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Natural Quotes

“No one has the right to destroy anything in the wilderness; such things belong to all and must not be disturbed. Freedom gives no license to violate a heritage that belongs to the ages.”

Sigurd F. Olsen, Reflections from the North Country, 1976

A Cooling Ocean Breeze
Welcome To Our Newest Members

April through June

Richard France
Mary Hall
Linda Lennon
Sheila & Abe Mensch
Vahan & Virginia Moushegian
Theresa Simonson
Annalisa Vapaa

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.

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 website was just recently upgraded, and 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.
**Thoughts From The Edge Of The Garden**

**NURSERY UPDATE**
The nursery is doing just fine so far this year. We’re a little behind schedule because of the construction of our greenhouse, but slowly catching up. We have some great plants growing and the misting/sprinkler system that was installed in the new greenhouse is doing its job perfectly. We have two paid “interns” right now are doing the bulk of the watering and repotting and, the nursery manager (Eric) is currently renovating our seed stratification bench to make it stronger and more durable. One of the things that we are really proud of is the wise, environmentally responsible use of materials from our old greenhouse and the packing material from the new greenhouse. Between dismantling the old greenhouse and the all the wooden packing crates that the new greenhouse came in, we had a huge pile of wood and PVC pipe to deal with. But the reduce, reuse, and recycle motto was put into action and between additional infrastructure made for the new greenhouse, constructing the new misting system, the current renovations of the seed stratification bench, and a few personal home projects, we used approximately 75% of that huge pile of material, and much of the remainder will be kept for future projects or recycled the best we can.

**WEBSITE UPDATE**
Our new website is up and running and it is really nice! We are very pleased with the work that Delaware.net did for us. The site is intended to be a source of current events and information for everyone and we have been making a concerted effort to keep things up-to-date. We’ve gotten a lot of good feedback so far, and we have gotten all the bugs worked out, so not only does it look great, but it’s working great from the technology side also. The adventure of keeping our domain name (www.delawarenativeplants.org) was at times a real hassle, but in the end was worth all the effort because we were able to keep 10 years worth of search engine optimization, which was a very important goal. From now on, all announcements for meetings, field trips, etc. will come initially in the form of an email as we have always done, but this email will be brief and you can go to the website for the important details. We are also looking for people to contribute articles to the blog. Anyone can write an article. It’s sort of our version of an open forum/discussion board for chat on native plant topics. Please contact Eric (from the Contact page of the site) if you would like to submit something.

**Natives And Transplants**
This column highlights Society members (both DE natives and DE transplants from other states) in an interview questionnaire style. We kicked off this new column in the Autumn 2007 issue. In this issue we are highlighting Eric Zuelke who is the DNPS Treasurer.

I originally was not involved with the DE Native Plant Society at all. I didn’t even go to the organizational meeting back in March of 1998! At the time I was deeply entrenched in the world of Zoology and I just didn’t even think about the significance of the flora of Delaware at the time. But then one day in March 1999, our current President, Bill McAvoy, came into work (I was working at the DE Natural Heritage Program at the time with our past and current presidents, Keith Clancy and Bill) and Bill asked me if I wanted to be the Editor of the native plant society newsletter. I said, “Sure, why not. Could be fun, and I know I’ll learn a thing or two.” And then it just snowballed from there to my present day roles as Editor, Treasurer, Nursery Manager, Membership Database Administrator, P.O. Box checker, Webmaster, and Chief Technology Officer. That’s how I got involved with the DNPS!

My involvement and interest with native plants was a concurrent learning experience along with my growing responsibilities in the Society. I began to realize that native plants were a lot more important than I ever really thought about. I am by no means a botanist, and I really depend on our President, Bill (who just happens to be the state Botanist for the DE Division of Fish and Wildlife for those of you who may not know) to ID plants for me, but I am learning a lot every year and know more now than I ever have about native plants and about how to grow them from seed.

I’ve taken a lot of what I learned about native

*Continued on page 5*

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**Resources & Reviews**

*Spring Wildflowers of New England*

Authored by Marilyn J. Dwelley. With hundreds of entries and nearly 500 illustrations, Spring Wildflowers of New England is a unique and indispensable guide. Each listing includes thorough text descriptions of the leaf and flower, as well as information on range, habitat, and growth habits. Latin names, common names, and family are also included. Best of all, each entry is complemented by Marilyn Dwelley's elegantly detailed watercolors.
Resources & Reviews

**Spring Wildflowers of West Virginia**

Authored by Earl Lemley Core. Originally published in 1948, this is the seminal text on nearly 250 species of spring wild flowers found in West Virginia. Common or English names and scientific or Latin names are given for each species. The descriptions are in two sections: the first description includes the meaning of the name of the flower, uses, habitats, and ranges in West Virginia.

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**FEATURE ARTICLE**

**HOW DO YOU DEFINE NATIVE?**

In the world of biology there is quite a bit of confusion and debate about the difference between what a native plant is. Just what are the definitions of three terms that biologist regularly use: native, indigenous, and endemic. In researching this, the variations of definitions are vast and very few people agree on exactly what certain terms mean. Below is a synopsis of definitions that were found to help you in your understanding of these terms. These definitions are confined to plants and animals.

**ENDEMIC**

Endemic, in a broad sense, can mean "belonging" or "native to", "characteristic of", or "prevalent in" a particular geography, race, field, area, or environment; native to an area or scope.

Confined to a small geographic area, often an island.

Native to a particular region, restricted in area.

Plants which are of a certain geographic area and generally are confined to that place.

Organisms that are native and can be found ONLY in that location.

Endemic plants are special because they are found in only one location on the planet, and nowhere else.

**INDIGENOUS**

In ecology, an indigenous species is an organism which is native to a given region or ecosystem.

A plant that is original to an area, not introduced; see also native plant.

Native to a particular country or region.

An indigenous species is not necessarily endemic. In biology and ecology, endemic means exclusively native to the biota of a specific place. An indigenous species may occur in more than one locale.

The terms endemic and indigenous do not mean that an organism necessarily originated or evolved where it is found.

Organisms that are native, but can be found elsewhere.

**NATIVE**

Organisms brought to a location without the help of humans, such as by birds, wind, or the ocean currents.

A plant that grows wild in that area; see also indigenous plant and endemic.

Any plant that occurs and grows naturally in a specific region or locality.

This refers to a plant that grows in the same habitat in which they originated. These plants can be native to a continent, state, or region.

A plant that occurs naturally in the place where it evolved.

One definition given for the word “native” in Webster’s Dictionary is “growing, living, or produced originally in a certain place”. Using this definition, a native plant would be a plant that was originally growing in a certain place. Sounds easy enough. However, how do you classify “originally” and what “certain place” are we talking about? In actual practice, the definition of a native plant is somewhat amorphous and often depends largely on the interpretation of the person doing the defining. The most commonly used definition of a native plant is one that is considered to have been present in a specific region of the country, or often simply in the United States, prior to European settlement. The reason for considering immigration or migration of these settlers as the cut off date is that when settlers arrived, they brought their plants along with them. Note that this definition does not take into account the actions of Native Americans who also moved plants about freely. A major complication encountered when using this timeline when attempting to define a native plant is that we really do not have accurate records to tell us which plants were here and which were not before European colonization. However, we do have a good idea of which plants were specifically brought into the United States for various uses (and where they came from), as well as most of the weeds that came here by accident. Therefore, in practical application, a plant is usually considered to be native if we know that it was not brought into this country. Other terms that may also be used when referring to a native plant are indigenous, aboriginal, or endemic.

The Delaware Native Plant Society subscribes to the definition of native as a plant that was here in Delaware prior to European colonization.

**SOURCES**

http://www.wikipedia.com
http://davesgarden.com/guides/terms/go/597/
http://www.bestplaceshawaii.com/tips/big_kahuna/endemic_or_indigenous.html
http://www.nps.gov/grba/naturescience/endemic-plants.htm
http://www.wildflower.org/expert/show.php?id=972 (a very good article with a comprehensive scope)
GARDENING WITH NATIVE PLANTS
FRINGETREE (CHIONANTHUS VIRGINICUS)

NATURAL HISTORY
Back in the old days, when I was forced to work for a living and before my knees, hips and other joints succumbed to the unrelenting attacks of too many Yuengling Lagers, I enjoyed nothing more than stopping off after work to jog along the tow-path of the C&O Canal just north of Washington D.C. It was in the spring that these evening jaunts were most enjoyable with blooming flowers, young ducks and geese, beaver and singing birds, and it was here that I first became acquainted with Chionanthus virginicus or fringe tree. I marveled at what I thought must be the most beautiful tree in the world and believed it to be so exotic that it must certainly have been an alien species imported from Shangri La. Not only was every limb covered with massive blooms of large white feathery flowers but the intoxicating aroma seemed to reach out and beg me to slow from the blinding speed at which I passed (well maybe not blinding). It was only after retiring, moving to Delaware and joining the DNPS that I discovered this remarkable tree was native not only to Delaware but could be found growing in moist wooded areas, swamp borders, rocky bluffs, streams and outcroppings from eastern Texas and southern Missouri eastward to the Atlantic Coast and north to Ohio and Pennsylvania. Chionanthus virginicus gets its name from the Greek words chion and anthos, which mean “snow flower” in reference to the white flowers and virginicus meaning “of Virginia”. Common names such as fringe tree, Gracy gray-beard, old man’s beard, granddaddy’s gray-beard, white ash, snow-drop tree or snow-flower all relate to the large 5 to 10 inch drooping clusters of wispy white flowers that are an important nectar source for butterflies and moths. But, the exceptional flowers of the fringe tree are not the only feature that make it so desirable, for in the fall the female fringe tree is covered with drupes of ½ to ¾ inch fleshy purple berries that are among the favorite foods of many birds. The fringe tree is a large shrub or small tree that grows to about 20 ft high and 20 feet wide, with single or multiple trunks and a rounded crown. The pale-gray trunk with bands of white and the dark-green glossy foliage that is a larval host for the Rustic Sphinx adds to its striking beauty.

WHERE TO GROW
Fringe tree is certainly one of the most beautiful flowering trees found anywhere. It blooms in late spring shortly after native dogwoods. Tolerant of air pollution and remarkably free from diseases or insect pests it adapts well to urban settings. It is adaptable to a variety of light and soil conditions, and with proper care can be a significant addition to any landscape. The fringe tree prefers a moist, well-drained loamy soil but once established is tolerant of drought conditions and poorer soils.

It enjoys full sun to partial shade and does well in the filtered shade under large trees. To promote maximum fruit production, brighter conditions are more desirable. Frequently cultivated for its ornamental value, fringe tree may be used as a freestanding specimen, but for fruit production both male and female specimens are required. It can be used in groups of three or more and works well in a border with evergreen shrubs. It is spectacular in mass plantings. It is right at home in natural settings, surrounded by meadow or as part of a mixed grove. Fringe tree is very sensitive to allelopathy from some trees in the walnut family and should not be planted near walnut or hickories. The fringe tree seldom needs pruning, but may benefit from some branch thinning if an open habit is desired. Flowers are produced on 2nd year wood, so care must be taken when pruning to allow for the next year’s flowering. In its early years, the fringe tree is relatively slow growing, attaining perhaps 8 to 10 feet of growth in 10 years under good growing conditions. Initial flowering occurs on plants of 5 to 7 years of age so it is best to attain reasonably mature plants if possible.

PROPAGATION AND CARE
The fringe tree is reportedly difficult to propagate from cuttings so given time and patience propagation from seed is the most desirable means of propagation. Collect seeds as soon as ripened (from July to September) and clean seeds from pulp using maceration. Fringe tree seeds require double stratification so perhaps the best method of propagation is to plant the seeds in a cold frame immediately after collection and protect the seeds from rodent damage and disturbance for the following 18 months. Seedlings will sprout during their second spring. Alternatively stored seed can be pre-soaked for 2 - 3 hours in warm water and then given 3 months warm stratification followed by 3 months cold stratification. Germination can then be fairly rapid. Prick out the seedlings into individual pots when they are large enough to handle and grow them on in a greenhouse or cold frame. Plant them out into their permanent positions the following spring or early summer and protect from deer browsing.

LORE
Native Americans and European settlers commonly used the fringe tree to treat inflammations of the eye and mouth ulcers and a tea made from boiled bark was used as a as a topical treatment for skin irritations, cuts and infections. The bark has been used as the source of a tonic said to be a diuretic and a fever reducer and a tincture of the bark was once used internally in the treatment of disorders of the liver, jaundice, bilious headache, gallstones and rheumatism. Though all of this sounds great, we strongly recommend enjoying your fringe tree for its exceptional beauty and value to wildlife!

Bob Edelen, DNPS Member

Resources & Reviews

Appalachian Wildflowers

Authored by Thomas E. Hemmerly. This informative field guide covers the wildflowers of the entire Appalachian region, Using this book, readers will learn to identify this region's wildflowers by shape, color, family, and habitat. Contains 378 color plates.
Resources & Reviews


Authored by Henry Warren Art. A new arrangement of the 32 most easily grown species native to northeastern North America organized by habitat (woodland, wetland, or meadow) and flowering season will aid garden planning. Includes color photographs and more advice on using wildflowers in a garden.

Natives And Transplants
Continued from page 2

plants and my easy access to a whole slew of seedlings and put them to good use in my own backyard. I live in Dover in my own house with about a half acre of property. I originally let the entire back 1/3 of my backyard go wild into whatever it wanted to be, then with dozens of native trees, shrubs, and herbageous species that I planted, I’ve groomed it into a very nice wildlife habitat. I also mulched over another 1/3 of my lawn to reduce the amount of grass I have to mow and groomed it into a nice spot for outdoor entertainment. I’ve been keeping an ongoing biological inventory in my yard, and so far I have recorded 107 species of animals since May of 1999.

Those of you who know me, have come to understand that I am a purist when it comes to natives. In our nursery, I have been able to maintain a purely native inventory. And on top of that, I try to keep the accession of all our plants to the Delmarva Peninsula. I occasionally accept plants and seeds from outside Delmarva, but mostly because there are some species that are very difficult to get a hold of and I have to take them from outside of our region to even have them in the first place. I think it’s important for organization that say they sell “native” plants to actually sell natives, and even endemics only.

Outside of the DNPS, I have had a couple of different careers. Currently, I own a computer repair business that I do out of my home (www.easyforyoucomputerservicing.com). Before that I was a Paramedic for Sussex Co. EMS. Before that I worked at DNREC in the Office of Information Technology, and before that I was a biologist for Fish and Wildlife/The Nature Conservancy.

People ask why I do so much for the Society… Over time it’s become a passion, and I believe our cause is an important one! Delaware was one of the last states to form a native plant society and we have a lot of catching up to do from that educated about the flora of this state and how important it is to reduce the use of non-native plants, and associated chemicals in their backyards. It takes a little more patience and time to grow really nice native plants, and a little more effort to find the plants you want. But if people would just change their attitudes and lifestyles, even a little, we could do a great deal for the natural environment of this state. In the 9 years that I have been planting native plants in my yard, I have seen tremendous change in the animal life that uses my yard. So, it really does work! It just takes time and patience. The motto, “we can make a difference one yard at a time,” is real and it has been one my primary driving forces since I became our nursery manager.

Lonicera Sempervirens. One of my favorite DE native plants. My hummingbirds won’t even come to my feeder because of this plant that I grow on a trellis that’s attached to the back of my garden shed. Photo source: Me.
Out Of the Wild & Into the Kitchen

Dawn Webb, a native of Delaware, is the Director of the Delaware Department of Natural Resources and Environmental Control's DuPont Nature Center in Milford. In addition to her work at the Center, she is a licensed Wildlife Rehabilitator. Growing up on a dairy farm west of Dover, Dawn developed an ethic of living in harmony with the natural world from her grandfather. She is well-known in Delaware for her mastery of cooking with wild game and wild plants. Dawn is currently compiling a cookbook devoted to wild game and wild plants and she had generously shared her instructions for making acorn flour and included a quick bread recipe using acorn flour. If you ever visit her at the nature center (directions are on DNREC’s website), she may just have a slice of acorn bread waiting for you.

ACORNs…An authentic American food?

Of course! Generations of Native American Indians would gather pounds of acorns every fall as they ripened. They would bury the acorns in the swamp returning to them the following year. This would remove the tannic acids which makes them bitter. The acorns were dried and ground into flour, then baked into bread.

Processing acorns for food consumption is much easier today. It can be done right in your own kitchen. Boiling shelled acorns is the quickest method to remove the tannin. The water must be changed every time it becomes brown. Continue boiling until you taste no bitterness. There is one drawback to this method; boiling removes beneficial oils and causes a loss of flavor.

Here is the method I use:

Place shelled acorns in a crock
Pour boiling water over acorns; enough to completely cover
Let stand for 24 hours
Repeat process for a third day

This cold “leaching” method completely removes the tannic acids and produces flavorful flour.

Dry acorns completely; about a week
Grind using a hand mill, stone grinder, or heavy duty blender.

Acorn flour can be used in bread, muffins, pancakes, and stews. It has a nutty flavor.

This is one of my favorite acorn recipes. I enjoy a slice of this bread toasted, with homemade Blackberry jelly.

Ingredients
1 cup acorn flour
½ cup whole wheat flour
½ cup unbleached flour
3 teaspoons baking powder
1 teaspoon salt
3 Tablespoons honey
1 egg
1 cup milk
3 Tablespoons oil

Directions
Mix ingredients well. Form loaf and place in greased loaf pan. Bake 45 minutes or longer at 300°.

In the wild, acorns provide food for squirrels, chipmunks, wild turkey, pintail ducks and other waterfowl, quail and deer. There are more than 200 species of oak trees. They can live for 200 years. Acorns are not nuts, they are a fruit. The wood of an oak tree is used for furniture and flooring because it is hard and durable.

If you have a recipe you would like to share, please contact Flavia Rutkosky at 302.653.9152, ext. 111.
Upcoming Events

TUESDAY, 19 AUGUST 2008 — THE DELAWARE CHAPTER OF THE SIERRA CLUB IS SPONSORING A Gubernatorial Candidate’s Environmental Forum at 6:30 PM. THE FORUM WILL BE HELD IN THE AUDITORIUM OF THE JEWISH COMMUNITY CENTER ON GARDEN OF EDEN ROAD IN WILMINGTON. ALL CANDIDATES PARTICIPATING IN THE PRIMARY ELECTION FOR THE GOVERNOR’S RACE HAVE BEEN INVITED TO PARTICIPATE AND WILL ANSWER A VARIETY OF QUESTIONS RELATING TO DELAWARE’S ENVIRONMENTAL FUTURE. SEE HTTP://DELAWARE.SIERRACLUB.ORG FOR MORE INFORMATION.

SEPTEMBER 2008 — BOWMAN’S HILL WILDFLOWER PRESERVE FALL PLANT SALE. FROM 10 AM TO 4 PM FOR A WEEK IN SEPTEMBER. CONTACT THEM AT 215.862.2924, OR ON THE WEB AT HTTP://WWW.BHWP.ORG/SEED_CATALOG/PLANTSALE.HTM FOR MORE INFORMATION.

SATURDAY, 6 SEPTEMBER 2008 — ADKINS ARBORETUM FALL NATIVE PLANT SALE. FROM 9 AM TO 1 PM. CONTACT THE ARBORETUM AT 410.634.2847, OR ON THE WEB AT HTTP://WWW.ADKINSARBORETUM.ORG/SALES.HTML FOR MORE INFORMATION.

4-5 OCTOBER 2008 — HARVEST MOON FESTIVAL AT COVERDALE FARM. FOR MORE INFORMATION CALL 302.239.2334, OR ON THE WEB AT HTTP://WWW.DELAWARENATURESOCIETY.ORG.

SUMMER AND AUTUMN 2008 — CONTINUING EDUCATION AT MT. CUBA CENTER. THIS NON-PROFIT ORGANIZATION HAS A FANTASTIC EDUCATION DEPARTMENT. THEY OFFER DOZENS OF CLASSES AND SYMPOSIA THROUGHOUT THE YEAR. FOR MORE INFORMATION CALL 302.239.4244, OR ON THE WEB AT HTTP://WWW.MTCUBACENTER.ORG.

DNPS BI-MONTHLY MEETINGS FOR 2008 — ARE CURRENTLY SCHEDULED FOR 15 JANUARY, 8 MARCH, 20 MAY, 15 JULY, 16 SEPTEMBER, 1 NOVEMBER (NOT A MEETING, BUT THE ANNUAL PLANT SALE) AND 18 NOVEMBER. ALL MEETINGS ARE ON THE THIRD TUESDAY OF EVERY OTHER MONTH AT 7 PM, UNLESS OTHERWISE NOTED. THE MEETING WILL BE HELD IN 3 LOCATIONS AROUND THE STATE. THE KENT COUNTY LOCATION IS AT THE ST. JONES RESERVE, THE NEW CASTLE COUNTY LOCATION IS AT THE NEW CASTLE COUNTY CONSERVATION DISTRICT OFFICE AT 2430 OLD COUNTY RD., NEWARK, DE, 19702, AND THE SUSSEX COUNTY LOCATION IS AT THE REDDEN STATE FOREST EDUCATION CENTER AT 18074 REDDEN FOREST DR., GEORGETOWN, DE, 19947. SEE OUR WEBSITE FOR MAPS AND DIRECTIONS TO EACH MEETING LOCATION. SEE OUR WEBSITE (WWW.DELAWARENATIVEPLANTS.ORG) FOR MORE DETAILS, AND FOR DETAILS ON UPCOMING FIELD TRIPS.
**Membership Application**

**DELAWARE NATIVE PLANT SOCIETY**

**Member Information**

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

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

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