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.

In This Issue

Page 1  Natural Quotes
        DNPS on Facebook

Page 2  Notes from Newcroft
        Chestnut recipes

Page 3  American Chestnut Workshop

Page 4  Gardening with Native Plants

Page 5  DE River Basin program

Page 6  BBG Native Flora Garden
        Rain Garden Program

Page 7  2013 DNPS Plant of the Year
        Upcoming Events

Natural Quotes

Under a spreading chestnut tree; The village smithy stands; The smith, a mighty man is he, With large and sinewy hands; And the muscles of his brawny arms Are strong as iron bands.

Henry Wadsworth Longfellow

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.
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](http://www.acf.org). Also, [NY State’s Chapter efforts](http://www.acf.org).
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 monoeccious 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 cleaned 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 skimmed 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!

(cont. 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 all 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:

- 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 garden 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.

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.


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.

---

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

Visit the website to register.

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.

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

## Member Information

<table>
<thead>
<tr>
<th>Name:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Business Name or Organization:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Address:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>City and Zip Code:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Telephone (home/work):</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>E-mail address:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

### Membership Options

- 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

- 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