

The Turk's Cap

THE NEWSLETTER OF THE DELAWARE NATIVE PLANT SOCIETY SUMMER 2004

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HOW CAN I GET INVOLVED?

The Delaware Native Plant Society is open to everyone ranging from the novice gardener to the professional botanist. 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 are undertaking reforestation projects at Prime Hook National Wildlife Refuge, at Blackbird Creek, New Castle County and Cedar Creek, Sussex County where we are installing tree tubes around newly sprouted seedlings. 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, E-mail us at dnps@delawarenativeplants.org. Or visit our website at www.delawarenativeplants.org. Our website will have all of the past issues of *The Turk's Cap* along with a large section on native plants, as well as links to other environmental and plant related organizations.

A CALL FOR ARTICLES

If you would like to write an article for The Turk's Cap, we would love to print it. With like minded individuals as an audience, The Turk's Cap is a great venue for plant or habitat oriented writings.

We'll take just about anything from gardening tips to book reviews to poetry. Of course, it has to be about native plants, or issues related to native plants; just a minor constraint. Your imagination is the real key.

Contact Eric Zuelke (ezuelke@juno.com), or Keith Clancy at 302.674.5187 for more information.

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A NOT A CLOUD IN THE SKY WELCOME TO OUR NEWEST MEMBERS

April through June

- Dr. John W. Gardner
- Bill Haldeman
- Mary Herrera
- Dawn Johnson
- Karen & Howard Priestley

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LETTER FROM THE PRESIDENT

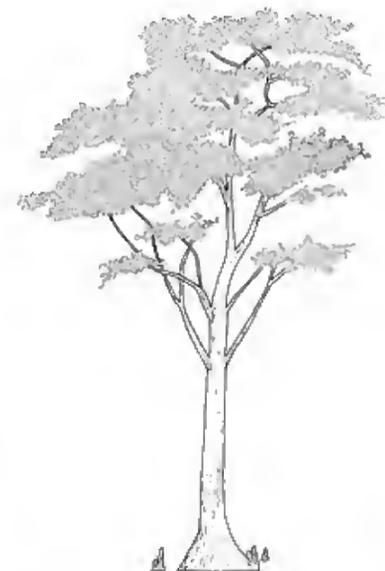
Does anyone else feel that they're busier than ever these days? Between planning for our reforestation management projects, ordering supplies for said projects, undertaking said projects, working in the nursery, doing botanical surveys at several wildlife refuges, and then working my day job, I feel like I am stretched to the max. Who said "its summertime and the living is easy?" I think they must have been off their rocker. Or, maybe they were on their rocker.

The DNPS is going to be (and has been) very busy this summer with reforestation management projects at three different sites (four if we count our 2000 project at Prime Hook State Wildlife Area) and your help is badly needed. Throughout the summer we will be installing protective tree tubes around the thousands of seedlings that have sprouted, and will be weeding invasive species and selectively removing weedy natives. In the fall we may be transplanting "extra" seedlings that are at flags. I only hope the tree tubes that we are using

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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.



LETTER FROM THE EDITOR**TIME TO GET A HIKIN'**

Though I'm a cold weather person at heart, summer does hold a special place for me because of one activity; heavy duty hiking! For many summers in a row when I was younger and still back in Ohio, my two brothers and I would go off a 10-14 day backpacking adventure. Usually we'd go to Smoky Mountain National Park, but we also went to Isle Royale in Lake Superior, and Porcupine Mountains in northern Michigan. I've also taken some of my own trips in Oklahoma, and Maine. With hiking in mind, I decided it was time for a change for our little newsletter, so beginning with this issue, I will no longer be writing my Plant-animal Highlight column. Instead, I will be writing a Native Plant Treks column which will highlight one natural area in Delaware and focus on some of the more interesting plants in that area and when to see them. If you like to get out and hike, but weren't quite sure where to go to see that favorite plant of yours, then I hope this column will be of some interest.

We may also be doing another change in the near future in the content of this newsletter. Our state Community Ecologist, Pete Bowman, who has been writing the Natural Community Highlight has accepted a job in North Carolina. So I may be discontinuing the Natural Community Highlight column. If there is a column topic you would like to see covered in the newsletter, then I'd love to hear your ideas. And if anyone is interested in writing a column on a regular basis, that would be even better.

Have a great summer and be sure to play in the rain!

oooo Eric Zuelke, Editor

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NATIVE PLANT TREKS**WHITE CLAY CREEK STATE PARK**

White Clay Creek State Park (WCCSP) is beautiful, scenic state park in northern Delaware. Located at the border of Delaware and Pennsylvania, it has one main trail that shares its scenery with both states. The park was created in 1968 when the state purchased 24 acres of land. The park has since grown to 3384 scenic acres in the continuing effort to preserve and protect the natural resources of the White Clay Creek valley. WCCSP is made up of 4 parcels of land that have been purchased over the years. These parcels are the Carpenter Recreation Area, Possum Hill, White Clay Creek Preserve, and Judge Morris Estate. Some of the many activities that are allowed are fishing, hunting, mountain bike riding, a life-course fitness trail, and of course hiking.

This park is predominantly forested and has some great rich woods habitats. The flora of the park are one of its greatest treasures. For the novice botanist all the way to the professional, WCCSP has some very interesting plants to find if you know where to look. Of course, timing is important with herbaceous plants, but the shag-bark hickory (*Carya ovata*), and alternate-leaf dogwood (*Cornus alterniflora*) can be seen at any time of year in the rich woods habitats. For those who love the spring ephemerals, the downy yellow violet (*Viola pubescens* var. *pubescens*), and cutleaf toothwort (*Cardamine concatenata*) can be found in the rich woods habitats. If you like being near the water, then watch for the pale jewel-weed (*Impatiens pal-*

lida), and eastern waterleaf (*Hydrophyllum virginianum*) in the floodplain areas and banks of the many streams that course they way down the slopes to White Clay Creek. Of the many fern species that make WCCSP their home, one in particular, the interrupted fern (*Osmunda claytoniana*) is really special. And if you happen to be wandering around at the edge of the forests in a field or thicket, be on the look out for the Carolina elephant-foot (*Elephantopus carolinianus*) which is in the aster family and blooms during the summer. Because WCCSP lies in the piedmont section of Delaware, there are many rock outcroppings which can hold many botanical surprises also.

WCCSP has so many botanical wonders in store for you, that I could not list them all here. But go hike around for yourself and see what you can find.

Please visit <http://www.destateparks.com/wccsp/index.asp> if you would like more information about this park.



oooo Eric Zuelke, Editor

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LETTER FROM THE PRESIDENT

Continued from page 1

(a plastic mesh type) will deter browsers such as squirrels, rabbits and especially deer (I am fearful that these critters may see the tempting seedlings through the mesh and seek to chew their way through the plastic to get at the rewards).

Earlier this year we received a \$1500 grant from the Partnership for the Delaware Estuary Program to buy needed tree tubes, and related supplies, and the Prime Hook National Wildlife Refuge received a \$10,000 Cooperative Conservation Initiative grant from the U.S. Fish & Wildlife Service (that was prominently mentioned by the Secretary of the Interior in a press release last May) to undertake management activities at the Prime Hook Wildlife Refuge's 18 acre reforestation site. Cooperators on this grant include the DNPS, the Prime Hook Volunteer Program, and the Partnership for the Delaware Estuary Program. All of us have committed to providing a 1:1 match. In our case, this will be entirely from volunteer hours. Therefore, I am beseeching DNPS members to come out and support this effort.

Germination at the Prime Hook site was very successful, as more than 70% of the flags had at least one (and often up to 4) seeds having germinated. The Cedar Creek site was also quite successful, with probably well over 2000 seedlings having emerged. The Blackbird Site appears to be the least successful, but has not been surveyed for over a month and needs to be checked again; its likely additional seedlings have sprouted.

These projects serve to begin the process, in a small way, of restoring coastal plain oak-hickory forest in Delaware; a community that is one of Delaware's most imperiled habitats.

I believe that we are in a battle against time and, more specifically, against the rampant development that is spreading across our small state at an unprecedented and unsustainable pace. These developments only serve to line the pockets of a few with substantial greenbacks while decimating our way of life and threatening to significantly diminish the lives of future generations. And what is being done about it? Little to nothing. A lot of complaining and public hearings that usually amount to nothing (as these projects never get denied) and only serve to drive up development costs that get passed onto the public.

We are at a crossroads in this battle and very little time is left. It pains me to no end to drive along Delaware "country" roads and see sign after sign after sign advertising thousands of acres of farmland as "Prime Development," and that's what these lands are becoming, as farm after farm is converted to huge developments. Is this what we want?

These reforestation projects only amount to a drop in the bucket in the grand scheme of things, but nevertheless are critical in stemming the tide that seeks to gobble up all remaining unprotected natural habitats. I would like to see members come out, en masse, to help with these projects and feel the sense of satisfaction that will result from a job well done. If, and there is no reason they cannot be, our efforts are successful, imagine the gratitude that our work today will generate from future generations. I won't be around to see it, but I can picture the celebration that will take place at "our" centennial forest at Prime Hook National Wildlife Refuge during the bicentennial celebration of the National Wildlife Refuge system in 2103. At this celebration I envision the Secretary of the Interior, along with the Governor of Delaware, other distinguished individuals and the public walking along a trail through this 100 year old (AKA "centennial") forest simply marveling at the beauty of this 18 acre forest and thanking the few dedicated individuals and organizations that made it all possible with work started way back in 2003.

I am looking for a few individuals that would like to manage these reforestation sites. The principal goal of the management is to ensure that a successful reforestation project results. Actions include monitoring the site, scheduling management workdays that include installing tree tubes, some transplanting of seedlings, weeding of invasives and aggressive natives, and repairing tree tube damage. It is only with an ongoing monitoring and managing program in place, can we ever expect to have a successful reforestation project. If you are interested in being a steward at one of these sites or want more information please contact the Delaware Native Plant Society.

I will be recommending to our Board of Directors, officers, and members at our next meeting (on July 20, 2004) that we postpone scheduling any other field trips until these reforestation management projects are satisfactorily completed this year. So, the more people we can get to participate the sooner we will finish the first stage of these projects (i.e., installing tree tubes).

It pains me to conclude this letter with the following news. Because of my tenuous employment status in Delaware and the fact that my freelance photography business has been more than a struggle, I was forced to take some drastic measures (like apply for a real job). Anyway, I have accepted a job offer as a botanist with the U.S. Department of Agriculture and will be relocating to New York in early September. Therefore, I will have to step down as president of the DNPS. I hope that we will be able to find a member that would like to step into this position ASAP and serve out my term (that runs to 2006). I will continue to play an active, although much more limited, role as a member of the society. I have enjoyed these past 6 years with the DNPS immensely and will miss everyone whom I have come to know these last few years. I wish everyone the best that life has to offer and I hope that the DNPS continues to  grow and prosper.

Signing off for the final time,
Keith Clancy

NATURAL QUOTES

"Signals abound that the loss of life's diversity endangers not just the body but the spirit. If that much is true, the changes occurring now will visit harm on all generations to come."

E. O. Wilson, *The Diversity of Life*, 1992

FEATURE ARTICLE

IRRIGATING THE HOME GARDEN

(Editor's note: Reprinted from the Virginia Cooperative Extension Publication Number 426-322, August 1996).

Introduction

Adequate soil moisture is essential for good crop growth. A healthy plant is composed of 75 to 90% water, which is used for the plant's vital functions, including photosynthesis, support (rigidity), and transportation of nutrients and sugars to various parts of the plant. During the first few weeks of growth, plants are becoming established and must have water to build their root systems.

While growing, vegetable crops need about 1 to 2 inches of water per week in the form of rainwater or irrigation water depending on the type of soil. One thorough watering each week is usually enough for most soils. The soil should be wetted to a depth of 5 to 6 inches each time you water and not watered again until the top few inches begin to dry out. An average garden soil will store 2 to 4 inches of water per foot of depth. Keep a rain gauge near your garden, then supplement rainfall with irrigation water if needed. In addition, there are ways to reduce the amount of water you have to add.

Reducing water demands

All of the water added to the garden may not be available to plants, particularly if the soil is a heavy clay. Clay particles hold soil moisture tightly; if, for example, there are 4 1/2 inches of water per foot of this type of soil, there may be as little as 1 1/2 inches of this water available for plants. A higher level of humus in the soil, brought about by the addition and breakdown of organic matter, can increase the amount of water available. By causing clay particles to aggregate (stick together), humus also adds air spaces to tight clays, allowing moisture to drain to lower levels as a reserve, instead of puddling and running off the top of the soil.

The moisture-holding capacity of sandy soils is also improved by additions of organic matter. Though most soil water in sandy soil is available to plants, it drains so quickly that roots are unable to reach water only a few days after a rain. Humus in sandy soil gives the water something to cling to until it is needed by plants.

Addition of organic matter, then, is the first step in improving the moisture conditions in your garden.

Mulching is another a cultural practice which can significantly decrease the amount of water that must be added to the soil. A 6 to 8 inch organic mulch can cut water needs in half by smothering weeds (which take up and transpire moisture) and by reducing evaporation of moisture directly from the soil. Organic mulches themselves hold some water and increase

the humidity level around the plant. Black plastic mulch also conserves moisture but may dramatically increase soil temperatures during the summer if not covered by other mulch materials or foliage.

Shading and the use of windbreaks are other moisture-conserving techniques. Plants that wilt in very sunny areas can benefit from partial shade during the afternoon in summer. Young plants, especially, need protection. Air moving across a plant carries away the moisture on the leaf surfaces, causing the plant to need more water. In very windy areas, the roots often cannot keep up with leaf demands, and plants wilt. Temporary or permanent windbreaks significantly reduce this stress.

Despite the use of these cultural practices, your garden may need a lot of water. When rainfall is sparse and the sun is hot, watering can benefit your garden with increased yields. It may save the garden altogether in a severe drought.

Irrigation practices, when properly used, can:

- Aid in seed emergence.
- Reduce soil crusting.
- Improve germination and plant stand.
- Reduce wilting of transplants.
- Increase the size of tomatoes, cucumbers, and melons.
- Prevent premature ripening of peas, beans, and sweet corn.
- Maintain uniform growth.
- Improve the quality and yields of most crops.

Irrigation methods

The home gardener has several options for applying water to plants including a sprinkler can; a garden hose with a fan nozzle or spray attachment; a portable lawn sprinkler; a perforated, plastic soaker hose; a drip or trickle irrigation system; or a semi-automatic drip system. Quality equipment will last for a number of years when properly cared for. When making a decision as to which type of watering equipment you will use, there are a number of things to consider.

The purchase of a specific type of watering equipment depends upon available water facilities, water supply, climate, and garden practices. If there is no outdoor spigot near the garden, the expense of having one installed may be greater than the benefits gained, except in very drought-prone areas or in the case of a gardener who is fully dependent on the season's produce. Where rainfall is adequate except for a few periods in the summer, it is wise to keep watering equipment simple. A rain barrel or a garden hose with a fan-type sprinkler may suffice; a water breaker for small seedlings is useful. In areas where there are extended periods of hot weather without precipitation, the local water supply is likely to be short. Since overhead sprinklers waste water, a drip irrigation system may be in order. Drip irrigation puts water right at the roots and doesn't wet plant leaves, helping to control some diseases. Timers are available that allow automatic watering with drip irrigation systems.

Several types of drip or trickle equipment are available. The soaker hose is probably the easiest to use as no installation is required. It is a fibrous hose that allows water to slowly seep out all along its length. It is simply laid at the base of the plants and moved around the garden. There are also complete kits containing attachments and PVC hose with holes to allow gradual water release. These are intended for semi-permanent installation and usually last 2 to 5 years. With this type, a flow

regulator usually has to be included with the system so that the water can reach the end of the hose without being sprayed out at full force. A special double-walled type of irrigation hose has been developed which helps to maintain a more even flow. Finally, there is the emitter-type system, best used for small raised beds or container gardens, in which short tubes, or emitters, come off a main water supply hose and go right to the roots of the individual plants. This is generally the most expensive form of irrigation and the most complex to set up, but it has advantages. The weeds in the area are not watered and evaporation from the soil is minimized. This type of system is best used in combination with a coarse mulch or black plastic. Drip systems can have problems with clogging from soil particles and/or mineral salts suspended in water taken from springs or wells. New designs take this problem into consideration; some include filters and self-flushing emitters. It is wise to make a complete investigation and comparison before purchasing a drip irrigation system.

Basic techniques and principles for watering

For overhead or sprinkler watering, adjust the rate of water application to about 1/2 inch per hour. A faster rate will cause run-off unless your soil has exceptionally good drainage. To determine the rate for a sprinkler, place small cans at various places within the sprinkler's reach, and check the level of water in the cans at 15-minute intervals.

When using the oscillating type of lawn sprinkler, place the sprinkler on a platform higher than the crop (to prevent water from being diverted by plant leaves), and try to keep the watering pattern even by frequently moving the sprinkler and overlapping about half of each pattern.

Wet foliage overnight can encourage diseases, so do not use sprinkle irrigation in the evening. Morning watering is preferred as there will be less water lost to evaporation than in the heat of the day. Add enough water to soak the soil to a depth of 5 to 6 inches. The amount required varies with the nature of your soil. Frequent, light waterings will encourage shallow rooting which will cause plants to suffer more during drought periods, especially if mulches are not used. On the other hand, too much water, especially in poorly drained soils, can be as damaging to plant growth as too little water; it deprives the roots of oxygen needed to grow.

By knowing the critical watering periods for selected vegetables or vegetable types, you can reduce the amount of supplemental water you add. This can be important, especially where water supplies are limited. In general, water is most needed:

- during the first few weeks of development
- immediately after transplant
- during development of fruits

If water supplies are short in your area and you wish to use "grey water" (water from household uses) on your vegetable garden, a few rules should be observed:

- Do not use any water run through the toilet, because of the possibility of contamination from fecal organisms.
- Avoid the use of kitchen waste water that contains grease or harsh cleaners, ammonia, bleach, softeners, or non-biodegradable detergents.

- If using water from the bathtub or washing machine, use only mild, biodegradable soaps. Omit softeners and bleaches. Allow the wash and rinse water to mix, if possible, to dilute the soap content. Never use a borax-containing product (such as washing soda) in water to be used on a garden because of the danger of applying plant-toxic levels of boron.
- Apply grey water to the soil, not to plant leaves. 🌿

oooo Diane Relf, Extension Specialist, Environmental Horticulture

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NATIVE PLANT COMMUNITY HIGHLIGHT

***Liriodendron tulipifera-Quercus rubra/Polystichum achrostichoides* Forest**

Tuliptree-Northern red oak/Christmas fern Forest

Introduction

Scattered throughout the state, rich woods are particular highlights come springtime. This community occurs on moist, nutrient-rich, loamy soils, and is rich in species. While there are certain species that are typical of this community throughout Delaware, such as *Liriodendron tulipifera* (tuliptree) and *Polystichum acrostichoides* (Christmas fern), individual occurrences can be quite variable. For this reason, this community type has been divided into two distinct variants; one for the Piedmont, and one for the Coastal Plain.

Community structure/composition (Piedmont)

This variant is typically restricted to the mid to upper reaches of steep slopes. In addition to *L. tulipifera* (tuliptree), *Quercus rubra* (northern red oak) is a characteristic tree, but these species may be joined in the canopy by *Quercus alba* (white oak), *Quercus coccinea* (scarlet oak), *Carya ovata* (shagbark hickory), *Carya cordiformis* (bitternut hickory) and occasionally *Fraxinus americana* (white ash) and *Tilia americana* (basswood). *Cornus florida* (flowering dogwood) and *Betula lenta* (black birch) are common in the understory. The shrub layer is typically characterized by *Hamamelis virginiana* (witch-hazel) and *Viburnum prunifolium* (black-haw), and *Viburnum acerifolium* (maple-leaved viburnum) may be abundant. The herbaceous layer can be quite diverse, with frequent species including *Podophyllum peltatum* (mayapple), *Sanguinaria canadensis* (bloodroot), *P. acrostichoides* (Christmas fern), *Collinsonia canadensis* (Canada horse-balm), *Galium lanceolatum* (Torrey's wild licorice), *Botrychium virginianum* (rattlesnake fern), *Aralia nudicaulis* (wild sarsaparilla), *Prenanthes altissima* (rattlesnake root), *Panax trifolius* (dwarf ginseng) and *Cimicifuga racemosa* (black cohosh). Other species that may be present include *Deparia acrostichoides* (silvery spleenwort), *Panax quinquefolius* (American ginseng), *Hydrastis canadensis* (goldenseal), *Phegopteris hexagonoptera* (broad beech fern), *Adiantum pedatum* (maidenhair fern), and *Caulophyllum thalictroides* (blue cohosh), among many others.

Community structure/composition (Coastal Plain)

These so-called "rich wood pockets" are typically found on slopes above streams beyond the range of regular flooding. However, they may also be found as small occurrences unassociated with a stream, on areas of rich, loamy soil. Like the

Piedmont variant, the Coastal Plain variant is dominated by *Liriodendron tulipifera* in the canopy. *Quercus rubra* is a good indicator of the type, and may be joined by *Carya glabra* (pignut hickory), *Carya cordiformis* (bitternut hickory) and *Liquidambar styraciflua* (sweetgum). *Cornus florida* (flowering dogwood) is characteristic in the subcanopy. The shrub layer ranges from moderately dense to sparse, and frequently includes *Viburnum prunifolium* (black-haw), as well as *Lindera benzoin* (spicebush) and *Viburnum acerifolium* (maple-leaved viburnum). The herb layer is diverse and typically includes a number of species restricted to this community type on the Coastal Plain. Indicator species for this variant are *Polystichum acrostichoides* (Christmas fern), *Podophyllum peltatum* (mayapple), and *Sanguinaria canadensis* (bloodroot). In addition, there are a number of other herbaceous species that are frequently present, including *Collinsonia canadensis* (Canada horse-balm), *Asplenium platyneuron* (ebony spleenwort), *Cardamine concatenata* (cutleaf toothwort), *Circaea lutetiana* (enchanter's nightshade), *Botrychium virginianum* (rattlesnake fern), *Senecio aureus* (golden ragwort), *Cimicifuga racemosa* (black cohosh), and *Solidago caesia* (bluestem goldenrod), as well as many others. There are also a number of herbaceous vines characteristic of Coastal Plain rich woods, including *Amphicarpa bracteata* (hog-peanut), *Menispermum canadense* (Canada moonseed), *Matelea carolinensis* (Carolina anglepod), and *Passiflora lutea* (yellow passion-flower).

Distribution

Occurrences of this community type tend to be rather small for a forest habitat, usually only a few acres. However, this does not diminish their significance in terms of conservation or botanical diversity. Several occurrences of the Piedmont variant are known from the Red Clay Creek valley, and are likely to occur in the Brandywine valley as well. The Coastal Plain variant is known from numerous scattered localities throughout the state, with notable occurrences at Woodland Beach Wildlife Area, Kent County and Prime Hook Wildlife Area, Sussex County. Species rich forests are known to occur throughout the Atlantic Coastal Plain, although their relations to this type are unclear. Similar community types occur in other eastern states but their composition can vary quite a bit.

Conservation Status

Currently ranked as an S? (questionable ranking) by The Nature Conservancy, but may be ranked an S3 in the future. There is currently no formal state or federal protection for this community. 🌿

oooo Peter Bowman

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NATIVE PLANT HIGHLIGHT

GENUS MONOTROPA

The genus *Monotropa* is featured in this edition and is represented in Delaware by *Monotropa hypopithys* L. (American pinesap), and *Monotropa uniflora* L. (ghost-flower). These are perennial plants that are found in both the Piedmont and Coastal Plain physiographic provinces of Delaware and are typically found growing in shady, moist woodlands. Ghost-flower, also known as Indian-pipe, is common throughout the State and American pinesap is only infrequently found.

These species usually begin flowering in Delaware in mid-summer and shed their seed in the fall. The entire plant of American pinesap is reddish-yellow in color and ghost-flower is white, but occasionally can be light-pink. Both species are about 6 – 8 inches tall with scale like leaves on a single stem. Both species have nodding flowers and when the flower matures, the crook at the top of the stem straightens so that the plant is erect in posture. The fruit is a capsule that will split down its sides when dry and slowly release very fine seeds to the wind.

Both American pinesap and ghost-flower lack chlorophyll and are thus parasitic, meaning they derive all their nutrients from other plants. These species are parasitic on the underground tissue of various plants and in order to be parasitic, they have developed a relationship with a fungus. The mycorrhiza of this fungus serves as a “bridge” that transfers nutrients from the photosynthetic host plant to the parasitic plant.

When walking the woodlands this summer, keep your eyes to the forest floor and you will likely see the ghost-flower, and if your lucky, the American pinesap. 🌿

◦◦◦◦ William McAvoy, DNPS Vice-President

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EVENT HIGHLIGHT

DNPS 5TH ANNUAL MEETING

The annual meeting this year, held at Ashland Nature Center was a great success and a lot of fun! We had a great presentation on Delaware piedmont geology by our keynote speaker, Sandy Schenk, lots of good food, a plant slide show challenge for two of our resident botany experts, Janet Ebert and Jack Holt (who did very well by the way on their quizzes by only missing one plant!), and a very interesting field trip along the Red Clay Creek.

We also had elections for the Board positions. Keith Clancy was re-elected to be President, William McAvoy as Vice-president, and Rick Mickowski will maintain his position for another two-year term as Secretary.

We hope everyone can make it out to next years annual meeting as they keep getting bigger and better each year, and it's an excellent opportunity to get involved in the activities of your society. Details will be announced at a later date for next years meeting time and place. 🌿

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THOUGHTS FROM THE EDGE OF THE GARDEN

DNPS NURSERY UPDATE

The nursery is coming along fine this summer. We have a group of members who are volunteering their time on a regular basis and those extra hands are really making a difference, particularly since we have a bumper crop of plants to re-pot this summer, and a bumper crop of rabbits chewing them all down. But solutions are being worked on for this little furry problem! And plans for our November plant sale are already in the works, so stay tuned.

DNPS REORGANIZATION

With the announcement from Keith of his departure from the DNPS in September, the Society will be going through

some flux for a short time. The Board will be having some special meetings to reorganize positions and responsibilities, as well as deal with the normal business items such as the nursery, the upcoming plant sale, and our reforestation projects. Stay tuned for more news on all of this, and if any members would like to take the reins on our reforestation projects, this would be a great time.

REFORESTATION PROJECTS UPDATE

So far, our reforestation efforts are going great. To date, approximately 2000 plants have sprouted at Cedar Creek, approximately 70% of the flags had seeds that sprouted at Prime Hook National Wildlife Refuge, and approximately 50 plants have sprouted at Blackbird (although a couple of members will be checking this site again shortly and we hope additional seedlings will have come up). At Cedar Creek we have installed a total of 488 protective tree tubes around seedlings and overall the future of these sites looks good right now. 🌿

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RESOURCES AND REVIEWS

HOW TO GROW WILDFLOWERS AND WILD SHRUBS AND TREES IN YOUR OWN GARDEN, BY HAL BRUCE

Time for a fun read! One of my favorite books, as well as an introduction to Delaware native plants, was published in 1976 by Hal Bruce, a former taxonomist at Winterthur. He wrote this book while teaching a course requiring commuting from Wilmington or his beach place to Georgetown. During these drives the author explores plants he sees: the Turks-cap lily: “the most beautiful of all”, milkweeds: “much neglected by gardeners”, and the glorious fall colors of poison ivy: “don't get too close”. Bruce mentions the fragrance of goldenrod, but he doesn't mention that the common milkweed flower has a wonderful scent.

The author covers shrubs and trees such as native azaleas and the American fringe tree. He includes some naturalized plants not indigenous to Delmarva noting their origins. Bruce voices his concern about habitat destruction which he notes was also a concern of Tatnall in 1946 and is still very much a concern today. The writer makes the point that perhaps the most compelling reason for using native American plants in our gardens is the chance that by so doing we might help save a species from oblivion.

The book is arranged by season with special chapters which include winter trees and the coastal plain in summer. Bruce includes some transplanting tips and ends with plants for problem areas. To quote a reviewer on Amazon.com: “Throughout, the author writes with a passionate, personal, engaging perspective on these plants never hesitating to criticize plant features he dislikes, but glowing in praise of their attributes and value.”

Join the ride. Although out-of-print, this book is available in Delaware public libraries and from the Amazon.com used book website. 🌿

◦◦◦◦ Gwendolyn Elliott, DNPS Member

UPCOMING EVENTS

SATURDAY, 14 AUGUST 2004 – SHELL IDENTIFICATION WORKSHOP FROM 1 PM TO 3 PM. WONDERING WHAT TO DO WITH THOSE SHELLS YOU COLLECTED OVER VACATION? DR. KEVIN ROE WILL TEACH YOU HOW TO IDENTIFY SOME OF THE MORE COMMON MOLLUSKS FOUND IN DELAWARE. FEE IS \$8 FOR MUSEUM MEMBERS, AND \$15 FOR NON-MEMBERS. REGISTER BY AUGUST 9. CALL 302.658.9111 FOR MORE INFORMATION, OR TO REGISTER BY PHONE, OR ON THE WEB AT [HTTP://WWW.DELMNH.ORG](http://www.delmnh.org).

SATURDAY, 11 SEPTEMBER 2004 – ANNUAL FALL NATIVE PLANT SALE AT ADKINS ARBORETUM. FOR MORE INFORMATION CALL 410.634.2847, OR ON THE WEB AT [HTTP://WWW.ADKINSARBORETUM.ORG](http://www.adkinsarboretum.org).

SATURDAY, 11 SEPTEMBER AND SUNDAY, 12 SEPTEMBER 2004 – NATIVE PLANT SALE AT BOWMAN'S HILL WILDFLOWER PRESERVE. A SELECTION OF OVER 200 SPECIES OF HIGH-QUALITY HERBACEOUS AND WOODY PLANTS OFFERED FOR SALE. FALL IS AN EXCELLENT TIME FOR PLANTING NATIVES. FOR MORE INFORMATION CALL 215.862.2924, OR ON THE WEB AT [HTTP://WWW.BHWP.ORG/INDEX.PHP](http://www.bhwp.org/index.php).

SATURDAY, 18 SEPTEMBER 2004 – ANNUAL TREE SPREE FAIR FROM 10 AM TO 3 PM. THE NEW CASTLE COUNTY TREE COMMISSION AND DCH INVITE THE WHOLE FAMILY TO CELEBRATE THE MANY BENEFITS OF TREES AT THE 10TH ANNUAL TREE SPREE FAIR, HELD AT CAROUSEL PARK ON LIMESTONE ROAD IN THE PIKE CREEK VALLEY. THIS YEAR'S FAIR WILL PARTNER WITH PIKE CREEK COMMUNITY DAY AND WILL FEATURE HOURLY TREE WORKSHOPS, FREE NATIVE TREE SEEDLINGS, NATURE HIKES, LIVE DEMONSTRATIONS AND EXHIBITS, CHILDREN'S ACTIVITIES, HAYRIDES, AND MANY OTHER OFFERINGS OF THE PIKE CREEK EVENT. A CEREMONIAL TREE PLANTING CELEBRATING THE COMPLETION OF THE COUNTY'S TREE SPREE CAMPAIGN WILL BE ATTENDED BY GOVERNOR RUTH ANN MINNER. CELEBRATION WILL BE HELD RAIN OR SHINE (EXCEPT IN THE CASE OF SEVERE WEATHER). FOR MORE INFORMATION, CALL 302.658.6262, OR ON THE WEB AT [HTTP://WWW.DEHORT.ORG/EVENTS/INDEX.HTM](http://www.dehort.org/events/index.htm).

SATURDAY, 25 SEPTEMBER 2004 – KNOWING NATIVE PLANTS: THE AMAZING ASTER FAMILY. THIS CLASS AT BOWMAN'S HILL WILDFLOWER PRESERVE WILL FOCUS ON THE SHOWIEST GROUP OF FALL BLOOMERS-THE ASTER FAMILY (INCLUDING SUNFLOWERS, ASTERS AND GOLDENRODS). LEARN ABOUT THESE UNIQUE FLOWERS AND THEIR SUCCESSFUL REPRODUCTIVE STRATEGIES. SLIDES/DISCUSSION FOLLOWED BY AN OUTDOOR TOUR. \$8 PRESERVE MEMBERS; \$12 NON-MEMBERS. FOR MORE INFORMATION AND TO PRE-REGISTER, CALL 215.862.2924, OR ON THE WEB AT [HTTP://WWW.BHWP.ORG/INDEX.PHP](http://www.bhwp.org/index.php).

SATURDAY, 06 NOVEMBER 2004 – FOURTH ANNUAL DE NATIVE PLANT SOCIETY NATIVE PLANT SALE. MORE DETAILS TO COME LATER.

DNPS BI-MONTHLY MEETINGS FOR 2004 – ARE CURRENTLY SCHEDULED THE 3RD TUESDAY OF EVERY OTHER MONTH. OUR NEXT MEETINGS WILL BE: 21 SEPTEMBER, 16 NOVEMBER. MEETINGS WILL TAKE PLACE (UNLESS OTHERWISE NOTIFIED) AT 7 PM AT THE ST. JONES RESERVE, 818 KITTS HUMMOCK RD. ABOUT 3/4 MILE EAST OF THE RT. 9/113/KITTS HUMMOCK ROAD INTERCHANGE JUST AT THE SOUTHERN EDGE OF DOVER AIR FORCE BASE. WE PLAN TO HAVE GUEST SPEAKERS AT EACH MEETING (SPEAKERS AND THEIR TOPICS WILL BE ANNOUNCED AT LATER DATES). CHECK OUR WEBSITE FOR ADDITIONAL DETAILS OR EMAIL US AT DNPS@DELAWARENATIVEPLANTS.ORG.

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**



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