

THE TURK'S

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3

THE NEWSLETTER OF THE DELAWARE NATIVE PLANT SOCIETY

IN THIS ISSUE

- Page 1** ■ *Natural Quotes*
■ *New Members*
■ *DNPS Vision*
- Page 2** ■ *Thoughts From The Edge...*
■ *Resources and Reviews*
- Page 3** ■ *Feature Article*
■ *Resources and Reviews*
- Page 4** ■ *Gardening With Native Plants*
■ *Resources and Reviews*
- Page 5** ■ *Feature Article continued*
■ *Resources and Reviews*
- Page 6** ■ *Out Of The Wild & Into The Kitchen*
- Page 7** ■ *Upcoming Events*

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 GOLDEN WELCOME TO OUR NEWEST MEMBERS

July through September



The DNPS Vision

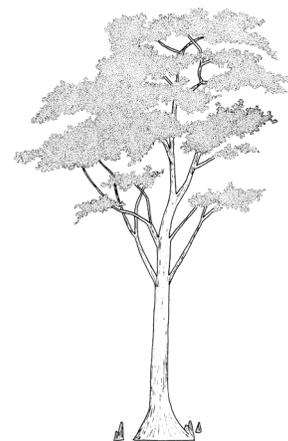
The purpose of the Delaware Native Plant Society (DNPS) is to participate in and encourage the preservation, conservation, restoration, and propagation of Delaware's native plants and plant communities. The Society provides information to government officials, business people, educators, and the general 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 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.



THOUGHTS FROM THE EDGE OF THE GARDEN**WEBSITE UPDATE**

On 7 April 2009 we added Google Analytics to the source code of our site to track a myriad of statistics about visitation. Here are the stats through 7 Oct 2009.

Number of total visits: 2,541

Number that were absolute unique visitors: 2200 (86.5%)*

New vs. returning visits: 2188 new (86.11%), 353 return (13.89%)*

Average time spent browsing: 2 min. 34 sec.

Average # of pages browsed: 4.6

Pages with most clicks: Nursery, Plant Talk, Publications

Places: U.S.A. (47 states), 40 other countries/territories

How we were located:

65% from a search engine

24% from a referring site

11% from direct traffic

*Absolute Unique Visitors counts visitors, whereas New vs. Returning counts visits.

A TREE'S RESPONSE TO ENVIRONMENTAL CHANGES: WHAT CAN WE EXPECT OVER THE NEXT 100 YEARS?

ScienceDaily, Oct 6, 2009 -- A recent article by Dr. Abraham Miller-Rushing and his colleagues at Boston University published in the October issue of the *American Journal of Botany* explores how increasing concentrations of atmospheric carbon dioxide (CO₂) may be affecting trees and, ultimately, affecting water and carbon cycles.

It is known that increasing concentrations of atmospheric CO₂ affect the physiology and behavior of many organisms, and in plants, changes to the pores (stomata) on the surface of leaves are one example of these effects. Stomata allow air (containing CO₂) to pass into the leaf while water vapor passes out of the leaf. Plants use carbon dioxide to produce sugars during the process of photosynthesis. With increasing concentrations of atmospheric CO₂, stomatal density decreases while rates of photosynthesis increase. The decrease in stomatal density results in decreased water loss through the leaves.

"These changes in stomatal behavior and water use efficiency can, in turn, have large impacts on plants and can alter ecosystem-scale water and carbon cycling," Miller-Rushing said. "For example, soil moisture, runoff, and river flows might increase and drought tolerance in individual plants might improve."

The relationship between atmospheric CO₂ concentrations and stomatal density is so constant over the long term that scientists are able to use stomatal density of fossilized leaves to determine historical atmospheric CO₂ concentrations. However, short-term responses to changes in CO₂ concentrations have previously been found to be much more variable, and very little concrete data exist on how long-lived organisms respond to changing CO₂ concentrations. "We currently do not know how the anatomy and water relations of individual trees will respond to changes in climate and atmospheric concentrations of CO₂ over their lifetimes," Miller-Rushing said. "Understanding these responses will be key to predicting how forests might contribute to changes in carbon and water cycles over the next 100 years."

TENNESSEE FORESTERS HELPING TO RETURN CHESTNUTS TO AMERICAN FORESTS

ScienceDaily, Oct 6, 2009 -- The American chestnut was a dominant species in eastern U.S.'s forests before a blight wiped it out in the early 1900s. Today it's being returned to the landscape thanks in part to work by a University of Tennessee Forestry alumna and the UT Tree Improvement Program (UT TIP).

SUPPORT THE PRESERVATION OF SCIENTIFIC COLLECTIONS

American Institute of Biological Sciences -- Write to President Obama to express your support for the preservation and expansion of scientific collections. These collections are valuable assets that can help to address pressing policy issues, such as climate change, emerging diseases, loss of biodiversity, environmental contaminants, and pest invasions. Scientific collections serve as sources of specimens for research, as repositories for rare objects, as standards for commerce, and as education and training resources. They are used extensively, with over 420,000 biological specimens loaned annually.

Despite the value of science collections, some collections are facing challenges ranging from a lack of qualified curators to limitations in improving accessibility to researchers. The current economic climate also demonstrates a need for a strategic and coordinated national policy structure to preserve and advance the research and education missions of our nation's natural science collections.

This Action Alert can be found at: <http://capwiz.com/aibs/issues/alert/?alertid=13948726> 

Resources & Reviews***Tree Planting and Aftercare: A Practical Handbook***

Authored by Elizabeth Agate. A comprehensive handbook on why to plant trees, the history of tree planting, planning and design, safety and equipment needed, propagation, planting and protection, and aftercare to ensure survival.

Resources & Reviews

Woodlands: A Practical Handbook

Authored by Elizabeth Agate. This handbook covers the full range of woodland work, from tree planting and establishment, through to thinning and conversion into woodland products.

FEATURE ARTICLE

USING BARE ROOT SEEDLINGS IN REFORESTATION

For anyone who has been involved in large reforestation efforts, the term “bare root” should be very familiar to you. What is a bare root seedling? It is a seedling that has been mechanically “lifted” out of the ground such that there is no soil left on the roots. Well that doesn’t sound very good for the seedling! If you aren’t familiar with this concept, you might think this would kill the seedling, and you would be correct if the lifting were done in the middle of the growing season on a hot, sunny day, while the seedling is actively growing. But this is not the case. Bare root seedlings are usually lifted in the spring, while trees are dormant, before the new leaf buds even start to swell.

Some folks might be surprised to learn that even evergreen trees are dormant during the winter and early spring. Here’s how one botanist¹ explains dormancy in evergreens:

“Evergreens do go dormant; just without the drama of complete canopy loss. Temperate climate plants, even evergreens, need a dormant or rest period that is activated by decreasing period of day length and cooler temperatures. Trees enter dormancy when the whole tree carbon balance shifts. They can no longer make enough food from photosynthesis to support active growth in all parts. Also if the area gets freezing temperatures they have to protect themselves from ice crystals rupturing their cells. When a plant cell freezes, it does what a frozen water pipe does: it bursts.

For growth to continue there must be more daylight to generate photosynthate (carbohydrate) than the plant requires to support its basic metabolism (growth below ground and in the stems, or woody parts, plus reserves for spring bud break). With less light and a decrease in temperature to between 5 and 10 C° (40-50 F) the tree struggles to support foliage. So there is a break-even point between available light energy and temperature that predicts actual canopy shut down – but the plant continues to live, and respiration continues to support this minimal function.

Evergreens shut down for winter dormancy but mostly do not shed their leaves (needles). Instead they set up to continue these most basic metabolic functions and yet prevent possible damage from periodic freezing; the plants super-cool. Water in the cells is chemically maintained in a liquid state below 0° C (32F) but above the homogeneous nucleation point at -38.1° C (-37F). So these plants avoid cold damage by not freezing. This is like adding antifreeze to the car’s radiator water. However if the temperature goes below -38.1° C they will freeze. So this first antifreeze method is only good for zones 3 or higher.

They go through further steps in colder areas to prevent freeze damage. However, all evergreens are at risk of desiccating.

Trees in a dormant condition, even without leaves, lose water. They lose water through lenticels on twigs, branches, roots, and stems, so those retaining leaves (needles) when dormant suffer greater water loss.”

So, back to bare root seedlings! We know that these seedlings are dormant when they’re lifted, but they are still susceptible to water loss and desiccation – especially if their roots are bare. This is why, once lifted, bare root seedlings are stored in cool, dark, damp conditions, prior to being shipped out to reforestation sites. And the shipping process includes packing the roots in a moist medium – usually moist, shredded paper, but sometimes moist sphagnum is used. The Delaware Forest Service receives and plants (through contractors) hundreds of thousands of bare root seedlings, mostly loblolly pines, each spring. These seedlings are stored in coolers at Redden State Forest until they are transported to planting sites. Most other reforestation efforts in Delaware use bare root hardwoods – primarily oaks, since our native oaks are very high in wildlife value, are generally dominant or co-dominant in our climax forest communities, and are slower to naturally colonize a barren site than other tree species such as wild black cherry, red maple, sweetgum, tulip poplar, sassafras, and eastern red cedar.

Loblolly pine bare root seedlings have short root systems and can generally be planted with a dibble bar. A dibble bar is a metal wedge, the wedge being about 6 inches long, with a long metal shaft terminating in a T-grip handle. The planter holds the dibble bar perpendicular to the ground, steps on the top of the wedge, forcing it into the ground and creating a wedge-shaped crevice, and pushes outward on the handle of the dibble bar, causing the crevice to be widened at the bottom. One mistake made by inexperienced planters is to rock the dibble bar back-and-forth, which creates an hour-glass-shaped crevice. The problem with this is that it can leave an air pocket around the base of the roots, greatly reducing soil contact and causing root desiccation and even seedling death.

Oak and other hardwood seedlings generally have much longer, stiffer roots than those of loblolly pines. For this reason, professional tree planters use an implement loosely referred to as a “hoedag,” although the U.S. Forest Service might contend that the particular tool used by tree-planting crews in Delaware is not a hoedag because it has a scalping blade. This tool is also referred to as a planting hoe, Rindt tool, Corson tool, R-1 tool, mattock, or R-6 hoe. The name “hoedag” may also bring to mind a small garden implement, but in this case we’re referring to a much larger, heavier implement. This tool has a long, thick, heavy blade, usually 13 to 17 inches long by 3 to 4 inches wide. Mounted on the blade is a 90- to 100-degree bracket in which a long wooden handle is inserted. If seedling roots are longer than 12 inches, the U.S. Forest Service recommends

Continued on page 5

GARDENING WITH NATIVE PLANTS

SWAMP SUNFLOWER (*HELIANTHUS ANGUSTIFOLIUS*)

NATURAL HISTORY

Perhaps 4 years ago at an earlier DNPS annual native plant sale, I purchased my first two swamp sunflower plants. I thought they would be ideal for naturalizing around our back yard pond. Now, fast forward to today, Thursday, October 1st, 2009, and walk with me around the pond, but first let me set the scene. I stopped regularly mowing the majority of the pond banks several years ago in deference to the numerous frogs and toads that didn't get along with the mower, so now I only mow once yearly after a hard frost and all the critters have gone to their winter rest. It is amazing how resilient nature can be given the chance. In just a few short years the pond banks have come alive with all sorts of flora including Joe Pye weed, cardinal flower, golden asters, wild orchids, numerous wetland and meadow plants, and, you guessed it, swamp sunflower! The spectacular masses of bright yellow blossoms with their dark reddish brown centers are truly magnificent. Swamp sunflowers are relatively uncommon in Delaware but can be found throughout much of the eastern U.S. from southern New York to Florida and west to the Ohio River valley and south to southern Texas. The genus name, *Helianthus* comes from the Greek, helios meaning sun and anthos meaning flower. The specific name, *angustifolius*, actually means narrow-leaved, giving rise to another popular name, narrow-leaved sunflower. It grows in swamps, wet pinelands, coastal salt marshes and moist disturbed sites and is often common along roadside ditches and fence lines. The common name, swamp sunflower, insinuates that it should be found in low, moist locations - and indeed it is, however, I was truly amazed how adaptable it is to dryer meadow-like locations.

There are 4 members of the sunflower family that are native to Delaware and though none are as large as the more cultivated and hybridized common sunflower, one can argue they are certainly as beautiful and valuable to wildlife as their better known cousins. Just as most herbaceous flowering perennials are closing up for winter vacation, narrow-leaved sunflower makes a dramatic entrance as though it had just been waiting all year for the most appropriate time to be the center of attention. Swamp sunflowers bloom from September through the first heavy frost. They are a valuable nectar source for bees and butterflies and their seeds are favored by numerous finches, sparrows, and other seed-loving birds. Swamp sunflowers can grow to heights of 6 feet or more and what they give up in size to their better known cousins, they more than make up for in the large masses of tens to perhaps hundreds of beautiful 2 to 3 inch flowers.

WHERE TO GROW

The swamp sunflower is best used in the landscape massed together. The bright yellow color displays well against any green background. Space plants about 12 inches apart in front of a group of taller shrubs with green foliage. Swamp sunflower grows best in full sun to partial shade. If planted in heavy shade it will exhibit poor floral display and will often collapse as it grows tall and leggy trying to reach the light. Though it is native to low, poorly drained or wetland areas, it can be planted in a well-drained soil and is even tolerant to moderate spells of drought. Swamp sunflower is salt tolerant and a useful perennial for coastal gardens. It can tolerate waterlogged soils for extended periods. It is rather inconspicuous most of the year, lying low and unobtrusive, but still attractive with its deep green leaves and maroon stems. It can be cut back in June to produce a lower, bushier shrub-like plant when bloom time occurs. It is in September when the swamp sunflower comes alive and brightens everything around it and creates a gourmet delight for native butterflies. Swamp sunflower is a herbaceous perennial that dies to the ground after the first freeze, and returns in spring, but delaying clean-up of the stems and seed pods will reward you with numerous bird species feeding on the nutritious seeds.

PROPAGATION AND CARE

Propagation may easily be performed from either seed or by division. Seeds may be collected in the late fall when seed pods have dried and sewn in the garden in early spring. Seedlings started from seed in this manner should be thinned to 12 inches once well established. Seeds may also be started in individual pots in a cold frame for a head start and set out in the landscape when danger of frost has passed. Many seedlings develop around the base of established swamp sunflowers and may be divided in spring or autumn to gain more plants.

LORE

Not much can be found for human uses of the swamp sunflower. Perhaps just as well that we enjoy it for its natural beauty and value to nature!



■ *Bob Edelen, DNPS Member*



Helianthus angustifolius,
Photo: Bob Edelen

Resources & Reviews

Forestry Nursery Manual: Production of Bareroot Seedlings

Authored by Mary L. Duryea, and Thomas D. Landis. The Manual emphasizes all stages of seeding production from nursery-site selection through outplanting. Twenty-one bareroot nurseries and eight seed-processing plants were surveyed .

Resources & Reviews

Successful Tree Planting and Care: A Guide for Practitioners and Consumers

Authored by George S. Stroempl. Those who wish to enrich their knowledge with unorthodox, down-to-earth facts about tree planting and care should find this guide invigorating and useful.

FEATURE ARTICLE

Continued from page 3

instead using a shovel or an auger to dig a deeper hole than can be created using a hoedag. The planter swings the hoedag in the same way one would swing a long-handled garden hoe, creating a deeper crevice than would be created by a dibble bar. The planter then pushes the hoedag handle downward, opening the crevice for insertion of seedling roots. Roots should always be inserted vertically and should not be bent to horizontal in an attempt to fit long roots into a hole of insufficient depth. However, long lateral roots can be bent to horizontal if necessary. Once the seedling is inserted in the hole, the planter tamps the soil down with a boot heel, closing the crevice and pushing soil snugly around the roots.

During planting, it is very important that seedling roots are kept moist, and if seedlings are temporarily stock-piled on site, they should be kept out of the sun, or the roots should be covered – preferably with a seedling protection tarp which is made of a reflective material that keeps them cool. Using a hoedag or dibble bar, professional tree-planting crews can plant very large numbers of seedlings in a short amount of time. A few years ago, one planter in Delaware planted 2,000 loblolly pine seedlings in one day! On average, a professional planter can plant about 500 bare root hardwood seedlings in a single day. Some projects rely on augering holes ahead of time, and then using volunteers to plant the seedlings in the holes. One potential draw-back to this approach is that the augered hole and displaced soil can dry out on a warm, sunny day, which means the planter is placing the seedling in a dry hole and back-filling with dry soil. This does not bode well for seedling survival. One of my favorite approaches is to use a spade-type shovel, with a long blade, to cut and remove a deep, square-shaped “plug” which I can usually remove in one piece – the plug resting on the shovel blade, and then I hold the seedlings roots against one side of the hole and re-insert the plug, and then tamp it down with my foot.

What are the advantages of using bare root seedlings? The number one advantage is cost. Depending on species, quantity, seedling age, and nursery, a bare root seedling will cost, on average, about 30 cents. Most nurseries have one-year, two-year and three-year old seedlings; the older seedlings naturally being larger and more expensive. Also, there can be a huge cost savings if you're buying very large quantities (e.g., thousands). Unfortunately, most of these nurseries are wholesale only, but if you're undertaking a very large reforestation project (e.g., tens or hundreds of acres), bare root seedlings are your best bet. Containerized seedlings, on the other hand, will generally cost \$5 to \$12 apiece (unless you purchase from the

Delaware Native Plant Society at their annual plant sale – the first Saturday of every November – where prices are generally much more reasonable than other sources).

A balled-and-burlapped tree generally goes for anywhere from \$35 to \$200! And a major draw-back with B&B is that the roots of the tree are very heavily pruned when the tree is dug. I have tried all three approaches on my own property, and have carefully monitored results. In general, comparing the same species, after five years the container plants have caught up to and, in some cases, surpassed the B&B specimens in stature. After 10 years, most of the bare root seedlings have caught up to or surpassed the B&B specimens for which I paid 100 to 200 times as much money! This is primarily because the B&B trees experience shock as a result of the heavy root-pruning they experienced, and they did nothing but recover (i.e., re-grew their root systems) for about the first 3 to 5 years post-planting. So, if you're planning to plant a small number of trees on your property, I would recommend some healthy containerized trees, as a cheaper alternative to B&B, that are also easier to plant and likely to grow much faster than the more expensive B&B trees.

If you're involved in large reforestation projects, bare root seedlings provide the most cost-effective option. However, in areas with large deer or rabbit populations, you may need to spend additional funds on various approaches to protecting your seedlings from browse damage. Voles can also be a problem, especially in sandy soils, where they may eat the roots right out from under your seedlings! There are several approaches to protecting seedlings from deer and rabbits, including seedling protection tubes, wire cages, repellants, and deer exclusion fencing. Keep in mind that even container trees may require protection. A rule of thumb is that a tree seedling or sapling is especially vulnerable to browse damage and/or girdling until it starts to form rough bark. Even then, a buck may rub your sapling to death in the fall, when its antlers are itching and it wants to find a flexible sapling to rub its antlers on, so as to remove the velvet from its hardening antlers. If your oak seedlings get clipped by rabbits (clean, angular cut), or browsed by deer, don't despair. If the roots are alive and well, most seedlings will send up new leaders – even after repeated, annual, browsing, until some year when they are overlooked and given the opportunity to shoot up to a height beyond the reach of these pesky herbivores. The great conservationist, Aldo Leopold, said that every oak you see is the result of rabbit neglect, and I have found this to be true.

If you're interested in the U.S. Forest Service's reforestation approaches and techniques, check out this link: <http://tinyurl.com/ybu46az> (link has been shortened).



■ Rick McCorkle, DNPS member

9th Annual Native Plant Sale

When: Saturday, 7 November 2009, 10:00 AM – 3:00 PM

Where: DE Native Plant Society's native plant nursery.

Directions: The nursery is located at 818 Kitts Hummock Road, at the St. Jones Research Reserve in Dover. Take Route 113 to the Dover Air Force Base. Kitts Hummock Road is directly at the southern border of the air base at the three way intersection of 113, Route 9, and Kitts Hummock Road. Kitts Hummocks Rd. only goes east, and if you go almost one mile you'll see a large sign for the St. Jones Reserve. Turn right onto the gravel road and the nursery is all the way in the back to the left of the parking lot.

What's for sale: Hundreds of trees, shrubs, herbaceous species, ferns, vines and grasses will be available at very reasonable prices. An inventory list will be posted on our website.

Come early, some quantities are limited!

For more information: Call 302.735.8918, email ezuelke@juno.com, or on the web at www.delawarenativeplants.org.

We had a great sale last year and hope to have an equally great sale this year, so come out and join the fun!

OUT OF THE WILD & INTO THE KITCHEN

Hickory trees (*Carya* spp.) produce a nut that is very similar to pecans and can easily be used in recipes to replace pecans or walnuts. The hickory nut mast in fall 2009 has been great so far, so steal a few from the squirrels and try out this recipe from <http://www.prodigalgardens.info/hickory%20nut%20recipes.htm>.

Maple Hickory Apple Crisp

8 cups sliced apples (9 or 10 medium-sized apples)
 1 Tbsp lemon juice
 1 tsp cinnamon
 3 Tbsp flour
 ½ cup water or apple juice

Peel, core and dice enough apples to make 8 cups. Toss apples with lemon juice, cinnamon, and flour. Place in a 9x13 baking pan and add the ½ cup water or apple juice.

Topping:

1 cup Hickory nuts (use chopped walnuts if you don't have Hickorys)
 1 cup whole wheat flour
 1 cup rolled oats
 1 cup brown sugar
 1 cup butter
 2 tsp cinnamon
 ¼ - ½ cup maple syrup

Chop oats coarsely in a food processor or blender. Add flour, sugar, cinnamon and nuts and whiz until mixed together thoroughly. Add butter and mix until it resembles coarse bread crumbs. (Note: Filling may get seem too wet, resembling a paste—don't get discouraged if this happens, just spread it as evenly as you can, it will be just fine!). Spread topping evenly over the sliced apples. Drizzle the maple syrup over the topping. Bake at 375° for 45 minutes.



Upcoming Events

29 OCTOBER 2009—ADKINS ARBORETUM PROGRAM FROM 10 TO 11:30 AM. PLANT COMMUNITIES--CHANGING WITH THE TIMES? DR. SYLVAN KAUFMAN WILL BE SPEAKING ON WHAT WILL HAPPEN TO THE DELMARVA'S PLANT COMMUNITIES AS CLIMATES CHANGE OVER TIME. MORE INFORMATION ON THE WEB AT [HTTP://WWW.ADKINSARBORETUM.ORG](http://WWW.ADKINSARBORETUM.ORG)

17 NOVEMBER 2009—DELAWARE NATIVE PLANT SOCIETY BI-MONTHLY MEETING FROM 7 TO 9 PM. WE HAVE A SPECIAL MEETING THIS MONTH AS DR. DOUGLAS TALLAMY WILL BE GIVING A PRESENTATION ON "BRINGING NATURE HOME." THIS MONTHS MEETING WILL BE AT OUR NEW CASTLE COUNTY LOCATION WHICH IS AT THE NEW CASTLE COUNTY CONSERVATION DISTRICT OFFICE AT 2430 OLD COUNTY RD., NEWARK, DE, 19702. FOR MORE INFORMATION ON DR. TALLAMY, PLEASE SEE HIS WEBSITE AT [HTTP://COPLAND.UDEL.EDU/%7EDTALLAMY/](http://COPLAND.UDEL.EDU/%7EDTALLAMY/), AND THE DNPS WEBSITE AT WWW.DELAWARENATIVEPLANTS.ORG. AND AS ALWAYS WE WILL HAVE FREE REFRESHMENTS AND SNACKS, ALONG WITH A SHORT BUSINESS MEETING.

AUTUMN 2009—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](http://WWW.MTCUBACENTER.ORG).

SATURDAY, 5 DECEMBER 2009—ADKINS ARBORETUM HOLIDAY GREENS SALE FROM 10 AM TO 4 PM. DECORATED WREATHS, SWAGS, TOPIARIES, ROPING, AND BOXWOOD TREES WILL BE FOR SALE, AS WELL AS FRESH LOCAL GREENS AND NATURAL MATERIALS TO CREATE YOUR OWN ARRANGEMENTS. MORE INFORMATION ON THE WEB AT [HTTP://WWW.ADKINSARBORETUM.ORG](http://WWW.ADKINSARBORETUM.ORG).

DNPS BI-MONTHLY MEETINGS FOR 2009—ARE CURRENTLY SCHEDULED FOR 20 JANUARY, 17 MARCH, 19 MAY, 21 JULY, 15 SEPTEMBER, 7 NOVEMBER (NOT A MEETING, BUT THE ANNUAL PLANT SALE) AND 17 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

Name:

Business Name or Organization:

Address:

City and Zip Code:

Telephone (home/work):

E-mail address:

" Full-time Student \$10.00

" Individual \$15.00

" Family or Household \$18.00

" Contributing \$50.00

" Business \$100.00

" Lifetime \$500.00

" Donations are also welcome \$ _____

Membership benefits include:

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

Total Amount Enclosed: \$

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

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

