________________________

**Business Name or Organization:**

________________________

**Address:**

________________________

**City and Zip Code:**

________________________

**Telephone (home/work):**

________________________

**E-mail address:**

________________________

- **Full-time Student** $10.00
- **Individual** $15.00
- **Family or Household** $18.00
- **Contributing** $50.00
- **Business** $100.00
- **Lifetime** $500.00
- **Donations are also welcome** $________

Membership benefits include:

* The DNPS quarterly newsletter, *The Turk’s Cap*
* Native plant gardening and landscaping information
* Speakers, field trips, native plant nursery and sales

**Total Amount Enclosed:** $  

**Make check payable to:**  
DE Native Plant Society  
P.O. Box 369, Dover, DE 19903
The Delaware Native Plant Society is open to everyone ranging from the novice gardener to the professional botanist. One of the primary goals of the society is to involve as many individuals as possible.

The DNPS is working on some significant projects at this time. We have completed four reforestation projects in the Prime Hook area, at Blackbird Creek in New Castle County and Cedar Creek in Sussex County where we have installed tree tubes around newly sprouted seedlings, and are performing annual management of the sites. Help is also needed at our native plant nursery at the St. Jones Reserve with the monitoring and watering of plants along with many other nursery activities.

For more information, visit our website at www.delawarenativeplants.org. Our very informative, up-to-date website has all the contact information for the Society, along with a section on native plants, volunteering, and links to other environmental and plant related organizations.
Notes from Newcroft

This issue is all about trees, especially sassafras. The best outing this spring was joining the Delaware Nature Society’s The Great Oak Tour in May—part of the Copeland Native Plant Series. Pictured above is the small group in front of the mighty London Grove oak, the second largest white oak (Q. alba) in PA. The tour was led by William Ryan, an ecological consultant and doctoral student at the University of Delaware, whose research is focused on the biological responses to restoration techniques in temperate eastern North American serpentine barrens. Several of the 16 oak species we saw, included Quercus marilandica, Q. stellata, Q. ilicifolia, and Q. prinoides, that are strongly associated with serpentine barrens in the Piedmont of DE, PA, and MD. A great day and a great tour.

Current reading includes Andrea Wulf’s “Founding Gardeners”. Benjamin Franklin from London and George Washington from Valley Forge used their horticulture interests during the search for independence of the colonies from England as a welcome distraction from the rigors of war. Letters home included directions about plantings they were thinking about. Once home Washington, thinking he would be home for good, redesigned his gardens. Included in his plantings were sassafras trees collected from his woods. On the bare branches cling delicate yellow flowers which Washington thought “would look very pretty” mixed with the eastern redbud.

Edwin Way Teale wrote about sassafras in his 1951 “North with the Spring” of his visit to The Greer Company a medicinal drug company in Lenoir, NC. “The bark goes into making perfumes as well as medicines.” (See pg. 4 of this issue for Bob Edelen’s column about sassafras’s carcinogenic nature.) In Teale’s “Autumn Across America” he remembers growing up on his grandfather’s farm in the dune country of northern Indiana observing the golden mittens of the sassafras.

So, you might want to plant sassafras in your landscape for it’s beauty—just don’t eat it.

Cindy Albright
cindy@cindyalbright.com

Update on Trees Donated to DE Wild Lands

Last year, 2012, Jim MacKenzie, DNPS member and Octoraro Native Plant Nursery President and Operations Manager, donated over 50 native plants to Delaware Wild Lands, Inc.(DWL) and the U.S. Fish & Wildlife Service (USFWS). The DWL staff and DNPS member Rick McCorkle visited the nursery and picked up 13 bald cypress, 4 black gums, 24 white oaks, 2 swamp white oaks, and a small number of native shrubs (e.g., sweet peppercush, highbush blueberry). All of the trees were planted in or adjacent to Great Cypress Swamp (GCS).

Update on June , 2013

Andrew Martin amartin@dewildlands reports from DE Wild Lands that nearly all of them survived and are in the ground and doing well in the Great Cypress Swamp. Most of the Cypress were planted in a grove at the Roman Fisher Farm which serves as the base of operations in the Great Cypress swamp, and the rest of the trees were planted at various locations throughout the ~10,500 acre property.


For the Founding Fathers, gardening, agriculture, and botany were elemental passions: a conjoined interest as deeply ingrained in their characters as the battle for liberty and a belief in the greatness of their new nation.

Founding Gardeners is an exploration of that obsession, telling the story of the revolutionary generation from the unique perspective of their lives as gardeners, plant hobbyists, and farmers.
FROM SHADY NATIVES TO A SHADY TRAIL
By Rick Mickowski, DNPS Secretary

Saturday, June 15 turned out to be a beautiful day for the 10 DNPS members and 2 guests who made their way to the Abbott’s Mill Nature Center south of Milford. President John Harrod gave an informative presentation on native plants that will grow in the shade or at least tolerate some shade. Some of the species he covered included Juneberry (also known as Serviceberry or Shadbush), native columbine, wild ginger, musclewood, American chestnut, redbud, sweet pepperbush, native dogwood, pagoda dogwood, American hazelnut, white wood aster, American strawberry bush, sweet bay magnolia, ostrich fern, native witch hazel, swamp pink, inkberry, spicebush, sensitive fern, skunk cabbage, Christmas fern, lyre leaf sage, blood root, bluestem goldenrod, maple leaf viburnum, and bellwort.

After the presentation, Jason Beale took our group on a guided hike of one of the outdoor trails across the street from the nature center. It is being developed into the Chestnut Trail. The first stop was an 11 acre meadow installed three years ago through a USDA – Natural Resource Conservation Service program. A warm season grass meadow with wildflowers was planted to serve as wildlife habitat. Nearby there was a collection of purple martin houses. We hiked through the woodland noting various fenced in American Chestnut trees that have been identified on the property. Another interesting stop was on the boardwalk wetland trail. The beavers have dammed the upper end of the Abbott’s Mill pond so there is more water in areas where it used to dry up more frequently. We saw many dragonflies flitting about. The final stop was a newly created wetland project that was completed last fall. It was created from a low spot in a field adjacent to the woodlands. Over 200 trees and shrubs were planted in the open space area.

We finally made our way back to the Nature Center for a pot luck lunch out at the picnic tables where John Harrod gave a brief update on DNPS activities and the upcoming fall symposium and plant sale. A big thank you to Eric Wahl, Rick Mickowski, Rick McCorkle and Flavia Rutkosky for providing the sandwiches, deviled eggs, baked beans, pasta salad, chips, brownies and beverages for our lunch. We also thank Jason Beale for being our host for the day.
**GARDENING WITH NATIVE PLANTS**  
**SASSAFRAS (Sassafras albidum)**

**NATURAL HISTORY**
My first experience with Sassafras was as a youth visiting relatives in the hills of Virginia for a family outing. One of the 'treats' prepared by my cousins was a large jug of sassafras tea made as I recall by steeping the dried root bark in boiling water. As I recall, it tasted somewhat like – sassafras, but that was a long time ago and I haven't taken the opportunity to repeat the experience! But I still manage to grasp a leaf from a sassafras tree and crush it to share its yummy fragrance with grandchildren when they come for a visit. The name 'Sassafras' applied by the Spanish botanist Monardes in the sixteenth century is said to be a corruption of the Spanish word for saxifrage with albidum, meaning white. More recently a whole slew of common names have been applied depending on geographical distribution or perhaps just the observers view or use of the sassafras! Some common name include sassafras, common sassafras, smelling stick, saloop, white sassafras, ague tree, cinnamon wood, gumbo file and mitten tree. The latter applied to the form the leaves take, all resembling mittens!

Sassafras is a small to medium-sized deciduous tree occurring from southwestern Maine west to southern Ontario and southwest to eastern Texas and east to central Florida. As a tree, sassafras can attain an average height of 40 to 60 Feet. The top three trees in the 'Big Trees of Delaware' are 59, 65 and 70 feet tall! Left to its own devices, the sassafras will spread by root suckers to form large colonies. Attractive, greenish-yellow flowers appear in clusters at the branch ends in spring. Flowers on female trees give way to small pendant clusters of bluish-black berries (drupes) which are borne in attractive scarlet cup-like receptacles on scarlet stalks. Fruits mature in the fall.

Sassafras is invaluable to wildlife! Sassafras leaves and twigs are consumed by white-tailed deer in both summer and winter. Sassafras leaf browsers include woodchucks, marsh rabbits, and black Bears, and Beavers will cut sassafras stems for winter forage. Sassafras fruits are eaten by many species of birds including bobwhite quail, eastern kingbirds, flycatchers, phoebes, wild turkeys, catbirds, flickers, woodpeckers, woodpeckers, thrushes, vireos, and mockingbirds. Some small mammals also consume the fruits and sassafras is a larval host or nectar source for Spicebush Swallowtail butterfly, Promethea silkmoth, and pale swallowtail butterfly!

For years, Sassafras was grown for the supposedly-medicinal properties of the fragrant roots and bark but it is the outstanding fall display of foliage which should bring it into the garden today. The large, multi-formed, five-inch leaves, fragrant when crushed, are bright green throughout the summer but are transformed into magical shades of orange/pink, yellow/red, and even scarlet/purple in the cooler months of autumn, brightening the landscape wherever they are found. These colors are especially prominent when Sassafras is planted as a specimen or in a mixed shrubbery border, with a background of dark evergreens.

The flowers, which are among the earliest in spring, are very popular with honey bees and other insects. Songbirds devour the fruits as fast as they ripen. Sassafras (along with other members of the laurel family) is the host plant for the **spicebush swallowtail** butterfly. Sassafras foliage brightens the landscape with yellows, oranges and reds in autumn, and the winter silhouette is appealing with its horizontal branches in tiered layers.

**WHERE TO GROW**
Given its excellent value to wildlife, ease of care, delightful fragrance, and beautiful yellow, purple and red fall color, sassafras deserves a place in your landscape! Naturally occurring in wood margins, fence rows, fields, thickets and roadsides, sassafras is easily grown in average, medium, well-drained soil in full sun to part shade. It is excellent for naturalized plantings or screens where they are given lots of space to colonize or can be grown as a lawn specimen if root suckers are removed! Since both male and female trees are required for pollination, you will need trees of both sexes for fruit setting.

**PROPAGATION AND CARE**
Sassafras can be propagated from seed or root cuttings, but note that the large, deep taproot makes transplanting of established trees difficult. To propagate from seeds, collect the fruits when they are filled out and dark blue, but note they are quickly devoured by birds and other critters, so you will need to act fast! Macerate, clean and air dry the seeds briefly. The seeds may then be directly sown outdoors or cold stratified in sand over winter to break dormancy and then planted out in early spring. Sassafras freely produces root suckers which may be taken in early spring before the plan leaves out.

(Continued on next page)
Resources and Reviews

Sibley Guide to Trees
David Allan Sibley, 464 pgs.
With the same attention to detail given in his bird guides, Sibley’s book offers several illustrations of flowers, leaves, bark, fruits and seed pods for each tree species.

Save the Dates
DNPS Native Plant Sale and Arts in the Estuary - 20th Anniversary Celebration!
Saturday, September 28
St. Jones Preserve
10:00 a.m. to 3:00 p.m.

Join us as we celebrate the Reserve’s 20th anniversary and National Estuaries Day by experiencing the estuary through the artistic viewpoint. Enjoy various artisans, performers, and authors as we join with the John Dickinson Plantation to bring you a cultural view of the estuary! Try your hand at some artwork, buy some native plants from the Delaware Native Plant Society during the native plant sale as you look at your landscaping artistically, and learn tips from local and regional artists. This event is open to the public and registration is not required. Directions are here.

Jennifer.Holmes@state.de.us
St. Jones Preserve
(302) 739-6377

Gardening with Native Plants
CONTINUED FROM PAGE 4

LORE
Native Americans used sassafras extensively for many purposes. Infusions were used to kill parasitic worms, to treat syphilis, colds and measles, to reduce fever, control diarrhea, and relieve constipation. A tea was made from the bark and roots and the dried leaves used as a spice to flavor foods. Early European settlers quickly adopted sassafras tea and oil of sassafras extracted from sassafras root bark was used as a food flavoring and was the basis of root beer. Filè powder, made from the ground, dried leaves of sassafras was used as a condiment and soup thickener in gumbo and other Cajun dishes. More recently, sassafras oils have been determined to contain a carcinogenic substance (safrole) and many of the former uses for the oils are now banned by the U.S. Food and Drug Administration.

Sassafras wood has been used for cooperage, buckets, fence-posts, rails, ox yokes, cabinets, interior finish, and furniture and Native Americans used the wood for dugout canoes.

Oh, and don’t forget, then next time you’re out walking in the woods, grab one of the sassafras mitten shaped leaves and crush it for its delightful fragrance!

Bob Edelen, DNPS Member

Dr. Susan Yost reports that the Big Trees of Delaware is a free guide book published by the Delaware Department of Agriculture. There are some extra copies at the Claude Phillips Herbarium at Delaware State University. Also contact Delaware Forest Service Administrator, Mike Valenti.
9th Annual Native Plant Symposium
Rain Gardens
Inspired by Native Plant Communities
Saturday, September 21, 2013
10:00 a.m. – 2:00 p.m.
Bombay Hook

Sponsored jointly by the Delaware Native Plant Society and the Bombay Hook Garden Keepers

Rain gardens are being installed all over the country but functioning and thriving examples are rare. Learn why so many plantings fail or lack the ecological and functional value they are expected to provide and take a closer look at natural plant communities and how we can learn to use them to create successful ecosystems that reduce runoff and pollution in our landscape. Speakers include Bill McAvoy, Botanist with the Delaware Natural Heritage Program, and Rob Jennings of the Chesapeake Bay Foundation. A complimentary lunch is included. The symposium is free, but registration is required and space is limited.

To register, contact Quentin Schlieder by phone at (302) 653-6449 or by e-mail

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Historic Lewes Colonial Herb Garden Celebrates Founding at Spring Fest

On May 22 some of the founders of the garden gathered to celebrate the garden’s beginnings in 1980 by Mary Vessels. Sussex Master Gardeners assisted in the maintenance over the next several years and about 12 years ago Lewes in Bloom became involved.

The Herb Garden contains plants used by a typical Colonial housewife in the 1700s. It is located next to the Lewes Chamber of Commerce at 120 Kings Highway, Lewes, DE 19958

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Brooklyn Botanic Garden Celebrates Opening of expanded Native Flora Garden

This newsletter has reported the development of this BBG garden over the last few years by Uli Lorimer. This NY Times article traces the project’s history which began in 1990 with the New York Metropolitan Flora Project.

Recently the New York Botanical Garden’s Native Garden opened with 400 species that reflect a broad population of plants native to the area east of the Mississippi River. By contrast, almost all of the 150 native species in Brooklyn (the goldenrods, the flat-topped asters, the cute little blue-eyed grasses blooming in the meadow, as well as the moisture-loving pitcher plants and orchids, the lichens and bearberry of the sandy Pine Barrens) were collected within 200 miles of New York City.

Celebrate Native Flora Day at BBG on July 8 with a special tour of the Native Flora Garden with curator Uli Lorimer, followed by a talk with Doug Tallamy, author of Bringing Nature Home: How You Can Sustain Wildlife with Native Plants.
Upcoming Events

Delaware Nature Society—Programs and Activities
Website delawarenatureorganization.org/

Pollinator Walks
Program #: U13-105-CF May/June dates;
U13-106-CF July/August dates
Fridays, Jul 12, 26, Noon – 2 pm, Aug 9, 23, Noon – 2 pm
Member/Non-Memb: FREE/$5 per walk,
Leaders: Dr. Don Coats, Marty Coats, Mike Faulkner
Join our resident “pollinator monitors” on semi-weekly walks that count and record these native and non-native hard-workers along with the plants that they are foraging and fertilizing. With populations of all insect pollinators on the decline, data collected will benefit national pollinator citizen science programs. Binoculars are recommended.

Flint Woods Walk with Brian Winslow
Program #: U13-018-FW
Thursday, July 11, 6 - 8 pm
Member/Non-Member: $10/$15
Leader: Brian Winslow
Meeting Location: Flint Woods Preserve
Evening is a wonderful time to see wildlife, hear singing birds, and to enjoy the soft evening light among towering old trees and bubbling creeks. This is a great opportunity to experience one of the best natural areas in New Castle County.

NEW! Nature Hikes! FREE for Members!
July 20, August 17, Sept 21
First walk leaves at 8:15, second walk starts at 9:45.
Non-Members: Adult $5, Children Ages 2+, $3
No pre-registration required.
Join us the third Saturday of each month thru September to explore the 352-acre Coverdale Farm Preserve. Take a gentle morning walk with our staff while discovering the rolling hills, farm pond, Burrows Run Stream, warm season grass meadows, and old growth woodland

Save the Date
Delaware Coast Day
Sunday, October 6, 2013 11 a.m. to 5 p.m.
College of Earth, Ocean and Environment
Lewes, DE
Includes many exhibits related to Native Plants and their environment www.decoastday.org

Copeland Native Plant Series
Butterflies and Their Host and Nectar Plants
Saturday, July 13, 1 - 3 pm
Joe Sebastiani and Eileen Boyle, Mt. Cuba Center Director of Education and Research
Enjoy a presentation about some of the butterfly species in our area and the native host and nectar plants you can plant in your yard to entice a variety of species. Take a walk through the Mt. Cuba gardens to see and learn about some of these plant species and to find and identify butterflies. Meeting location: Mt. Cuba Center.

Medicinal Uses of Native Plants
Tuesday, August 20, 5:30 - 7:30 pm
Joe Sebastiani and Sue Bara, Professional Herbalist
Walk different habitats at Ashland Nature Center to identify native plants and discuss identification, natural history, and uses of the plant in food and medicine. Practice making some samples of various teas and poultices, and find out what you can grow in your backyard for such purposes. Meeting location: Ashland Nature Center.

Wet and Dry Meadow Wildflowers and Ecosystems
Thursday, September 5, 4 - 7 pm
Joe Sebastiani and Janet Ebert, Botanist
Explore a wet floodplain meadow and a dry upland meadow at the Bucktoe Creek Preserve to identify a variety of wildflowers in each. Learn natural history and ecology of both habitats, as well as how these areas differ floristically and get ideas to plants that you can incorporate into your backyard or natural restoration site. Both of these sites are wonderfully diverse and are prime examples to follow for replicating in other situations. Meeting location: Bucktoe Creek Preserve.
# Membership Application

**DELAWARE NATIVE PLANT SOCIETY**  
**WWW.DELAWARENATIVEPLANTS.ORG**

## Member Information

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- Full-time Student  $10.00
- Individual  $15.00
- Family or Household  $18.00
- Contributing  $50.00
- Business  $100.00
- Lifetime  $500.00
- Donations are also welcome  $________

Membership benefits include:
* The DNPS quarterly newsletter, The Turk’s Cap
* Native plant gardening and landscaping information
* Speakers, field trips, native plant nursery and sales

**Total Amount Enclosed: $**

Make check payable to:
DE Native Plant Society  
P.O. Box 369, Dover, DE 19903
The purpose of the Delaware Native Plant Society (DNPS) is to participate in and encourage the preservation, conservation, restoration, and propagation of Delaware’s native plants and plant communities. The Society provides information to government officials, business people, educators, and the general public on the protection, management, and restoration of native plant ecosystems. The DNPS encourages the use of native plants in the landscape by homeowners, businesses, and local and state governments through an on-going distribution of information and knowledge by various means that includes periodic publications, symposia, conferences, workshops, field trips, and a growing statewide membership organized by the DNPS.

**How can I get involved?**

The Delaware Native Plant Society is open to everyone ranging from the novice gardener to the professional botanist. For more information, visit our website at www.delawarenativeplants.org.

**Natural Quotes**

“Can the whole forest be seen through a small contemplative window of leaves, rocks and water?”

by David Haskell

**The DNPS Vision**

Visit us on Facebook:

Delaware Native Plant Society
Notes from Newcroft

Most of us are familiar with jewelweed here in the Mid-Atlantic. I found it on a recent Inn-to-Inn hiking trip to Vermont. Our group walked along a 6-mile trail mostly covered with jewelweed and stinging nettles. It was along a creek bed and amply moist from the 30 straight days of rain. The guide mentioned using the crushed leaves to relieve the sting of nettles.

(See Bob Edelen’s article on pages 4 & 5.)

Visits closer to home, included the Adler Arboretum’s Tent Symposium in Denton, MD on September 29, 2013 which hosted author of “The Forest Unseen: A Year’s Watch in Nature” David Haskell. As a biology professor he observed a sq. meter section (a mandala) of old-growth forest near his University of the South in Tennessee for a year. The New York Times profile says “he thinks like a biologist and writes like a poet. Bill McKibben says he “sees the whole living planet as clearly as any writer in many years.”

Each paragraph is charged with poetic information and a deep understanding of the eco-system. The biography section in the back is listed by chapter.

Rather than buy the print edition of the book I plan to buy the eBook edition so that I can search for specific items and keep it as a handy reference.

Cindy Albright
cindy@cindyalbright.com

Native Cultivars—Good, Bad and Ugly

Excerpts from Native Plants & Wildlife Gardens
by Vincent Vizachero *

Native plant cultivars are a vexing topic. My experience has been that gardeners who are increasing their use of native plants are likely to find the topic of native plant cultivars to be confusing, and for good reason. There is a tremendous amount of variation in the traits for which cultivars are maintained, how the cultivars originated, and how cultivars are propagated.

See the complete article on this website for details about cultivars as related to native plants. He closes with this personal note:

“So, what is a native plant gardener to do? I have planted, and will probably continue to plant, cultivars of locally native plants. However, my first choice will always be a locally-sourced open-pollinated seed-grown plant. My second choice will be a cultivar that maintains the flower shape, berry size, and leaf color of the species. My goal is to never buy cultivars that exhibit radically different flower shape or color, but I will knowingly buy dwarf varieties which are otherwise similar to the species. And when I see a cultivar touted as resistant to insect damage, that one gets an automatic rejection. I also pay extra attention to observing my cultivars in the garden: if I don’t see pollinators on the flowers, or insect damage on the leaves, or birds eating the fruit then I am quite likely to rip out the cultivar and try the species. This is my policy because my primary motivation for using natives in the first place is that I want to support my local ecology. If I can’t see evidence that a cultivar is helping me accomplish that goal, I fire it and hire a plant that will.”

Also listed are 53 books which might be of interest to the native plant gardener. http://nativeplantwildlifegarden.com/books/

* Vincent Vizachero is a native plant advocate and social media coordinator in Baltimore, MD. He manages Herring Run Nursery, a native plant nursery operated by the non-profit watershed protection group Blue Water Baltimore.
A BEAUTIFUL DAY FOR THE DNPS PLANT SALE

The final DNPS Native Plant Sale in its current format was held on September 28th. Over 325 people attended the St. Jones Reserve “Arts in the Estuary” event which celebrated the 20th anniversary of the Reserve. Many members stopped by to purchase native plants and talk about the future of our plant sale. We give a big thank you to member Bob Meadows for the donation of blue flag iris and to member Rick Mickowski for the donated Cardinal flower and New York ironweed. The remaining plants being sold were left from the 2012 plant sale. We also thank Eric Zuelke for staffing the sale table and to Bill McAvoy and Mick Jones for assisting with customers. We made approximately $400 from the plant sale. DNPS Vice-President Eric Wahl staffed his own table to assist homeowners with potential landscape design questions.

For the first time, we had two commercial vendors – Nature Design Garden Center located in Frankford, Delaware and Yellow Springs Nursery located in PA near West Chester. The future plan for the plant sale is to continue to hold it in September as part of the St. Jones Reserve’s annual open house and to have commercial vendors sell plants. DNPS will no longer be in the plant nursery business due to lack of volunteers to grow, water, and care for the plants in the months before the plant sale.

DNPS will continue to hold a winter lecture/training workshop, the annual meeting, the plant sale, and the annual symposium. If you have any ideas or would like to work on one of these activities please contact one of the officers.

John Harrod, President  john@delawarenature.org

John Wahl, Vice President  johnEWahl@elementdg.com
GARDENING WITH NATIVE PLANTS

SPOTTED JEWELWEED (*Impatiens capensis*)

by Bob Edelen

NATURAL HISTORY

I remember my first experience with spotted jewelweed as a child playing with friends and the endless enjoyment of touching the swollen seed pods to watch them explode, scattering their seeds perhaps two feet in all directions. Spotted jewelweed, Touch-me-not, wild balsam, snap weed, orange balsam and silver weed are all common names for *Impatiens capensis*. Impatiens being the Latin word for impatient referring to the seed pods that burst open at the slightest touch – hence the common name ‘touch-me-not’, and the species name capensis meaning ‘of the cape’, referring to the Cape of Good Hope at the southern tip of Africa where they were thought to have originated. The more common name of spotted jewel weed is thought to reflect the beautiful one-inch, orange-spotted flowers that bloom for up to two months in late summer and the way dew or rain beads up on the leaves forming sparkling droplets which give rise to the common name of jewelweed.

Spotted jewelweed is a native of eastern North America occurring from Canada south to Oklahoma, Alabama and Florida. It is an annual plant of boggy, shady areas, typically occurring in low woodlands and thickets, along stream banks and in swampy areas throughout its range. It grows two to five feet tall on weak, watery stems that are translucent – you can see light through them! The beautiful trumpet shaped flowers have a long spur at the end enticing long tongued pollinators to its rich nectar reward. Spotted jewelweed is a magnet for humming birds, butterflies and moths that can reach the nectar and to bees and other insects that will chew through the flowers base to reach the nectar. The caterpillars of several moths feed on the foliage, including Obtuse Euchlaena, Pink-Legged Tiger Moth, White-Striped Black, and Toothed Brown Carpet. Upland game birds eat the large seeds, including the Ruffed Grouse, Ring-Necked Pheasant, Greater Prairie Chicken, and Bobwhite Quail. Among mammals, White-Tailed Deer browse on the foliage, while the White-Footed Mouse eats the seeds.

WHERE TO GROW

Spotted jewelweed is an annual plant in the balsam family that grows to a height of two to five feet and remains in the landscape through self-seeding and can become somewhat aggressive under ideal growing conditions. It will often form large colonies in the wild. Spotted Jewelweed is a plant of damp, low woods, stream and river banks, swamps, pond edges and moist disturbed areas. Though it will tolerate drier locations given a constant moisture supply it will do best in moist shade or woodland gardens, bog gardens, pond or stream margins and low spots. It prefers light shade to partial sun, and a fertile soil with an abundance of organic material. Submergence of the roots by flood water is tolerated without apparent ill-effects.

PROPAGATION

In the late summer collect seeds by encasing the seed pods in a paper bag and shaking vigorously to cause expulsion of the seeds. They can be difficult to start from seed because they are double-dormancy species, and may need a cold moist period followed by a warm moist period followed by a second cold moist period implying the need for two years (winter, Summer and winter) for germination although some seeds have been reported to germinate the year following planting. Therefore it is best to directly sow the seeds immediately in the target landscape.

(cont. on page 5)
Resources and Reviews (see editor’s column on page 2)

The Forest Unseen wins “Best Book Award” from the National Academies as the 2013 Communication Award. “Giving voice to the incredible scientific stories that lie hidden away inside the ivory tower was one of reasons I started this project.”

David George Haskell

Gardening With Native Plants
(cont. from page 4)

LORE
Native Americans used the watery plant juices to relieve itching associated with poison ivy, stinging nettle and insect bites. The Ojibwa applied the thick juice to skin rashes and rubbed it on the head for headaches. Native Americans had many other uses for the plant including treatment by the Iroquois for renal disorders, as a diuretic, as a febrifuge, and for sore eyes and by the Cherokee as a gastrointestinal and gynecological aid.

It is said to have value in easing of bee sting pain and mosquito bites, minor burns, cuts, acne and has been used for warts, bruises, and fungal skin infections such as athlete’s foot and ringworm.

But don’t forget its most popular use of entertaining children for the enjoyment of exploding seed pods at the slightest touch, submerging the leaves in water to watch the undersides turn silvery or misting with water to watch the water bead up creating the “jewel” of jewelweed!

Jewelweed is listed in the “The Flora of Delaware Delaware Natural Heritage and Endangered Species Program” - Bill McAvoy’s database.

Monarch Butterflies: The Last Migration, by Benjamin Vogt

From 1999-2010, milkweed populations shrank 58% in the Midwest as agriculture adopted genetically modified (GMO) crops that accept mass spraying of weed killer. And from 1999-2010 monarch egg production dropped by 81% in the Midwest. This now threatened insect migration – one of the largest of its kind in the world, stretching from central Mexico to southern Canada – is a calling out to restore native plants and ecosystems. Only 3% of the original tall grass prairie remains as each backyard becomes a 21st century wildlife refuge. Learn about the monarch– its migration and preferred host / nectar plants–and what you can do ensure its survival. See below:

Bring Back the Monarchs

There are a number of websites devoted to making milkweed more readily available. Here’s one online source listing nine nurseries in MD:

http://monarchwatch.org/bring-back-the-monarchs/resources/plant-seed-suppliers

This one has free seeds: http://www.livemonarch.com/free-milkweed-seeds.htm

Listen to the Diane Rehm Show on Oct. 1, 2013 Environmental Outlook: The Shrinking Monarch Butterfly Population
My Discovery of Pipsissiwa

*Chimaphila maculata*

By Ed Crawford

My discovery of Pipsissewa began last spring during the annual Spring Roundup bird count, sponsored by the Delmarva Ornithological Society. This is an all-day bird count and I spent a good part of it at the Delaware Wild Lands (DWL) Cypress Swamp preserve in Southern Delaware. Between bird sightings, our DWL guide told me that some years back he had found surviving American chestnut sprouts on the Angola Neck Preserve. This was interesting news because I live on Angola Neck and, second, the previous autumn I had come across chestnuts for sale at the local produce market. Like American Chestnuts, these chestnuts had been on the small side, and I had never before come across locally grown chestnut. Energized by the latest information, I revisited the market and, after giving the owner an enthusiastic presentation of the history of the American chestnut, got the name and an address of the chestnut lady. She promised to call ahead and pave my way. The next week, I drove to the chestnut lady’s house and knocked. Concerned she wouldn’t open the door to a stranger, I prominently displayed a copy of *The Journal of the American Chestnut*. The chestnut lady soon flung open the door and exclaimed, “Why, you are the chestnut man!” “Yes, indeed,” I replied. She listened to my chestnut stories and told me some very interesting anecdotes about old land transfers and life on Angola Neck in the old days. She lamented the sharp declines in birds, wildlife, and wild plants caused by the loss of habitat to development. We then turned our attention to her chestnut trees.

There was almost zero chance of finding nut bearing American chestnut trees, but I maintained my delusion until she told me the trees had been planted 40 years ago by her late husband. The trees were Chinese chestnut. With this resolved, she gave me a tour of her property.

At a dappled shade side garden near the chestnut trees, she made a point of showing off two small plants with beautiful striped dark green leathery leaves. She said that Pipsissewa was one of her favorite plants, but it had become very hard to find. Pipsissewa was a new plant for me and I liked it a lot. We said our good-byes and I went to the Angola Neck Preserve and explored it without success for signs of American Chestnut.

As I walked back to the car I kept my eyes down to avoid tripping over the many briars. Just as I left the forest, I spied a small plant with striped green leaves peaking out of the brown duff. Instantly, I realized it was Pipsissewa! I looked around and found just seven plants, many of which were displaying attractive round green seed capsules. Despite its diminutive size, the bright leathery green leaves made it really stand out from the surrounding brown leaves. It was easy to understand why it was one of the chestnut lady’s favorite plants. After expanding my search in all directions with no success, I realized how lucky I had been to stumble upon this small colony. With my luck changed, I drove off thinking that sometimes the path taken to avoid tripping on a brier makes all the difference.

Common names for PIPSISSEWA are Striped Wintergreen, Spotted Wintergreen, Rheumatism Root, Rat’s Bane, and many others. It is a delicate plant that likes shady sites, acidic loose sandy soil, and expands slowly through underground runners. It has an interesting history as an herb and was listed in the US Pharmacopoeia from 1820-1916. It blooms in early summer, bearing very pretty drooping pinkish and white flowers followed by attractive round seed capsules. It can be found in Southern Delaware on the Pine Trail at Prime Hook NWR, and in the North at White Clay Creek State Park.
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Sunday, October 6, 2013 11 a.m. to 5 p.m.
College of Earth, Ocean and Environment
Lewes, DE
Includes many exhibits related to Native Plants and their environment www.decoastday.org

Fall/Winter 2013—Mt. Cuba Center  Your pathway to native plants

Lectures in the Copeland Native Plant Series are:

Native Plants for Fall Color
See them all - reds, yellows, burgundies, and oranges!

Date: Thursday, October 24
Time: 10:00 am – 12 Noon
Cost: $15
Instructors: Renée Kemmerer and Daniel dePersia, Mt. Cuba Center

Discover Our Natural Lands
The splendor of our forest, meadow and pond awaits you

Dates: Thursday, November 7, Time: 1:00 pm - 3:00 pm
Cost: $15
Instructors: Eileen Boyle & Nathan Shampine, Mt. Cuba Center
Visit the website for more details and to register.

Fall 2013—Adkins Arboretum

Sustainable Lawns—The Backyard Revolution
Wednesday, October 9, 2013 5:30 pm — 7:30 pm
Tom Christopher, founder of Smart Lawn LLC, will discuss the different grass mixes and techniques he is using to create locally adapted, biodiverse lawns that need only three to four mowings per year, no summertime irrigation, and little or no fertilization.

Register for classes adkinsarboretum.org.

Fall 2013—Delaware Nature Society
October 5 & 6: Harvest Moon Festival, Saturday and Sunday, 10 am - 5 pm. Click for more information

* Rick says “While biking along a trail near my home in New Castle County, I spotted a big patch of passion flower vine, which is a native of the southeastern United States.” If you find an interesting native plant, submit to the editor for inclusion in one of our newsletters.
Membership Application

DELAWARE NATIVE PLANT SOCIETY

WWW.DELAWARENATIVEPLANTS.ORG

Member Information

Name:

__________________________________________________________

Business Name or Organization:

__________________________________________________________

Address:

__________________________________________________________

City and Zip Code:

__________________________________________________________

Telephone (home/work):

__________________________________________________________

E-mail address:

__________________________________________________________

ø Full-time Student  $10.00
ø Individual  $15.00
ø Family or Household  $18.00
ø Contributing  $50.00
ø Business  $100.00
ø Lifetime  $500.00
ø Donations are also welcome  $________

Membership benefits include:
* The DNPS quarterly newsletter, The Turk’s Cap
* Native plant gardening and landscaping information
* Speakers, field trips, native plant nursery and sales

Total Amount Enclosed:  $

Make check payable to:
DE Native Plant Society
P.O. Box 369, Dover, DE  19903

DELAWARE NATIVE PLANT SOCIETY
P.O. BOX 369
DOVER, DELAWARE 19903
THE TURK’S CAP

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HOW CAN I GET INVOLVED?
The Delaware Native Plant Society is open to everyone ranging from the novice gardener to the professional botanist. For more information, visit our website at www.delawarenativeplants.org.

Natural Quotes

“Ilex verticillata has...wands of scarlet against a leaden sky.”

Hal Bruce
Notes from Newcroft

Winter at Newcroft

After 18 years, the *Ilex verticillata* below that was planted near the garden picket fence was the lushest ever. While my three plants are up at the top of my hill and not near the wetlands at the end of my cul-de-sac, the plants have thrived this year. For many years it languished under an old maple tree but once that came down the extra sun gave the ilex new life.

Perhaps more than you want to know, but my “*Hortus Third: A Concise Dictionary of Plants in the US and Canada*” has five pages of *Ilex* of which *I. verticillata* is one of 400 spp. It says it is the most widespread. Below is the *Etymology*.

*Ilex* in Latin mean the holm oak or evergreen oak (*Quercus ilex*). Despite the Linnaean classification of ilex as holly, as late as the 19th century in Britain, the term ilex was still being applied to the oak as well as the holly—possibly due to the superficial similarity of the leaves. The name “holly” in common speech refers to ilex *aquifolium*, specifically stems with berries used in Christmas decorations. By extension, “holly” is also applied to the whole genus.

Cindy Albright

Excerpt from Hal Bruce’s book
“How to Grow Wildflowers & Wild Shrubs & Trees in Your Own Garden” 1976

“Many delightful—almost magical—moments of my life are associated with Winterberry. I first encountered it on the edge of a place called “Thompson’s Swamp” near Wilmington (I-95 now passes through the heart of this place). I was about ten years old, yet I can still feel the pure wonder that I felt on looking above me in the foot-soaking, toe-numbing, gray and dank woodland and seeing all the red in the world concentrated into pea-sized berries strung on narrow, straight dark stems, wands of scarlet against a leaden winter sky. The feeling is rekindled each time I encounter the plant, for it always makes an arresting contrast to its surroundings.”

Doug Tallamy to be Featured Speaker at Environmental Education Conference

Doug Tallamy will be the keynote speaker on the theme “Bringing Nature Home” during the 5th annual statewide environmental education conference held by the Delaware Association for Environmental Education. The conference will be held at Milford High School on Saturday, February 1st from 9 am - 4 pm registration and information about the conference workshops can be found at: [https://2014daeeconference.eventbrite.com](https://2014daeeconference.eventbrite.com)

Resources & Reviews

*A Guide to Wildflowers in Winter: Herbaceous Plants of Northeastern North America*

Authored by Carol Levine, and Dick Rauh. This guide is intended to help both amateur naturalists and serious field botanists to identify non-woody plants - herbaceous weeds and wildflowers - as they are found in winter in the NE United States and E Canada.
GOING NATIVE WITH YOUR RAIN GARDEN

The DNPS 9th Annual DNPS Symposium focused on “Natural Plant Community Models for Rain Gardens in Delaware.”

Past DNPS President Bill McAvoy, a botanist with the Delaware Natural Heritage Program, presented the many native plant species that would be great additions to a rain garden.

Some of the shrubs include meadowsweet spirea, swamp azalea, northern sweet bay magnolia, silky dogwood, sweet pepperbush, and elderberry. Other noteworthy plants to include in a rain garden include cinnamon fern, switch grass, smooth rush, wool grass bulrush, fringed sedge, and tussock sedge. Highlights of the perennial flowers include New York ironweed, hollow-stem Joe-Pye weed, swamp milkweed, blue flag iris, cardinal flower, bread-leaved arrowhead, and rose mallow.

Rob Jennings, Grassroots Field Specialist with the Chesapeake Bay Foundation gave an overview on rain gardens. He stated that we do not have a water shortage but over consumption and misuse of water resources. Rain gardens help to infiltrate water back into the ground. Benefits of rain gardens are:

- They should and can be aesthetically pleasing
- They attract butterflies and other pollinators
- They help to reduce stormwater run-off
- They increase groundwater retention
- They collect “pollutants” and sediments and keep them from entering streams
- They contain and break down pet waste and auto waste
- They reduce the area of lawn to be mowed. The average gas powered mower emits as much pollution as 11 cars and a riding mower equals 34 cars.

There are three key ingredients to a working rain garden: the soil mixture, the plants, and the mulch. The soil mixture is made up of anywhere from 50% - 80% sand, 20% - 30% soil, and 20% -30% compost. The plants should be mulched with wood mulch and watered weekly until established.

Eric Wahl from Element Design Group (and DNPS Vice-President) suggests calculating the ecosystem services provided by natural systems. He defined sustainable as “meeting the needs of the present without compromising the ability of future generations to meet their own needs.” The Native Americans have a saying that “Today’s decisions affect the next seven generations.” DelTech’s Energy House in Georgetown features a rain garden, native plantings, a partial green roof, and a cistern to collect water and re-use to flush bathroom facilities. Maintenance costs should be considered.

Pat McElwee from the Bombay Hook Garden Keepers shared saga of installing her own rain gardens on her property in Dover near the St. Jones River. She estimated the cost for self-installation at $3-$5 per square foot. If professionally installed the cost would run $10 - $15 per sq. ft

Everyone attending the symposium had the opportunity to take some free plants home with them courtesy of members from the Garden Keepers group. A wonderful lunch was provided by a local caterer.
**Gardening With Native Plants**

**Winterberry holly  
Ilex Verticillata**

**Natural History**
At the first mention of holly, one’s thoughts typically lean to the American Holly (*Ilex opaca*) a stately evergreen tree with shiny (and prickly) green leaves and spectacular red berries that adorn landscapes throughout the country and who’s festive greenery brighten homes during the holiday season. However, a winter stroll along waterways and moist woodlands throughout Delaware will reveal another member of the holly family worthy of any landscape! Winterberry (*Ilex verticillata*) is a deciduous holly that thrives in moist habitats from Nova Scotia and Quebec, west to Minnesota and south to Arkansas and the Florida Panhandle. This relatively slow growing holly forms a dense well rounded shrub that is ideal for low nesting birds such as cardinals and mocking birds, and it’s diminutive flowers are a major source of energy for bees, bumblebees, small butterflies and other insects that act as pollinators in return for their nutrient rich nectar. But it is during the fall and winter months that winterberry is unsurpassed for it’s beauty and value to wildlife. The Latin name ‘*verticillata*’ translates as "arranged in whorls", referring to the arrangement of the sessile fruits (and also referring to the flowers) in a "pseudo-whorl" around the stems. The bright red and sometimes orange berries are born in large clusters that persist well into the winter months unless consumed by wildlife. Because of their relatively low fat content the bright red berries are not readily consumed, but as more desirable food sources diminish, the berries of winterberry become a welcome banquet to over 20 species of birds including bluebirds, robins, thrushes, mockingbirds, catbirds, cedar waxwings, sparrows, grouse, dove and woodpeckers, and mammals such as raccoons, squirrels, deer and mice that rely on the late season bounty.

**Where to Grow**
*Ilex verticillata* or winterberry is a must for any landscape. Though winterberry is a shrub of primarily moist woodlands and thus especially tolerant of poorly drained soils, it will thrive under many light and soil conditions given an ample supply of water and slightly acid soil. It can be planted in a forest understory, at the edge of woodland and along stream banks. It can be regularly trimmed to maintain a lush, impenetrable hedge. For the best fruiting, thickest foliage and most attractive shape and display, grow your winterberry in an open landscape with ample light. Since the fruits are only produced on the female trees, both male and female specimens are required to produce fruit. One male tree is suitable for pollinating from 3 to 5 female trees, but be sure to obtain plants from the same area (or hybrid) to insure that flowering occurs at the same time each year. Your winterberry will tend to sucker and form dense impenetrable thickets 6 to 10 feet tall, so it is most effectively

**Propagation**
Propagation of winterberry can either be accomplished from seed or by taking cuttings. Seeds will require 18 months to germinate, and are best sown in autumn as soon as they ripen. Collect ripened berries and separate from the pulp by maceration. Scarification, followed by a warm stratification and then a cold stratification may speed up germination. Place the seeds in a mixture of equal parts peat moss, fine pine bark mulch and sand and place in a cold frame protected from the winter chill. Once large enough to handle, pot the seedlings up into individual pots and grow them on in light shade in a cold frame for their first year. Grow them in their pots for a second season and then plant them out into their permanent positions in late spring or early summer. Seedlings should be provided a layer of organic mulch for Chlorosis and stunting will occur in alkaline pH soils.

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**Resources & Reviews**

**Winter Weed Finder: A Guide to Dry Plants in Winter** by Dorcas Miller
Key to identifying non-woody plants in late fall and winter by the dried structures that remain after frost, such as pods, dried flower heads, seed capsules, and burrs. Includes common native and naturalized herbs and native ferns. Area covered is the upper Midwest and eastern U.S. north of South Carolina and eastern Canada. Illustrated with line drawings. 64 pgs. 1989

A reviewer said “I love these ‘finder’ books. They are just the right size to grab and stuff in a pocket or hip pack before a nature hike or even a walk in an untamed yard. It identifies between 350-400 plants, giving both their common and Latin names.”
It is best to place the plants into their permanent positions as soon as possible, as transplanting of mature plants may provide protection during their first year. Alternatively, cuttings of almost ripe wood with a heel, taken in August and treated with a rooting hormone and placed in a shaded cold frame will also produce desirable results. Leave for 12 months before potting up. Best performance occurs in full sun in acidic, organically enriched, moist to wet soils, but winterberry is somewhat adaptable to soils that are occasionally dry provided ample watering and rich vegetative mulch.

Lore
Native Americans used various parts of winterberry for treatment of upset stomach, fever, lethargy, hay fever and diarrhea, hence the common name ‘fever bush’ and a tea was made from the dried and crumbled leaves. However, the fruit and leaves of Winterberry contain a potential array of toxins that can result in moderate to severe nausea, vomiting and diarrhea. So, we highly recommend using winterberry for more traditional uses of beautifying your landscape and perhaps taking cuttings of the berry laden branches to grace your holiday table – they will last a long, long time!

Bob Edelen

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**Resources & Reviews**


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**A good resource for Delaware...**

**Rare Species Conservation**

35 state-rare flora species and 3 state-rare fauna species can be found in our Natural Lands. Of this total, seven species are presently ranked as “S1” (five or fewer occurrences in the state). Twenty-one others are “S2” species (occurring in six to twenty sites in Delaware). Since the majority of these species are forest-dependent, we have committed our own professional resources, as well as outside partners in a myriad of forest-related research studies. Collaboration with:

- Delaware Natural Heritage Program,
- Delaware Forest Service,
- USDA Forest Service,
- DNREC Fish and Wildlife,
- Delaware Invasive Species Council,
- Delmarva Ornithological Society,
- and University of Delaware’s department of Entomology and Wildlife Ecology, and Department of Plant and Soil Science allows us to accurately assess the habitat needs of our rarest plants and animals. These target species appear on the Delaware Species of Conservation Concern list compiled by the Delaware Natural Heritage Program and are monitored annually through field surveys.

*from* Mt. Cuba’s website
A winter treat for our feathered friends

by Eric Wahl

Birdseed Treats

Thanks to cookie cutters, you can offer birdseed for your feathered friends while decorating at the same time! All you need are unflavored gelatin, water and seed mix. Combine the ingredients, spread the mixture onto a cookie sheet, chill and use cookie cutters to make the shapes. Let dry before putting outside or wrapping.

Birdseed Treat Recipe

- 1/3 cup gelatin
- 1-1/2 cups water
- 8 cups of birdseed

Mix gelatin and water on low until gelatin is melted and clear. Remove from heat and stir in 8 cups of birdseed. Stir until it is well mixed and there is no dry seed. Fill cookie cutters with the seed mixture and pack tightly. Then refrigerate for 2 to 4 hours. Dry on baking rack for 3 days.

* Visit this website for other ideas.

The Living Landscape: Designing for Beauty and Biodiversity in the Home Garden (2014*)

By Rick Darke and Doug Tallamy

A home garden is often seen as separate from the natural world surrounding it. In truth, it is actually just one part of a larger landscape that is made up of many living layers. And the replacement of the rich layers of native flora with turf grass greatly diminishes a garden’s biological diversity and ecological function.

The Living Landscape seeks to reverse this trend by showing gardeners how to create a landscape that is full of life. Written by Rick Darke and Douglas W. Tallamy, two of the most important voices in sustainability and horticulture, it is the definitive guide to designing a beautiful, biodiverse home garden.

The authors first explain the layers of the landscape and what role the plants within them plays in the larger environment, from providing berries for birds, food for bugs, or a place for bees to pollinate. The authors then put this information into context and offer design strategies to implement in a home garden. Helpful charts suggest plants, including natives and nonnatives, for each region.

Published July 1, 2014

Native Plants of the Southeast: A Comprehensive Guide to the Best 460 Species for the Garden

by Larry Mellichamp Larry Mellichamp is a professor of botany at the University of North Carolina at Charlotte and director of the University’s botanical gardens.

This guide is an invaluable resource, with plant profiles for over 460 species of trees, shrubs, vines, ferns, grasses, and wildflowers. Each plant description includes information about cultivation and propagation, ranges, and hardiness.
Upcoming Events

Spring 2014—Mt. Cuba Center  www.mtcubacenter.org  Visit website for details.

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<tr>
<td>1/28/14</td>
<td>Why We Need More Natives In Our Gardens</td>
<td>7:00 pm - 9:00 pm</td>
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<td>2/15/14</td>
<td>Sustainable Suburbia</td>
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<td>3/5 to 4/9/14</td>
<td>Landscape for Life</td>
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<td>3/13/14</td>
<td>Slide Show Tour of Delaware’s Plant Communities</td>
<td>9:00 am - 2:00 pm</td>
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<tr>
<td>3/29/14</td>
<td>Not Tonight, Deer!</td>
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Spring 2014—Adkins Arboretum  Native Plant Nursery opens for the season on April 15

Native Plant Nursery Hours
Tuesday–Friday, 10 a.m. to 4 p.m.
Weekend hours by arrangement. For more information about special orders, special pick-ups, help with restoration projects plant choices, or pricing for nonprofits or commercial contractors, contact Nursery Manager Joanne Healey at 410.634.2847 x32 or jhealey@adkinsarboretum.org.

Delaware Center for Horticulture - Spring 2014 Event (register at www.TheDCH.org)

“The Layered Garden”— Lecture by David Culp
Thursday, January 30, 2014  7:00—8:30 pm

Garden Writers Association 2013 Best Overall Book
Culp developed the Brandywine Hybrid strain of hellebores, and has been cited for his expertise on snowdrops.

“Meadowscaping in Urban and Suburban Landscapes” - Lecture by Catherine Zimmerman
Thursday, February 27, 2014 7:00—8:30 pm

Ms. Zimmerman presents a convincing case for bringing back native habitat, shrinking the mowed lawn space, reducing water usage, and eliminating pesticides.

Delaware Native Plant Society - Winter/Spring 2014 Event

“Evaluating Sustainable Design”— Lecture by Eric Wahl, RLA
Saturday, February 22, 2014  10:00—12:00

Our Vice-President recently returned from a lecture series sponsored by Morris Arboretum, New Directions in the American Landscape, Connecticut College Arboretum, and co-sponsored by the PA/DE Chapter of the ASLA, and Temple University (Eric’s alma mater). Eric will present a summary of the conference in addition to his own observations. A focus on attracting birds and wildlife through native plantings will be highlighted, including a hands-on project of homemade birdseed ornaments that be taken home after the workshop.
# Membership Application

**DELAWARE native Plant Society**

[www.delawarenativeplants.org](http://www.delawarenativeplants.org)

## Member Information

**Name:**

**Business Name or Organization:**

**Address:**

**City and Zip Code:**

**Telephone (home/work):**

**E-mail address:**

- **Full-time Student** $10.00
- **Individual** $15.00
- **Family or Household** $18.00
- **Contributing** $50.00
- **Business** $100.00
- **Lifetime** $500.00
- **Donations are also welcome** $________

Membership benefits include:

* The DNPS quarterly newsletter, *The Turk's Cap*
* Native plant gardening and landscaping information

**Total Amount Enclosed:** $ 

**Make check payable to:**

DE Native Plant Society
P.O. Box 369, Dover, DE 19903