

THE TURK'S CAP

Volume 17, Number 1
Spring 2014

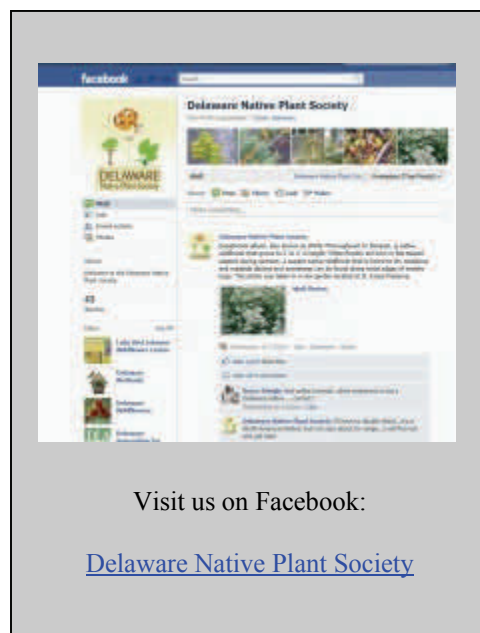
THE NEWSLETTER OF THE DELAWARE NATIVE PLANT SOCIETY

www.delawarenativeplants.org

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Save The Date: DNPS Annual Meeting on Saturday, June 7th. Details still being finalized. More information to come via email to membership. Board/Officer elections will be held at this meeting. If you are interested in serving DNPS in any capacity, please contact John Harrod, DNPS President. John has announced that he is stepping down as DNPS President as of June 2014.



Visit us on Facebook:

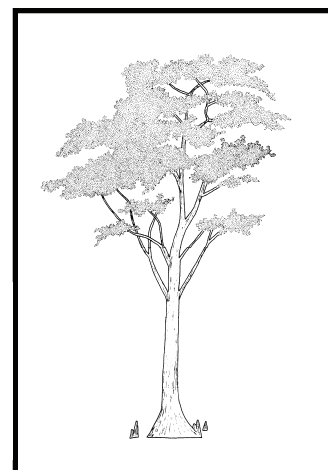
[Delaware Native Plant Society](https://www.facebook.com/DelawareNativePlantSociety)

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.

The DNPS Vision

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.



Notes from Newcroft

Stretching back to when I took horticulture classes at Longwood Gardens, I've been exposed to Linnaeus's binomial nomenclature. An interest in birding furthered my exposure to that type of classification. Recently my *Natural Selections* book group has been reading [Horseshoe Crabs and Velvet Worms](#) which traces the evolution of living things back through millions of years. That and other nature books are replete with Latin names and references to eons, eras and periods. Liking to organize things, I was trying to determine how many kingdoms current research list. In discussing this with my sons, Eric a biology teacher and Andrew a molecular biologist, they report:

- 2 - ancient Greece (Plant/Animal)
- 3 - someone added fungi
- 5 - ma's list (what I sent them)
- 8 - my HS text (early 1990s)
- 12 - getting too big
- 3 - Andrew's U of Illinois professor [Carl Woese](#) Discovered 3rd kingdom—Archaea

"I make stuff like this up all the time to teach my students that classification is constantly in flux ... just a debate over the rationale you have. Birds are the same. Phases of lumping and then splitting." Andrew says "Yes sequencing is a game changer but in many arenas it will take a while to figure out what it all means."

My real question is "What is a native plant"? Each issue when I'm looking for a plant to feature in the newsletter, I ask that question. During their peak, it is thought that there were as many as 16 genera of ginkgos which formed a major component of the world's flora. Maximum diversity was reached during the Cretaceous period in the **Northern**

Hemisphere. Could they have been native to our area? On my list of new books to read is "[Ginkgo: The tree that time forgot](#)".

Bob Edelen's review of *Quercus alba* is on pgs 4 & 5. Maybe next month we'll highlight the Ginkgo although it's not in [Bill McAvoy's list](#).



Cindy Albright

Visit to the Claude Phillips Herbarium February 6, 2014



Photo : Cindy Albright

Pictured: Chris Besche, Gwen Elliott, Carole Stillbaugh, Donna Hoyt and Patti Deptula

My Natural Selections book group has been meeting for over 10 years and finally we took our first field trip. We visited the [Claude Phillips Herbarium at Delaware State University](#). Thanks to Dr. Susan Yost and Dr. Art Tucker for their tour of the facility. It was a cold day so we decided to return later to tour the

Save the Date:

Pine Barrens Wildflower Ramble. (Part of the **Copeland Native Plant Series**.) DNSP President, John Harrod along with Russell Juelg. will lead this walk on **July 12, 2014**, 8am-5pm. Meet at Ashland Nature Center. July is prime wildflower time in the NJ Pine Barrens. Join Russell Jueig, a pinelands expert with the New Jersey Conservation Foundation, for a day of searching for rare, unique, and beautiful flora. See sundews, pitcher plants, rose pogonia orchids, cranberries, Atlantic white cedars, and fragrant swamp azaleas. Bring a lunch. Transportation provided. Registration: Call 302.239.2334 or visit delawarenaturesociety.org



2014 Winter Workshop at St. Jones Reserve “Navigating the Edge”

On February 22nd, nearly 30 people turned out for this workshop at the St. Jones Reserve. Participants were there to hear about the many types of edges found throughout the landscape, and to learn more about how to improve edges through ecological restoration, including planting native species which provide benefits for migratory birds and other wildlife.

In addition to giving the feature presentation, Eric Wahl also provided coffee and an assortment of home-baked goodies. Eric discussed sustainability and ensuring that the needs of future generations are met when we tinker with the natural world, ecosystem services such as those provided by trees, the importance of pollinators and current threats they face, the importance of water and understanding the water cycle, and different types of edges (e.g., urban, suburban, agricultural, wetland). The urban edge was discussed as a way of bringing nature into urban areas, slowing traffic and improving water quality with street trees, and improving aesthetics and the urban experience.

Eric also talked about suburban edges and yardscapes, and how residents can improve these edges and their value to birds and other wildlife by enhancing them with native trees, shrubs and herbaceous plants. The importance of trees to energy conservation, carbon sequestration and air quality was also discussed. Eric presented examples of natural edges, including wetland edges and the different plant communities along a moisture regime from wetland to upland, and edges associated with natural succession, from a fallow field to a mature forest and the various stages in between. He then provided examples of native trees that work well as street trees, and other native trees and shrubs to consider in the home landscape.

some of the highlighted shrubs such as southern arrowwood produce fruits that are very important to migratory birds. Lastly, Eric discussed bird seed ornaments, and provided a handout about how to make them. Rick McCorkle then gave a presentation about the challenges of living on the edge, and the negative impacts of forest fragmentation (which creates lots of edge) on many of our rarest, forest-dependent, bird species. Among those challenges are increased predation, increased human disturbance, invasion by non-native plant species, and nest parasitism by brown-headed cowbirds. Rick ended by referring back to the suggestions Eric had made about planting native trees, shrubs and herbaceous plants in backyards and along edges between forests and developed areas, to mitigate the impacts of human disturbance and provide food and cover to birds and other wildlife. Rick provided three handouts, two of which come from Dr. Doug Tallamy's book about "[Bringing Nature Home](#)," and list the most important trees and wildflowers in terms of the numbers of butterflies and moths they host. The third handout lists native shrubs in order of importance of their fruit to migratory birds. The workshop was a great success with lots of good questions and interactions between the participants and speakers. Special thanks to Jennifer Holmes for making the facility at the St. Jones Reserve available, and for providing a computer projector.

John Harrod, President
john@delawarenaturesociety.org
 John Wahl, Vice President
johnEWahl@elementdg.com

GARDENING WITH NATIVE PLANTS

WHITE OAK (*QUERCUS ALBA*)

by Bob Edelen

NATURAL HISTORY

Hardly anyone does not know of the majestic White Oak. In fact the White Oak is so popular for its beauty, stately presence, many uses, and abundance, that it is the state tree of Connecticut, Illinois and Maryland. The value of the White Oak to all of nature becomes apparent. Take a walk in most any mature forest throughout the Eastern United States and in a good year you will feel the crunch of acorns under your feet. Acorns are a valuable source of food for more than 180 birds and mammals. They are a favorite food of turkeys, ducks, pheasants, grackles, jays, nuthatches, thrushes, woodpeckers, rabbits, squirrels, raccoons, deer and many others. Handsome and sturdy, the White Oak is named for its whitish bark and gray twigs. They may be found in pure stands but most often occur in mixed hardwood forests usually with other oaks, hickories, sweetgum, yellow poplar, maple and often conifers such as loblolly and Virginia pines as well. The west slopes of the Appalachian Mountains, and the Ohio and central Mississippi River Valleys have optimum conditions for white oak, but some of the largest individuals have been found in Delaware and Maryland's Eastern Shore. [The Wye Oak on Maryland's Eastern Shore](#) was the honorary state tree of Maryland and was probably the oldest living White Oak until it was felled by a thunderstorm on June 6, 2002. The largest White Oaks in Delaware are found in New Castle County.

WHERE TO GROW

The White Oak is one of the most spectacular of oaks and when grown in an open landscape without competition will spread into a magnificent shade tree, with an exceptionally wide spread and almost never dropping limbs. It bestows a special elegance to parks and large lawns. There is no finer shade tree for eastern North America and the rich brown fall color often persists for several weeks. Normally not a tall tree, typically 60 to 80 ft. at maturity, it nonetheless becomes quite massive and its branches tend to reach far out parallel to the ground when given sufficient room to grow. The White oak is fairly tolerant of a variety of habitats, and may be found on ridges, in valleys, and in between, and in dry and moist habitats, and in moderately acid to alkaline soils. So, regardless of



Maryland's Wye Oak in 1929 in Talbot County

the condition of your landscape the White Oak might just be the perfect tree given sufficient room and time to grow.

PROPAGATION

Most White Oak propagation is from seed. The White Oak will begin to produce acorns usually around its 50th year although a well-grown specimen in an open area may produce acorns by its 20th year. Acorn production will vary from year to year and from tree to tree, but in a good acorn production year (every 4 to 6 years), a healthy specimen may produce up to 10,000 acorns. In a poor production year it may be difficult to find viable seeds, as the competition among wildlife for food can be intense. Seed will begin to fall in early October and will soon germinate and are best harvested before wildlife or insect damage can occur. Select large healthy, light brown, blemish free seeds and remove the cap carefully inspecting for holes in the shell that might indicate the presence of borers – discard if holes are evident. Finally, check for seed viability by flotation in water: acorns that sink are sound; those that float should be discarded. White Oak acorns do not store well, so they should be planted as soon as possible after collection. A light medium is preferred so that the taproot can develop unimpeded. Prepare a mix of equal parts peat moss, sand, fine pine bark mulch and rotted leaf compost and place in a large (6 to 8 inch) pot. Add a layer of acorns spaced approximately 1 inch apart and cover, water well and place in a cold frame. I have found that an insulating layer of fresh leaves inside the cold frame is great for protecting from any freeze/thaw cycle and improves root development. After germination, root growth continues until interrupted by cold weather. Root and shoot growth will resume in the spring and a large taproot will develop. In early summer pot up the seedlings into individual pots and continue to grow for one year before setting out into the landscape. Keep young seedlings well watered until established. Once established, transplanting is hard because of the deep growing taproot!

(cont. on page 5)

Resources and Reviews

[Bringing Nature Home: How You Can Sustain Wildlife with Native Plants](#), Updated and Expanded Paperback
by Douglas W. Tallamy (Author), Rick Darke (Contributor)

(cont. from page 4)

LORE

In addition to being an outstanding tree for the landscape, the wood, bark and fruit of the White Oak have long been valued by the earliest Native Americans to present day furniture makers and artisans. Native Americans used acorns of the White Oak as a food – they are much less bitter than the acorn of red oaks. Native Americans ground acorns into flour, a technique they shared with early European settlers. The acorns were either boiled in water or soaked in a lye solution to remove the tannins, then pounded and ground to make a flour that was made into mush or used to thicken soups. In Native American medicine the bark was brewed into a tea for treating diarrhea and hemorrhoids. Modern herbals still specify White Oak as an astringent for external use on wounds open sores and insect bites. Of course, where would the furniture market be were it not for the White Oak? The wood is tight grained, hard and tough making the finest furniture and flooring, support timbers, railroad ties and pallets. It was used in ship construction and extremely popular for barrel making for its watertight grain – hence the name stave oak.



Quercus alba is listed in the "[The Flora of Delaware Delaware Natural Heritage and Endangered Species Program](#)" - Bill McAvoy's database.

Delaware Watersheds: **Protecting Delaware Waterways**



Below is shared from the [Inland Bays Blog](#)

The Inland Bays Foundation supports the concept of "Rain" Gardens and even more the concept of **"rain" communities**. Plantation lakes in Millsboro is a good example of a "rain" community where every drop of rain and flow from impervious surfaces is trapped in lined ponds for future use in irrigation. This is especially important as this community surrounds Bett's Pond on three sides. Bett's Pond is in the Headwaters watershed for the Indian River. It can be done by responsible developers- Lennar gets a thumbs up!

(see page 6 for more info from blogs)

Last minute notice for PA Conference—Register now!
2014 Native Plants in the Landscape Conference at
Millersville University June 5-7, 2014. There are many
registration options for the conference.
www.millersvillenativeplants.org
or register online at <https://www.regonline.com/npilc2014>.



**Fostering
Environmental
Awareness
and
Action**

▲
Promoting
the restoration
of the
Delaware
Inland Bays watershed

[Inland Bays Foundation
Blog](#)

DE Environmental Summit, March 22, 2014



Photo: Inland Bays blog

Bill McAvoy spoke at the summit plenary session about the important of non-tidal freshwater wetlands. These wetlands serve as the home for an overwhelming number of rare plants and animals and are currently completely unprotected in Delaware.

From [Livable Lawns](#) Blog

by [Delaware DNREC](#)

The goal of the **Delaware Livable Lawns** initiative is simple -- reduce fertilizer and pesticide runoff from lawns.



[Taking A Soil Sample.mov](#)

[Ed Gartley](#)

9:33



[UD How to Interpret a Soil Test
Video.mov](#)

[Ed Gartley](#)

7:
4
7



[Purchasing Fertilizer for Your Lawn](#)

[UDCANR](#)

9:
0
1



[How to read a fertilizer bag and
choose a fertilizer](#)

[Water-
MattersTV](#)

3:
4
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[How to apply fertilizer](#)

[Water-
MattersTV](#)

3:
4
8

Upcoming Events



Photo by Rick Mickowski*

Mt. Cuba Center *Your pathway to native plants*

Spring Ephemerals Throughout the Season on April 10, 24, and May 8
 Adventures in Moss Gardening on April 17
 Tenth Annual Wildflower Celebration on April 27
 Our Native Azaleas: America's Treasure on April 29
 Terrific Trilliums on May 1
 National Public Gardens Day on May 9
 Fundamentals of Ecological Gardening May 10 & 17
 The Blended Garden – Good Looks With Terrific Taste on June 3
 Milkweeds for Monarchs on June 26

Center for Inland Bays—Native Plant Sale

Saturday, May 3, 2014 9:00 a.m. until 1:00 p.m.

James Farm Ecological Preserve

On Cedar Neck Road in Ocean View

Plants, good food, good advice and fun at the Gardening for the Bays Native Plant Sale!

Copeland Native Plant Series

Tour of Ashland Hollow Gardens. Host: Helen Fischel. **Saturday, May 3, 9:30-11:30am.** Meet at Ashland Nature Center. Tour the **17-acre garden with Bill and Nancy Frederick**, who started work on the property in 1965. Great care has been taken by Mr. Frederick, a professional landscape architect, to design with the seasons, climate, and the existing land forms in mind. Get ideas for your property, or join us to just escape onto this mixture of art, nature and spring. This garden is known for its azalea collection,. Van transportation included. Registration: Call 302.239.2334 or visit delawarenaturesociety.org

Delaware Nature Society **Spring 2014** 3511 Barley Mill Rd Hockessin, DE 19707 (302) 239-2334

Magical Mystery Wildflower Tour Wednesday, April 16, 9:00 - 12:00 pm

Travel to a magical place for wildflowers known for diversity of native species and natural beauty. Learn identification techniques and the ecology of some of our most outstanding species -- Member/Non-Member: \$15/\$22 -- Leader: Janet Ebert, Joe Sebastiani -- Location: Van provided

Beautifying Your Garden With Native Plants Wednesday, April 16, 7 - 9pm -- Members/Non-member: FREE Pre-registration required, RSVP by calling the Receptionist at [\(302\) 656-1490](tel:3026561490)

Peggy Anne Montgomery is the Brand Manager for American Beauties Native Plants will show some of her favorite native landscape plants: Native Medicinal Plants

Native Plant Sale -- Tuesday April 29, 2:30-4:00 -- Member/Non-member: \$5/\$7 Join us for a talk and tour of the grounds of Ashland to discover which native plants are medicinal and how they can be used, like Spicebush, Elderberry, and Goldenrod. Native Plant Sale guide will be provided; prepare your shopping list for the Native Plant Sale. -- Meeting Location: Ashland Nature Center. Van provided:

Wildflower Study Certification

Earn a certification in Wildflower Study from the Delaware Nature Society by attending **4 lectures and 4 field trips** on the topic. Lectures cover basic botanical structure, biology, ecology and identification of wildflowers, ferns, and grasses. Field trips will be habitat-based -- Dates: **April - September see full itinerary online or call.** -- Member/Non-Member: \$125/\$175 -- Leader: DNS Staff --Locations: Various

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: _____

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

Membership benefits include:

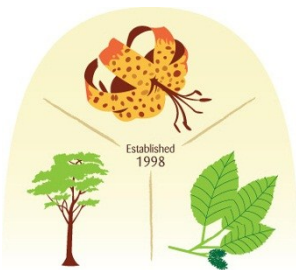
- * The DNPS quarterly newsletter, The Turk's Cap
- * Native plant gardening and landscaping information
- * Speakers, field trips, native plant nursery and sales

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

Volume 17, Number 2
Summer 2014

THE NEWSLETTER OF THE DELAWARE NATIVE PLANT SOCIETY

www.delawarenativeplants.org

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DELAWARE
Native Plant Society

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HOW CAN I GET INVOLVED?

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NATURAL QUOTES

*"How doth the busy little bee
Improve each shining hour
And gather honey all the day
From every opening flower!"*

*from Divine and Moral Songs for Children
by Isaac Watts (1674-1748)*



Spring view at Mt. Cuba Center

Photo by Rick Mickowski, May 2014

Notes from Newcroft

In this column last month, I thought this month I'd highlight the ginkgo tree but after reading the book "[Ginkgo: The tree that time forgot](#)" I found that it was never a native in our area. What is native is the Black cherry tree Bob Edelen selected for this issue's *Gardening with Native Plants* column. I moved to Newcroft almost 20 years ago and before I knew it the tree pictured above was growing in the corner of my lot. Over the years I've learned to pull the multitude of saplings that come up everywhere. You know, you learn to ID a plant like that with only a few young leaves sticking out of the ground.

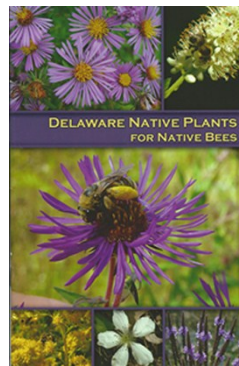


Black cherry tree at Newcroft

The rest of this issue is buzzing with bee info. For years there have been reports about the decline in the bee population. I'm still able to buy honey for my toast and buy fruits and vegetables at the market. Perhaps the commercial beekeepers have filled in the gap. All but the one whose truck had an accident in DE on I-95 recently. It was hauling 460 hives of honeybees from Florida to Maine when it crashed and released its cargo of live bees -- an estimated 16 to 20 million of them. New Castle County emergency squad followed *bee swarm removal procedures* including calling three bee providers for assistance.

Thanks to Rick Mickowski who will be finishing up this issue. I am traveling to Sweden to pay homage to Carl Linnaeus in Uppsala.

Cindy Albright



Why Plant for Bees?

The term "native bee" refers to any of a large and diverse group of wild bees that are indigenous to North America. There are some 4,000 species of native bees north of Mexico, around 200 of which have been found in

Delaware. Native bees are a vital component of natural ecosystems, providing pollination services to countless species of wild trees, shrubs and flowers.

While honey bees are still very important pollinators, native bees can provide "pollination insurance" during times when honey bees are not available.

Bees benefit from patches of **native flowering plants** on farms, in home garden and in public spaces. Adult bees drink nectar and gather pollen to provide food for their young. A supply of pollen- and nectar-rich plants available throughout the growing season will help maintain large, healthy native bee populations.

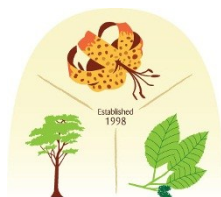
This DE Dept. of Agriculture guide provides a section on "Choosing Plants for Bees." It includes factors to consider eg. 1. Timing 2. Diversity 3. Origin 4. Ecotype 5. Annual vs. Perennial and 6: Hybrids.

* [Download entire booklet](#)

Also see: USDA Bee Pollination website:

<http://www.fs.fed.us/wildflowers/pollinators/animals/bees.shtml> and the Xerces Society website at www.xerces.org. They have just released a report about native milkweeds— "Milkweeds: A Conservation Practitioner's Guide". Download at this link:

[Milkweeds: A Conservation Practitioner's Guide](#)



**The American Chestnut Foundation
Delmarva Restoration Branch *Kick-off***

**at Abbotts Mill Nature Center
Saturday, October 11, 2014**

**15411 Abbott's Pond Road, Milford, DE 19963 [\(Directions\)](#)
(see page 7 for details)**





Spotted Knapweed in bloom and basil rosette of silver leaved foliage

NEW OFFICERS ELECTED AT DNPS 2014 ANNUAL MEETING NATIONAL TRAILS DAY AT CAPE HENLOPEN STATE PARK

Article and photos by Rick Mickowski ✨



Remnant chestnut tree at Abbott's Mill Nature Center and nut sample



National Trails Day



Saturday, June 8 turned out to be a beautiful day for DNPS members to volunteer their time as part of National Trails Day at Cape Henlopen State Park. Nine DNPS members participated in this event – Jan and John Ferrell, Richard Kacynski and Linda Sperry, Ed Crawford, Rick Mickowski, Eric Wahl, Eric Zuelke and Cindy Albright. Rob Line from Delaware State Parks was the group leader for the invasive species removal project. We were shown a sample of the plant we were to pull that morning. It was an invasive plant called Spotted Knapweed (*Centaurea stoebe*). We found and pulled a lot of this plant along the edges of the parking lot and a little along one of the trails leading to the dunes and beach. We looked in the dunes where the native beach heather grows but previous efforts at these locations seemed to have stopped the plant as none could be found.



After lunch, DNPS members held the 2014 annual business meeting. Eric Zuelke gave a financial report. DNPS has \$7,136.36 in the checking account and \$7,505.04 in the money market savings account. The funds in the money market account were a donation several years ago to DNPS from the Delaware Chapter Sierra Club from a settlement with Exxon. Some of the funds were used to purchase the greenhouse located at the St. Jones Reserve. Most expenses consist of postage, making copies, newsletter costs and miscellaneous expenses. We currently have around 100-110 members. Eric also filed the online reports for DNPS to keep our not-for-profit status. The filing fee is \$25.00 per year.

The annual plant sale will be held on **September 27th in conjunction with the St. Jones Reserve Open House**. Eric will be contacting the native plant vendors soon to confirm their attendance. Last years' vendors were YellowSpring Farm from PA and Nature Design Garden Center from DE. The annual symposium will be held on the same day at the Bombay Hook National Wildlife Refuge. The speaker this year will be Rick Darke, a noted landscape designer, photographer, and author on the topic "Planting for Beauty and Biodiversity: Putting Back the Layers". Bill McAvoy, botanist with the Delaware Natural Heritage Program and DNPS Past President, will speak about the layers of a Delaware forest as a model layers of a Delaware forest as a model.

Ed Crawford, a volunteer with the Abbott's Mill Nature Center, has volunteered to coordinate the upcoming American Chestnut Restoration Branch event being held on October 11th at the nature center in Milford. The event will include a tour of the Abbott's Mill Chestnut Trail. The President of the American Chestnut Foundation will be the featured guest speaker. Also speaking will be the President of the Maryland Chapter. Plans are to offer door prizes of items made out of chestnut wood, possibly a coaster with the ACF logo on it. There will be exhibits and possibly a silent auction. Dog Fish Head brewery will be contacted about becoming a sponsor since the business is located on Chestnut Place in Milton. This event will be promoted to businesses, organizations, and conservation groups. The plan is to get nuts and trees to plant from ACF. The restoration chestnut trees are hard to get. They are 95% American chestnut and 5% Chinese chestnut. There are however, techniques that can be used on the remnant native chestnut trees in the woodlands to get the sprouts to regrow long enough to bear fruit.

The slate of officers was presented by Rick Mickowski. They were Eric Wahl for President; Rick Mickowski for Vice-President; Eric Zuelke for Treasurer; and Alison Long for Secretary. Linda Sperry made a motion to accept the slate of officers as presented, seconded by Cindy Albright. The motion was unanimously approved. Several members then toured the native plant demonstration garden and rain garden at the U of D Sharp Campus in Lewes.

Eric Wahl is a landscape architect with Element Design Group in Lewes. Rick Mickowski is a conservation planner with the New Castle Conservation District in Newark. Eric Zuelke is our long-time treasurer who runs his own computer business. Alison Long owns her own design firm where she designs sustainable landscapes and wildlife habitat restoration. She also works as a teacher/naturalist for the Delaware Nature Society at the Russell W. Peterson Urban Wildlife Refuge. Thank you to John Harrod for serving as DNPS President for the past two years.

✨ **Author's note: The card in my camera malfunctioned, so I lost all the photos taken the day of the annual meeting.**



Eric Wahl, Rick Mickowski, Alison Long, & Eric Zuelke

GARDENING WITH NATIVE PLANTS

Black cherry *Prunus serotina*

Natural History

A tree for all gardens? **NOT!** Black cherry, also known as wild black cherry, rum cherry, cherry-bounce or mountain black cherry by most accounts is not a garden friendly tree. Its foliage is toxic, known to severely sicken and even cause death to horses and cattle, it is plagued by a host of insect pests including the scourge of fruit gardeners, the dreaded tent caterpillar, it is susceptible to a variety of diseases and its fruits litter the ground sprouting numerous invasive seedlings. So why write about it? Well, on the other hand many of the characteristics that make the black cherry undesirable for many landscapes, also make it a natural panacea for wildlife! It is perhaps most noted for its profuse spring bloom of fragrant white flowers that occur in slender clusters up to 6" long attracting a myriad of butterflies, bees and other insects. Black cherry is a larval host to Eastern Tiger Swallowtail and Viceroy Butterflies, Colombia Silk Moth, Promethea Moth, Sphinx and other moths and is of special value native bees, bumble bees and honey bees! Did I mention tent caterpillars? Yes, in spring, black cherry trees are often disfigured by tent caterpillars, but these usually do no long term harm, and are themselves eaten by yellow-billed



Photo courtesy of
Backyard Nature

cuckoos, great crested flycatchers and other native songbirds. The berries are themselves eaten by a myriad of songbirds including robins, thrushes, bluebirds, cedar waxwings, mocking birds, catbirds, quail, wild turkey, and many more!

Deer will browse the lush foliage, and are seemingly unaffected by the toxins so injurious to domesticated animals! In the north, porcupines will eat the bark.

Black cherry is native to eastern North America and can be found from eastern Canada through southern Quebec and Ontario, south through the eastern United States to Texas and central Florida, west to Arizona and New Mexico and in the mountains of Mexico and Guatemala. It is the largest of native cherry trees typically growing to 50 to 80'. The Delaware record is an impressive 90+ foot tree found in Wyoming, Delaware! Black cherry is very adaptable and typically occurs in both lowland and upland woods and along streams. Flowers are followed by drooping clusters of small red cherries (to 3/8" diameter) that ripen in late summer to dark purple-black with foliage that turns attractive shades of yellow and rose in fall. Mature trees develop a dark scaly bark.

Where to Grow

Black cherry is a medium to large flowering shade tree, easily grown in average, medium, well-drained soils in full sun to part shade and is salt and drought tolerant. It will do best in moist, fertile loams in full sun. As with most cherries, however, it is susceptible to a large number of insect and disease pests. Potential diseases include leaf spot, die back, leaf curl, powdery mildew, root rot and fire-blight. Potential insects include aphids, scale, borers, leafhoppers, caterpillars, tent caterpillars and Japanese beetles. Spider mites may also be troublesome. The tree drops lots of twigs, leaves and fruit and in cultivation can be allelopathic, negatively affecting the growth of garden plants. So, it is perhaps best suited to woodland edges, naturalized with other native species and is definitely not recommended for those who pasture livestock! Considering all the negative aspects written of the black cherry, the trees growing wild in the woodlands surrounding our home in Harbeson appear quite healthy and save a few spring tent caterpillars exhibit little of the more detrimental characteristics!

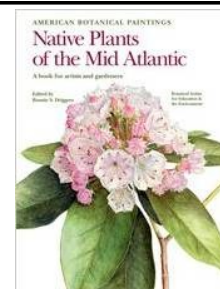
Resources & Reviews

[*American Botanical Paintings: Native Plants of the Mid Atlantic*](#) Feb. 2014

by [Bonnie Driggers](#) (Editor)

Published by the [Botanical Artists for Education & the Environment](#) (BAEE)

The United States Botanic Garden exhibited original paintings and drawings published in the book. (2014 Feb.—June) Juried botanical art that included both native plants and insect pollinators.



(cont. from page 4)

Propagation

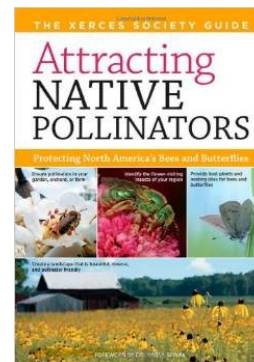
Black cherry is a pioneer species sprouting readily in disturbed areas and as you might expect, propagation from seed is not difficult. Seeds require cold stratification. Collect fruit when ripe, clean seeds from the pulp and briefly air dry. Seeds may be directly sewn in the fall or held for spring planting, stratified in moist sand for a period of 30 to 60 days. Seedlings may need protection from deer, rabbits and mice until well established, usually within the first two to three years. Young trees will develop a taproot, making transplanting difficult.

Lore

Widespread and the largest of native cherries, black cherry is by far the most important native cherry. The valuable hard, reddish brown wood is used for furniture, paneling, veneers, gun stocks, musical instruments, handles, cabinets and toys. Wild cherry syrup, a cough medicine, is obtained from the bark, and Native Americans used the inner bark to prepare cough medicines and tea-like cold remedies. While the fruit is bitter fresh off the tree, it is popular for making jelly and wine, and for flavoring ice cream (black cherry is one of my favorites) and certain liquors, hence the names 'rum cherry and cherry-bounce', but beware, the rest of the plant can be toxic to humans and domesticated animals if consumed!

Bob Edelen

(Thanks to Bob for 10 years of columns as he retires from that authorship. They are priceless articles which we have archived.)



Protect the Pollinators That Help Feed the World
Bees, wasps, butterflies, moths, flies, and some beetles pollinate more than 70 percent of flowering plants, but North America's native pollinators face multiple threats to their health and habitat. The Xerces Society offers a complete action plan of protecting these industrious animals by providing flowering habitat and nesting sites.

Providing Healthy Habitats for Pollinators:
Supports bountiful farm and garden harvests
Maintains healthy plant communities
Provides food for other wildlife
Beautifies your landscape with flower plants

"Precise, elegant, and thoughtful, the recommendations offered by the Xerces Society will become essential to advancing a healthy and diverse food-production system." - Gary Paul Nabhan, *The Forgotten Pollinators* and *Renewing America's Food Traditions*.

[Book available from Amazon](#)



Native milkweed
blooming along
Porter Road in New
Castle County on
June 23, 2014.
Photo by Rick
Mickowski

An insecticide-infection connection in bee colony collapses

Researchers discover a common insecticide shuts down a key immune protein in bees.

*by [John Timmer](#) - October 21, 2013

Colony collapse disorder has been decimating bees for several years, but explanations have been hard to come by. After some spurious claims about cell phones causing the problem, researchers began identifying factors that *did* create problems for the health of bees, including [infections](#), [insecticides](#), and [agricultural practices](#). The problem is that all of these seemed connected to colony collapse, which suggested the cause was likely to be complex.

Now, some researchers may have cut through the complexity. They've found that a common insecticide causes changes in the immune system of insects, which in turn leaves them more vulnerable to infection. And they've begun the process of determining how those immune changes come about on the molecular level.

The Italian researchers behind this current work previously analyzed an infection present in bees. But the concerns being raised about insecticides motivated them to look into whether there might be a connection between the two. Rather than focusing on bee mortality, they decided to look at the pathways that mediate immune responses in insects.

Bees lack that adaptive immune system that generates pathogen-specific antibodies and T cells in mammals. But they share an innate immune system, which is able to generally recognize infectious agents like bacteria. In fact, this innate immune system is evolutionarily ancient, as the same genes are used to control the response in animals as distantly related as bees and humans.

Previous toxicology work in mammals indicated that a specific class of insecticides, the **neonicotinoids**, could influence the activity of genes involved in the innate immune system. These genes were activated by the presence of neonicotinoids, and they shut down a key regulator of the innate immune system (a protein called NF- κ b). Thus, the more of these insecticides, the less effective the innate immune system is likely to be—at least in mammals.



The researchers started by showing that the same is true in insects. Initially, they worked with everyone's favorite fruit fly, *Drosophila*, showing that the equivalent genes responded in the same ways in the flies. They then showed that the innate immune response isn't activated when these same flies are exposed to an infection. A different class of insecticide (an organophosphate) had a much weaker effect on the fly's innate immunity. With the molecular activity well characterized, they went on to demonstrate that the same effects could be seen in bees.

To show that the changes in gene activity had an impact on the bees' immune function, the authors turned to the deformed wing virus. Animals that were not given a dose of a neonicotinoid were able to largely keep the viral infection in check. But two different neonicotinoid insecticides showed a dose response: the more you gave the bees, the more likely the infection was to flourish.

If this result holds up, it neatly ties together a number of observations. Various infections may still be doing the ultimate job of killing the bees, but their virulence could be explained by compromised immune function, caused by a combination of insecticide use and agricultural practices. The results will also provide further support for the European Union's attempt to ban the use of neonicotinoid pesticides, [a decision](#) that was made earlier this year. Several chemical companies have announced that they will sue to block the ban.

- *John Timmer became Ars Technica's science editor in 2007 after spending 15 years doing biology research at Berkeley and Cornell.*
- *The Xerces Society website under the "Publications/Guidelines" tabs has two articles on this timely topic. Link on www.Xerces.org*

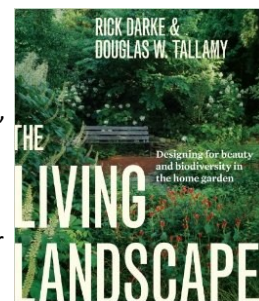
Upcoming Events

Delaware Native Plant Society - Fall 2014 Events

DNPS Plant Sale at the St. Jones Reserve Annual Open House September 27

DNPS and Bombay Hook GardenKeepers Annual Native Plant Symposium September 27

The annual symposium will be held on the same day at the Bombay Hook National Wildlife Refuge. The speaker this year will be Rick Darke, a noted landscape designer, photographer, and author on the topic "Planting for Beauty and Biodiversity: Putting Back the Layers". Bill McAvoy, botanist with the DE Natural Heritage Program and DNPS Past President, will speak about the layers of a Delaware forest as a model. Information on how to register for this event will be sent out to members later this summer by email or contact DNPS member Quentin Schlieder by phone at 302-653-6449 or by email at qcsjr@comcast.net.



American Chestnut Restoration Branch — Abbotts Mill Nature Center Saturday, October 11, 2014

15411 Abbott's Pond Road, Milford, DE 19963 ([Directions](#))

Make your plans to attend the kick-off event for the first Delmarva-based American Chestnut Foundation Restoration Branch. This event will feature presentations on the ecology of the chestnut and the efforts to restore it to the landscape. A field session will include a visit to Abbott's Mill Nature Center's chestnut orchard and to see surviving American chestnuts and chinquapins in the Milford Millponds Nature Preserve. The formal evening event will feature a keynote speech by the president of The American Chestnut Foundation, Byran Burhans. Also highlighting this unique event will be a silent auction, wood working demonstrations, live music, and dinner. Ticket prices will include a membership in The American Chestnut Foundation. Stay tuned for additional information about time, location, additional speakers, and ticket prices.



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

July 10 10:00 a.m. to 12:00 p.m.

[The Top Ten: Trees and Shrubs for Wildlife](#)

July 12 8:00 am to 5:00 pm Meet at Ashland Nature Center

[Copeland Native Plant Series:](#)

[Pine Barrens Wildflower Ramble](#)

Mt. Cuba Center pond



Summer 2014—Adkins Arboretum [Native Plant Nursery](#) is open for business
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.

Maryland Native Plant Society annual conference at Cecil College in Northeast, Maryland
September 20-21: "The Diverse Flora and Habitats of Cecil County and the Tri-State Area"
<http://www.mdflora.org/2014conference.html>

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: _____

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:

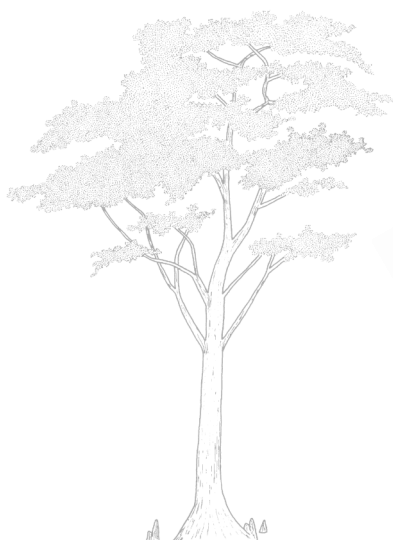
* The DNPS quarterly newsletter, The Turk's Cap

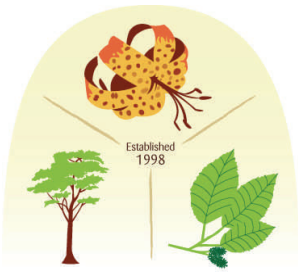
* Native plant gardening and landscaping information

Total Amount Enclosed: \$ _____

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

**DELAWARE NATIVE PLANT SOCIETY
P.O. BOX 369
DOVER, DELAWARE 19903**





THE TURK'S CAP

Volume 17, Number 3

Autumn 2014

The Newsletter Of The Delaware Native Plant Society

www.delawarenativeplants.org

GET INVOLVED! ATTEND THE OCTOBER 11TH AMERICAN CHESTNUT BENEFIT!

Delaware's native plants need you to step up and get involved by attending our October 11th benefit for The American Chestnut Foundation (ACF), to be held October 11, 6-9 PM at Abbott's Mill Nature Center, Milford, Delaware. By reading the DNPS newsletters and attending official events the last two years, you may be aware that the board of directors has voted to actively support bringing the American Chestnut back to Delaware through the creation of a Restoration Branch (RB) of The ACF, headquartered in Ashville, North Carolina. (Event details inside)

NATURAL QUOTES

"But it is the great trees stretching their arms above us in a thousand forms of grace and strength, it is more especially the trees which fill the mind with wonder and praise."

Susan Fenimore Cooper

The Delmarva Restoration Branch (RB), as it will be known, has been officially recognized as part of the the Maryland Chapter of the ACF. The link below leads to the official chapter site. [Maryland, TACF](http://Maryland.TACF)

You ask, why are we doing this and what are the implications for our existing program? The list of questions and issues raised by this initiative are many, but let us begin by addressing a few of the most important and obvious issues.



Restoration 1.0 American chestnut hybrid at Meadowview Research Farms, Meadowview, Virginia. Photo from the American Chestnut Foundation.

First, we need to get more members actively involved and passionate with our native plants to save them from destruction, learn about them, and enjoy them. Simply put, the DNPS is competing with other conservation oriented non-profits for new members, and the time and attention of their existing members. As anyone who is involved in volunteering for these organizations knows, their demands can be heavy, but our time and energy is limited.

That being said, we believe that the fundamental importance of native plants is a key component of a healthy and bio-diverse environment. It places our DNPS mission in the first rank of importance, deserving of your support. (Continued on Pg 2)

Messages from the Editors



Mission accomplished. Since the last issue, I travelled to Uppsala, Sweden and paid homage to Carl Linnaeus, the Father of Taxonomy, visiting his home and garden.

He is entombed in the Uppsala Cathedral. But more fun than showing you that photo is the one above of the bust by Paul Granlund that grows out of a linden tree.

Four years ago, I became editor of the *Turk's Cap*. With this issue, I am turning over the editorship to Ed Crawford. Utilizing my library of nature-related books for resources was perhaps my greatest pleasure. Easy access to online resources shortened the preparation time. Happy reading!

Cindy Albright

Good-bye to Cindy Albright and thank you for everything you have done for the DNPS. There are some big shoes to fill here as the professionalism displayed by Cindy and the editors that preceded her, was of a very high order. All I can promise is that I will do my best to learn Microsoft Publisher and work to keep the *Turk's Cap* interesting, useful, and relevant.

Also, a big thank you to retiring contributor Bob Edelen, whom I have never met, but who wrote so many first-rate native plant articles over a span of many years. He will be hard to replace, but I know there is an enthusiast out there who wants to share his or her passion for native plants. Don't be shy, step right up!

Next issue, the *Turk's Cap* will once again cover a wider variety of wild plants and related issues, with chestnut specific material relegated to one box. Feel free to make suggestions. My email is coastalcoaster@gmail.com.

Ed Crawford

Support

(Continued from front page)

There was general agreement within the DNPS that we needed a new focus, a driver if you will, that could energize our organization.



Volunteers at the American Chestnut Foundation demonstration orchard at Abbott's Mill Nature Center. Left to right: Steve Childers, Ed Crawford, Jason Beale, Allison Long.

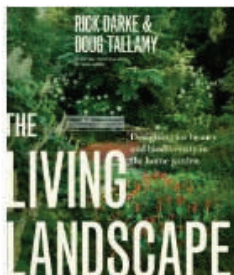
Where does this leave the DNPS? The answer is that the core mission remains the same. The American chestnut tree has become the top layer forest icon and an important focus, but the DNPS mission will continue to embrace all categories and layers of native plants. If you believe that timing is important, this new mission addition fits neatly into the new native plant landscape approach, championed by Dr. Doug Tallamy and Mr. Rick Darke in their book, "The Living Landscape," which is discussed by Rick Mickowski later in this newsletter.

In short, the DNPS, and the Delmarva Restoration Branch will support one another, but remain separate organizations. The DNPS board and officers believe that many members will choose to support both organizations. We also hope that this change raises questions, and brings out opinions, so get involved and make your views known.



Attendees

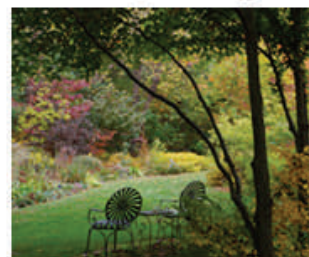
DNPS 10th Annual Plant Symposium with Bombay Hook Garden Keepers September, 2014



Rick Darke autographing book



Examples of Living Landscape



Photos by Rick Darke

10th Annual Symposium Features Author Rick Darke and Delaware Botanist Bill McAvoy

Article and symposium photos by Rick Mickowski, DNPS Vice-President

The 10th annual native plant symposium organized by Delaware Native Plant Society (DNPS) member Quentin Schlieder is now history. The DNPS officers sincerely thank Quentin for organizing this annual symposium for the past 10 years in conjunction with the Bombay Hook Garden Keepers. The Bombay Hook Garden Keepers provided all participants with the choice of a rooted Blackhaw Viburnum shrub or Paw Paw tree. After the lectures, everyone enjoyed a catered lunch. Guest speaker, Rick Darke, offered to sign purchased copies of his new book at a discounted price.

The first presentation was by noted botanist and past President of DNPS, Bill McAvoy, who gave an overview of the vegetative layers in Delaware forests. He covered the canopy layer (trees that grow 80-100 feet tall); the sub-canopy layer (trees that grow 40-60 feet tall); the shrub layer; and finally the herbaceous layer. In all, he covered 21 large trees, 13 sub-canopy trees, 17 shrubs, and 32 herbaceous plants. Delaware has no remaining virgin forests and most forested areas are less than 100 years old.

More information about Delaware flora can be found at <http://www.wra.udel.edu/de-flora/Introduction>.

Rick Darke, noted author, photographer, lecturer, and consultant gave a presentation based on his new book, co-authored with Doug Tallamy, entitled "The Living Landscape," that focuses on how the home gardener can establish an ecologically sound landscape by mimicking and re-creating the vegetative layers found in nature. His property near the White Clay Creek Preserve in Pennsylvania has been a living laboratory since he moved there in 1988. There, he has learned to incorporate native plants and to love color, textures, forms, and fragrances. Approximately 80% of the plants on his property are now native plants. He encourages gardeners to be open-minded and understand that as a result of human use, much of our land has been divided into disjointed and fragmented patches, which do not support essential living organisms. This fragmentation is caused and enforced by widely adopted ordinances and codes.



How are the Green Heron fledglings pictured in the top photo and the photo of the suburban home related? They were hatched from a nest located in the native American holly tree on the right, only 40 feet from the front door. Photos by Ed Crawford

(continued from page 3)

Now, due to extensive human development over centuries, nature cannot take its normal regenerative course to re-establish disturbed natural landscapes. One of the worst aspects of this change is the spread of invasive species, which have rapidly replaced native species in the disturbed areas, particularly along forest edges. It is important to combat these invasive plants before they become established by planting and encouraging native plants.

Planting and layering native plants from groundcovers to trees will by itself make the landscape more effective, useful, functional, and diverse. To understand comprehensively how the various vegetative layers work together, we must look at both the vertical layers and lateral layers or edges. Take into consideration the cultural layers of human impact, as well as temporal layers, which reflects how landscapes change over time. Once established, such a balanced bio-diverse ecosystem will be self-sustaining if harmful practices such as using sterile wood chip mulch and toxic mushroom soil are avoided.

Native plants can be part of an organic landscape architectural plan that is not only ecologically sound, but also beautiful, functional, and livable. So remember to design and plant your landscape for beauty and diversity by putting back the natural layers that support biological functionality. To learn more, read the book, "Living Landscape,:" by Darke and Tallamy. It is widely available at bookstores and through online sources.

Native plant is a term to describe plants [endemic](#) ([indigenous](#)) or [naturalized](#) to a given area in [geologic time](#).

This includes plants that have developed, occur naturally, or existed for many years in an area (e.g. [trees](#), [flowers](#), [grasses](#), and other plants). In North America a plant is often deemed native if it was present before colonization.

Some native plants have adapted to very limited, unusual [environments](#) or very harsh [climates](#) or exceptional [soil](#) conditions. Although some types of plants for these reasons exist only within a very limited range ([endemism](#)), others can live in diverse areas or by adaptation to different surroundings ([indigenous plant](#)).



Future Black Swallowtail butterflies enjoying the view of a clump of *Conoclinium coelestinum*. Photo by Ed Crawford

Upcoming Events

DATE: SATURDAY, 11 OCTOBER 2014

Time: 6:00 - 9:00 PM

A Benefit for Restoring the American Chestnut in Delmarva

Abbotts Mill Nature Center

15411 Abbott's Pond Road

Milford, DE 19963

A fun-filled evening that includes: dinner, craft beer, fiddle music, an American Chestnut souvenir, door prizes, raffles, speakers, exhibits, and 1 year memberships in The American Chestnut Foundation and Delaware Native Plant Society

Tickets: \$60 Single, \$80 Couple, Youth \$15 (12-17) Chestnut Leaf Sponsor \$340 includes sponsor and one guest. Comes with 4 Restoration 1.0 seeds.

For info and tickets contact Ed Crawford at: delawarechestnutrb@gmail.com, or go to the link below to purchase tickets by credit card

WWW.ACF.ORG

Sponsored by Delmarva Restoration Branch of the American Chestnut Foundation, Maryland Chapter, with the support of the Delaware Nature Society and Delaware Native Plant Society

Please consider coming to our event. It is a good deal! The price of a ticket includes a new membership to the DNPS or a one year renewal for existing members, membership in the ACF with all its great benefits, a delicious full dinner with craft beer, and the other items listed above, including a hand-crafted beverage coaster made from old American chestnut. There will be chances to win other great American chestnut items.

Speaking on the current state of the ACF effort, and representing the ACF, will be Ms. Sara Fitzsimmons, Regional Science Coordinator, North Central Region.. She holds a MS degree in Forest Ecology and Resource Management from the Duke University Nicholas School of the Environment.

Bill McAvoy, Delaware State Biologist will speak on the history of the American chestnut in Delaware.

The benefit is also educational in nature and there will be exhibits concerning the American chestnut and, also, the Delaware Native Plant Society. Those persons coming at 5 pm can enjoy a tour of the American chestnut Demonstration Orchard and, time permitting, portions of the Chestnut Trail.

We hope to make this a fun event and invite the participation of DNPS members and others to help us make the event go smoothly. Contact Ed Crawford or any of the officers and board members to volunteer.

Upcoming Events

Delaware Coast Day

Sunday, October 5, 2014 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 2014—[Mt. Cuba Center](#) *Your pathway to native plants*

Install and Maintain a Native Plant Meadow

With Mark Gormel

Saturday, October 4

9:30 am – 11:30 am

\$30

Reduce your weekly lawn maintenance by starting your own native plant meadow. Properly planned, installed, and maintained native plant meadows are unmatched in their ability to provide nearly year round beauty with long-term, high-quality habitat and low maintenance requirements. This lecture covers the why, how, what, when, and where of what it takes to turn an area of turf grass into an aesthetically rich, environmentally functional, thriving native plant community. Get started today.

Native Plants for Fall Color

With Pete Ziegler

Thursday, October 23

1:00 pm – 3:00 pm

\$30

What are the best plants for fall color? This fall enjoy the reds, yellows, burgundies, and oranges of autumn while strolling through the gardens of Mt. Cuba Center. Discover native plants that add spice and flavor to your fall landscape with blooms, bark, fruit, and leaf color. Once inspired, find out where, why, and how to use these plants in your garden. Be prepared to walk outdoors.

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.



Rhus glabra

Otherwise known as smooth sumac, *Rhus glabra* is a plant of edge habitats and, therefore, frequently seen by the roadside. They are an ideal native to outcompete invasives such as tree of heaven and multiflora rose. Smooth sumac came to my attention this summer at the height of bloom because their flowers were swarming with native bees collecting its bright orange pollen. In the autumn smooth sumac presents brilliant red leaves. Over the years they will gradually be overtopped by trees and disappear.

Notice in the full leafed photo, taken in October, that the flowers are gone and there are no seed pods in their place. The leaves have been tattered by insects so I assume caterpillars or other insects completely devoured the flowers. Photos by Ed Crawford

Membership Application

Delaware native Plant Society

Member Information

Name:

Business Name or Organization:

Address:

City and Zip Code:

Telephone (home/work):

☐ 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:

Total Amount Enclosed: \$

Make check payable to:

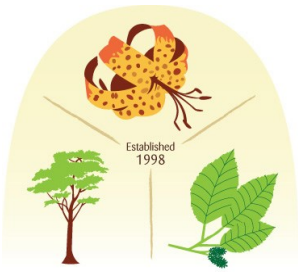
DE Native Plant Society

DELAWARE NATIVE PLANT SOCIETY

P.O. Box 369

DOVER, DELAWARE 19903





THE TURK'S CAP

Volume 17, Number 4

Winter 2014

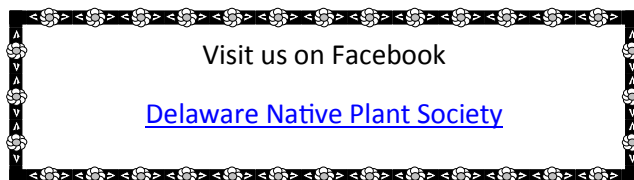
The Newsletter Of The Delaware Native Plant Society

www.delawarenativeplants.org

Feeding the Fall Songbird Migration Recommended Native Plants

By Rick McCorkle

Winter is a great time to begin planning your spring landscaping projects, especially if you want to have your plant list prepared ahead of some of the many spring native plant sales. As a wildlife biologist, I'm often asked for advice about which native plants are best for attracting, and providing habitat for, native wildlife species. I've also recently been involved in an effort to improve stopover habitat for migrating songbirds that are funneled down the Delmarva Peninsula each fall on their way to warmer climes where food is abundant. Reluctant to continue over the vast expanse of open water near the mouth of the Chesapeake Bay, and exhausted



after the first leg of their fall migration, huge numbers of warblers, kinglets, thrushes and other varieties of songbirds become concentrated near Cape Charles, Virginia, where they rest and forage for enough food to fuel the next leg of their trip. Eastern Shore of Virginia National Wildlife Refuge, Kiptopeke State Park, Magothy Bay State Natural Area Preserve and the Virginia Coast Reserve Brownsville Farm are among the protected natural areas that are managed for wildlife conservation in this area.



Smooth Serviceberry, *Amelanchier laevis*. The fruits of this small tree have attracted many desirable birds, including Scarlet Tanagers and Cedar Waxwings.

The organizations responsible for managing these land-holdings (U.S. Fish & Wildlife Service, Virginia Division of Conservation and Recreation, and The Nature Conservancy) have been coordinating their management efforts and working with others to develop optimal habitat conditions for providing the food resources the birds need to refuel and successfully complete their migrations to their winter habitats in the southern U.S., the Caribbean, and central and south America. To date, research indicates that there is not enough food to fully meet the needs of the birds. This is largely due to the conversion of maritime forests and shrublands to agriculture and other human uses. (Continued on page 4, Feeding)

DNPS Enters Dogfish Head Brewery Beer and Benevolence Competition

We lost, but the good new is our collaborative entry with the Delaware Nature Society (DNS) and the Delmarva Branch of the American Chestnut Foundation (ACF) identified areas of mutual interest and potential cooperation.



Crataegus viridis, Winter King Hawthorne tree

In early November, 2014, Editor Ed Crawford contacted DNS proposing a joint entry and DNS agreed to become the lead organization. First prize was \$10,000 with the potential to win an additional \$5000.

Organizations had to be operating in Sussex County and were required to submit a video of 60 seconds or less and an executive summary of their programs.

It was agreed amongst the organizations that DNS would use some of the proceeds to expand its native plant related educational programs that could include improvement of existing or installation of additional native plant gardens and improved signage at the Abbott's Mill site. DNPS agreed to provide expertise and support and assist in developing the contest submission. The ACF agreed to obtain appropriate plants and chestnuts in support of an overall plan.

It was disappointing not to win, but a little perspective was gained when we learned there were over 70 entries! The video can be accessed through the following link. [Blue Hen Productions](#)

Native plant is a term to describe plants endemic (indigenous) or naturalized to a given area in geologic time.

This includes plants that have developed, occur naturally, or existed for many years in an area (e.g. trees, flowers, grasses, and other plants). In North America a plant is often deemed native if it was present before colonization.

Some native plants have adapted to a very limited, unusual environments or very harsh climates or exceptional soil conditions. Although some types of plants for these reasons exist only within a very limited range (endemism), others can live in diverse areas or by adaptation to different surroundings



Turk's Caps Photo by Ptery Iris



**Report on the 11 October 2014 Benefit
Delmarva Branch of The American Chestnut Foundation
A Great Success!**

Despite less than optimum weather conditions, the outdoor fund raising event at Abbott's Mill Nature Center, Milford, Delaware, drew 27 participants and netted over \$3200 for The American Chestnut Foundation (TACF). It was fun!

Paid attendees received one year memberships in TACF and Delaware Native Plant Society. A delicious dinner, with desserts by Eric Wahl, was included and the Dogfish Head Brewery donated a nice variety of its craft-brewed ales.

To start, event coordinator and emcee Ed Crawford briefly spoke about the Delmarva Restoration Branch and its goal of restoring the American chestnut, *Castanea dentata*, to the Delmarva.

The keynote speaker was Sara Fitzsimmons, Regional Science Coordinator for TACF, who inspired everyone with an informative and highly enjoyable presentation regarding the history of the American chestnut and TACF programs. She is seen in the bottom-right photograph, above.

Other notables in attendance were Bruce Levine, President of the Maryland Chapter of TACF, and Laura Schnitzlein, representing TACF national.

The Delaware Native Plant Society defrayed event expenses with a donation of \$2000, and its members and officers contributed to the project in many different ways.

President Eric Wahl took charge of making the rented event tent look amazing with special lighting and wild flowers for the tables. Steve Childers donated the proceeds of his chestnut carvings, which were sold at the silent auction. Bill McAvoy provided the entertainment by playing various stringed instruments and singing Appalachian folk music. Treasurer Eric Zuelke was responsible for check in and keeping track of the money. Vice-President Rick Mickowski, past President John Harrod, and many others hustled throughout the evening to keep everything running smoothly.

Gary Carver, past President of the Maryland Chapter of TACF and professional carver, donated a valuable American chestnut eagle for sale at the silent auction.

Special thanks goes to the officers and staff of the Delaware Nature Society that donated the venue, use of equipment, and their time and effort.

Photos by Rick Mickowski and Ed Crawford.

(Feeding, continued from page 1)

Therefore, it's imperative that remaining habitats are managed to provide as much food as possible for these migrating birds. So how can this be achieved, and which native plant species are best for satisfying the requirements of the birds?

Researchers have analyzed the fruits of many native plants utilized by migrating songbirds in order to determine which fruits contain the most nutrients. Analyses of nutrient contents have focused on fat, carbohydrate and protein. Most of these studies place Southern Arrowwood, (*Viburnum dentatum*) at the top of the list. The fruits of this shrub are high in fat and carbohydrate content, but do not contain an adequate amount of protein, so protein needs must be satisfied by insects or other fruits. It should be noted here that many of these birds transition from eating mostly insects to eating mostly fruit during the fall migration. For example, more than 90% of the diet of the American Robin consists of various fruits during the fall and winter, whereas during the spring and summer, less than 10% of its diet consists of fruits. Presumably, other Viburnums, such as Blackhaw (*V. prunifolium*) would also provide high-value fruits to migrating songbirds.

Pokeweed (*Phytolacca americana*) is not a plant species that you're likely to find offered at a native plant sale, but you might consider allowing it to persist in your landscape if you'd like to provide highly nutritious fruit to songbirds. Another native plant which may not be all that attractive to us, but which is high on the list for satisfying the nutrient needs of migrating songbirds, is Virginia Creeper (*Parthenocissus quiquefolia*). If you're looking for a more

attractive shrub which produces fruits that are tasty and nutritious to both you and the birds, Highbush Blueberry (*Vaccinium corymbosum*) is also high on the list, although its protein content is inadequate. And a native plant that not only has valuable fruits in the fall, but also flaunts showy flowers in the spring, is Shadbush or Serviceberry (*Amelanchier canadensis*). Other recommended species, the fruits of which are eaten by many migratory songbirds, include Common Elderberry (*Sambucus canadensis*), Spicebush (*Lindera benzoin*), and Silky Dogwood (*Cornus amomum*). Native raspberries (*Rubus spp*) are also important.

Other recommended shrubs are Northern Bayberry (*Morella [Myrica] pennsylvanica*) and Winterberry Holly (*Ilex verticillata*). Research suggests that the Yellow-rumped Warbler may be the only bird species that is able to digest the waxy coating of the Northern Bayberry fruit and the closely related shrub, which is also native to our region, Wax Myrtle (*Morella [Myrica] cerifera*).

Many warblers and other songbirds continue to feed primarily on insects during fall migration, although they do supplement their diets with fruit. Therefore, in order to fully meet their needs it's important to provide native plants which support insects and other arthropods. Many birds rely heavily on Lepidopterans (butterflies and moths), and of all plant genera, the Oak family supports the most Lepidopterans. So, where possible, plant native oaks in your landscape. Many of our native oaks are currently being hit hard by diseases, but among the more resistant oaks, that are often available, are Willow Oak (*Quercus phellos*), and White Oak (*Q. alba*).

Message from the President:

Welcome 2015!

I hope all our members had a joyful and relaxing holiday season. The past year was a wonderful success, not only for DNPS but also for organizations we teamed with throughout the year for varying events. We are looking forward to additional teamwork in 2015 and beyond. In planning the new year, DNPS is discussing a number of ideas including:

"Landscape Design with Native and their Maintenance" is planned for our Winter Event. Sustainable landscaping methods such as holistic farming may also be included in this discussion.

DNPS is hoping to team with Bayshore Walk for a Spring Event and Annual Meeting. This may include a walk along the Delaware Bay discussing wildlife and native plants along the way.

Of course the year would not be complete without the Annual Symposium with the Bombay Hook Garden Keepers. This year we will hear from our very own Flavia Rutkosky regarding native pollinators, and Gregg Tepper, Director of Horticulture, Delaware Botanic Garden, will be our keynote speaker presenting the "Sensory Appeal of Natives".

The Native Plant Sale will again be coordinated with the popular Arts in the Estuary, also in September. DNPS is also hoping to team with the Delmarva Restoration Branch of the American Chestnut Foundation in autumn. October's kick-off event for the organization was a huge success and Abbott's Mill was a beautiful and gracious host for the occasion.

We hope to see you throughout the year and especially at these events. More specific times and dates will be available closer to the planned activity. A sincere "thank you" goes out to all our members, and especially to those that volunteer their time and effort to make our organization a continued success.

Happy New Year!

Eric W. Wahl

Calendar of Events

Delaware Center for Horticulture

Visit www.TheDCH.org for a listing of events for January – April 2015. Those with a native plant component include:

“Go for the Gold: Award-Winning Native Plants for Our Region” with local horticulturalist Peggy Anne Montgomery. This lecture will be virtual tour of native plants that have won the prestigious Pennsylvania Horticulture Society Gold Medal and considers the role of beneficial insects and plant combinations in ornamental plantings. (Wednesday, February 4, 2015 from 7-8 p.m.) \$15 for general public and \$10 for DCH members.

Delaware Nature Society and the Mt. Cuba Center

Copeland Native Plant Seminar, Saturday, March 21, 2015 from 9 a.m. to noon at the Ashland Nature Center. Join nationally recognized birder Kenn Kaufman and renowned photographer Rick Darke as they share their vision for enticing, appealing, and peaceful gardens that welcome both people and wildlife. Cost \$35 for general public and \$25 for DNS members.

Mt. Cuba Center

Go to www.mtcubacenter.org for a listing of the winter/spring 2015 lectures and classes including such topics as “Shake Up Your Foundation” on February 25th, and “Native Plants of Spring” on six Wednesdays beginning April 8th. There is a registration fee for most classes.

Bowman's Hill Wildflower Preserve and Delaware Valley College (DVC) present the 15th annual Land Ethics Symposium

DVC is hosting the annual Land Ethics Symposium at the College on Thursday, March 12, 2015 from 8:30 a.m. – 4:30 p.m. Register online at www.bhwp.org/education/Land-Ethics-Symposium.htm.

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.

Calendar of Events (Continued)

Society for Ecological Restoration

The Mid-Atlantic Chapter is holding their 10th annual conference March 26-28, 2015 at the University of Delaware's Clayton Hall in Newark. Check out the website at www.chapter.ser.org/midatlantic.

Chesapeake Conservation Landscaping Council

Free webinar: "Edible Native Plants for Your Landscape" on February 11, 2015 from 7:30-8:30 p.m. Go to www.chesapeakelandscaping.org/tag/edible/ to register. Other webinars on various topics available for \$10 registration fee.

United State National Arboretum

2015 Lahr Symposium and Native Plant Sale on March 28, 2015. Visit www.usna.usda.gov/education for updates and information as it becomes available. North Creek Nursery's Carrie Wiles will be one of the featured speakers.

Longwood Gardens

"Landscape for Life" classes based on the principals of the Sustainable Sites Initiative. Held on successive Wednesdays from 2/25 through 3/25, 2015. Go to www.longwoodgardens.org for more details.

Membership Application

Delaware native Plant Society

Member Information

Name:

Business Name or Organization:

Address:

City and Zip Code:

Telephone (home/work):

☐ 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:

Total Amount Enclosed: \$

Make check payable to:

DE Native Plant Society

DELAWARE NATIVE PLANT SOCIETY

P.O. Box 369

DOVER, DELAWARE 19903

