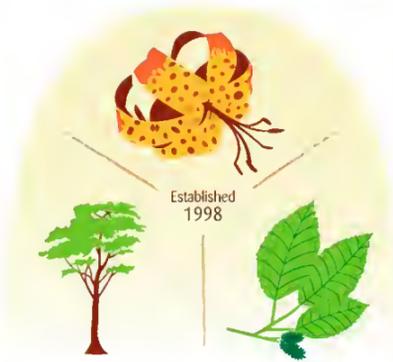


The Turk's Cap

The Newsletter Of The Delaware Native Plant Society

www.delawarenativeplants.org



Spring Workshop Report Hometown Habitat Preview and Green Infrastructure in Delaware



Workshop attendees enjoyed a 40 minute preview of the upcoming “Hometown Habitat” film what will debut in it’s entirety on Earth Day. Doug Tallamy is the featured host on the film and he shared some stark statistics. In the Unites States about 52 % of land-use is agriculture. Around 43% is the suburban/urban complex which leaves 5% of our land in a pristine state. Our lands and



habitat areas provide important eco-system services such as oxygen, holding water, keep topsoil from eroding, buffering extreme weather, sequestering carbon, and providing pollination services to name a few.

The solution that must become prevalent is to share our personal landscapes where we live and work and connect it to the surrounding landscapes. It really does matter. The food webs are critical for plants, herbivores, predators, and parasites. Chickadees bring back to the nest anywhere from 390 to 590 caterpillars. That is 6,000 to 9,000 for one clutch of birds. Think how much more a larger bird like the red-bellied woodpecker will use to raise their young.

Eighty per-cent of our ornamental plants come from Asia and many are highly invasive, just look at what has happened with the Bradford Pear. Eighty-five per-cent of woody invasives are escapees from our gardens. Native plants are a plant from within the local food web. They are adapted to local conditions and provide specific habitat and food for local wildlife. For example, oak trees host an incredible 557 species.



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Message from the President

After a long winter's nap, Spring is finally upon us. With the return of warmer weather, signs of the new season are around us with emerging native plants and the song of birds filling the air. I encourage all our members to stop and observe the changing of the seasons; it will truly inspire you.

Much thanks to our members who attended our Winter/Spring workshop in March. We learned an amazing amount of information from Jennifer DeMooy from DNREC regarding Green Infrastructure in Delaware. Slowly, but surely, Delaware is heading in the right direction when it comes to ecosystem services and protecting our future environment. In addition, we saw a portion of Hometown Habitat, a movie discussing the importance of native plants and ecosystems. DNPS donated to this endeavor through the Meadow Project. We are hoping to showcase the full-length movie later this year with the author, Catherine Zimmerman presenting the movie and providing an opportunity for Q & A.

We are also starting to plan for our other events and meetings being held later this year. So stay tuned for more information. In the meantime, get to planting some natives and watch what happens!

As always, thanks to all our members, and especially to those that volunteer their time and effort to make our organization a continued success.

Happy Spring!

Eric W. Wahl

"Study nature, love nature, stay close to nature. It will never fail you." ~ Frank Lloyd Wright

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

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

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

Questions or comments please contact Rick Mickowski, newsletter editor at rick.mickowski@state.de.us or at 302-832-3100 ext. 113. Member submissions encouraged!

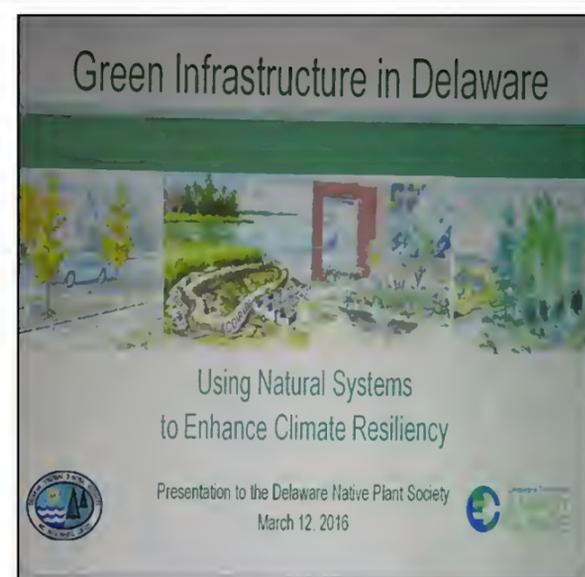


DNPS Officer Team 2014-2016 from left to right: Eric Wahl - President, Rick Mickowski - Vice President, Eric Zuelke - Treasurer, and Alison Long - Secretary

Black cherry and willows also host a food host for many species. We must re-focus on food web productivity to re-build biodiversity.

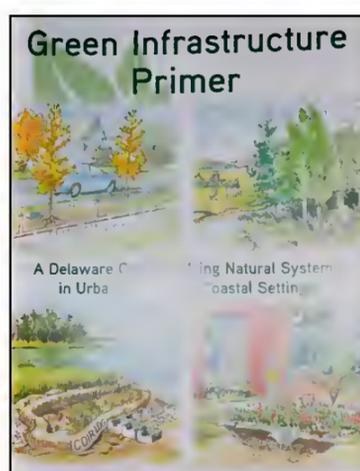
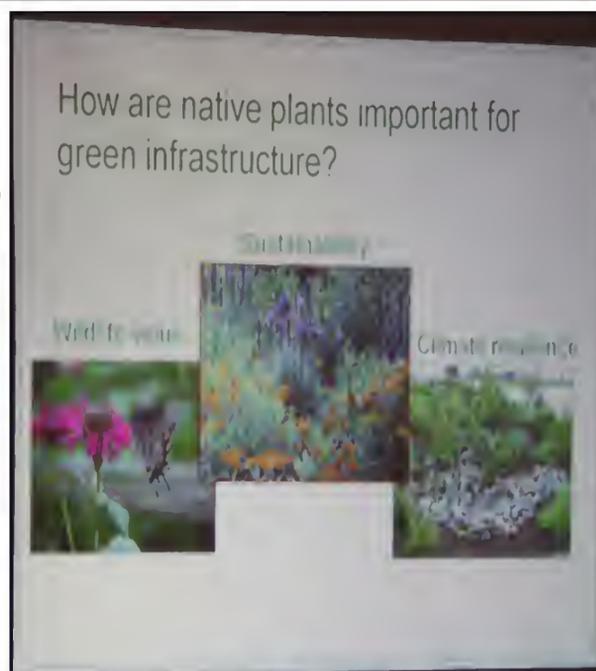


Jennifer DeMooy from DNREC gave an overview about Delaware's Climate Action Plan and the newly released "Green Infrastructure Primer". Governor Markell's Executive Order 41 in September 2013 states "Incorporate measures to improve resiliency to flood heights, erosion, and sea level rise using natural systems or green infrastructure to improve resiliency wherever practical and effective". 2015 was the warmest year on recorded record and the amount of precipitation falling in the heaviest downpours has increased in many regions. The temperature in Delaware has increased by 2 degrees over the last century and is projected to increase by another 2.5 to 4.5 degrees by 2050. We are seeing more intensive storms and precipitation. Sea level rise had increased by 13 inches in the last century.



How can green infrastructure help? These practices provide for flood retention during high tides or heavy rainfall events. They moderate high temperatures through shaded streets and buildings. They capture carbon from the atmosphere and store it in plant tissues and soil. Adapting to extremes is becoming very important. Native plants are important to green infrastructure for wildlife value, sustainability, and climate resilience. All are all part of the process of adapting to extremes.

For more information, go to www.de.gov/greeninfrastructure.



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

NATIVE PLANT HIGHLIGHT

Bloodroot

One of the first native woodland wildflowers to bloom each spring is bloodroot (*Sanguinaria Canadensis L.*) of the *Papaveraceae*, or Poppy family.

In Delaware, bloodroot blooms from March to April. Simultaneously, before leaf-buds break in the forest canopy, a leafless stem containing a single terminal flower bud, along with a deeply lobed leaf, emerge from a stout rhizome. Initially, the stem and flower bud are wrapped –up tight by the leaf, and in time the leaf gradually unfolds while the bud slowly swells into a blossom. The blossom is composed of 8-16 snowy white petals and the center appears golden due to the numerous stamens that are coated with bright yellow pollen. The petals fall quickly in just a few days, quicker if the days are windy, so the window of opportunity to view this species in the forest is very short.

The buds containing the leaves and flowers develop a year before they appear in the spring, and sometimes after flowering, the leaves begin to enlarge and will last until fall. Fruits mature in late spring and seeds have a large white growth along their edge that contains oil. This oil is attractive as food for ants and a result, ants help to disperse seed throughout woodlands.

Although the flowers of bloodroot lack nectar, the species is usually pollinated by bees. Bees will visit the flowers when the weather is warm and sunny, but during days that are cold or rainy, the plant will self-pollinate.

Bloodroot is a perennial plant and the thick rhizome contains a red juice that will stain anything that it comes in contact with. This juice was widely used by Native America's to

decorate their skin and also their tomahawks. The rhizome also contains a substance called sanguinarine, which has a potential for use in modern medicine. Currently, it is used as a toothpaste additive and in other oral care products.

If multiple leaves are observed on one plant, it is an indication of a branching rhizome, and a single intact rhizome can produce up to ten leaves and flowers.

Bloodroot is a monotypic species, meaning it is the only species belonging to the genus *Sanguinaria*. The native geographic distribution of bloodroot is from Nova Scotia, south to Florida and west to Nebraska.

Article by William McAvoy from the Spring 2002 issue of *The Turk's Cap* newsletter.



White Clay Creek State Park—Possum Hill



Rhizomes and Roots (left) and ants on seed (right)



Photos by David G. Smith at www.delawarewildflowers.org

CALENDAR OF EVENTS

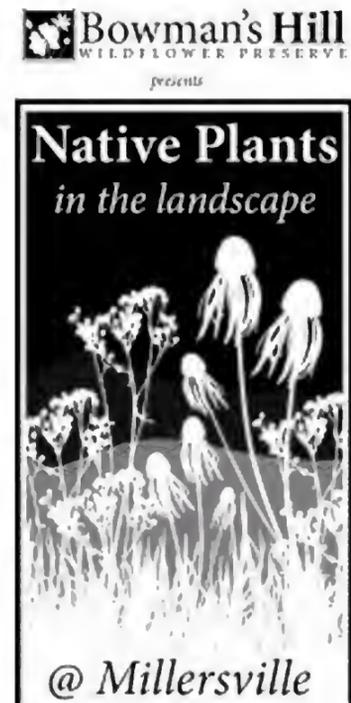
APRIL—AUGUST 2016

Various Dates	Mt. Cuba center Spring-Summer 2016 program guide is now available at www.mtcubacenter.org . Many interesting workshops and courses being offered. April 24 is the annual wildflower celebration from 10 a.m. to 4 p.m. and National Public Gardens Day is on May 6 from 10 a.m. to 4 p.m.	
April 20	Magical Mystery Wildflower Tour with offered by the Delaware Nature Society. Go to www.delawarenaturesociety.org for more information.	
April 27	April Wild Foraging Foray with the Delaware Nature Society. Go to www.delawarenaturesociety.org for more information.	
April 27	Spring Plant Walk on the Brandywine with John Harrod from 10 a.m. to noon or with Alison Long from 5:30—7:30 p.m. Register online at www.delawarenaturesociety.org .	
April 30th	AG Day at University of Delaware from 10 a.m. to 4:00 p.m. Includes the UD Botanic Garden plant sale. Check out the plant catalogue at https://ag.udel.edu/udbg/friends/udbgfriends.html .	
April 30	Delaware Center for the Inland Bays annual native plant sale at the James Farm Ecological Preserve located on Cedar Neck Road. Go to www.inlandbays.org/events for more information. Sale runs from 9 a.m. to 1:00 p.m.	
May 7 and 8	Delaware Nature Society annual native plant sale at Coverdale Farm Preserve on Way Road. Go to www.delawarenaturesociety.org for details.	
May 7 and 8	Environmental Concern Native Plant Sale in St. Michaels, Maryland. Go to www.wetland.org for details.	
May 7 and 8	Brandywine Conservancy Native Plant Sale from 9:30 a.m. to 4:30 p.m. Go to www.brandywine.org for more details.	
June or July	DNPS annual meeting program. Stay tuned for more details.	
June 29	16th Woody Plant Conference at Scott Arboretum of Swarthmore College in PA. Go to www.woodyplantconference.org for more details and to register.	
August 13	Longwood Gardens—Native Meadows from the Ground Up from 8 a.m. to 2 p.m. Fee is \$70.00. Go to www.longwoodgardens.org for more details.	

Calendar of Events

Special Feature

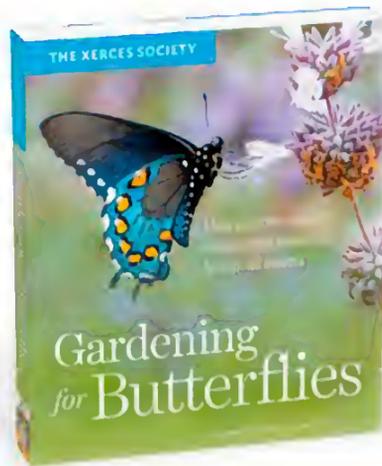
Bowman's Hill Wildflower Preserve presents the Native Plants in the Landscape Conference at Millersville University June 15-17, 2016. This is the 25th anniversary of this premiere event. For general conference information email nativeplantconference@gmail.com or go to www.millersvillenativeplants.com.



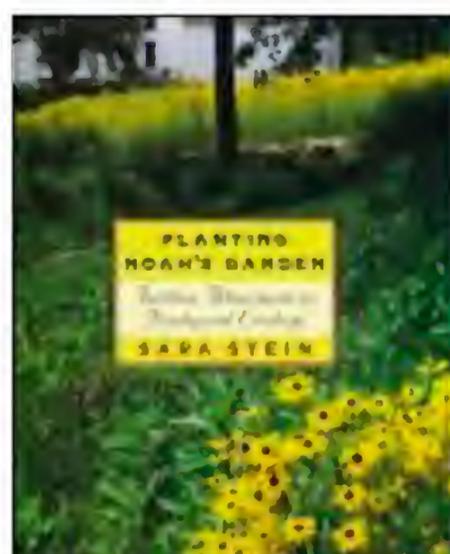
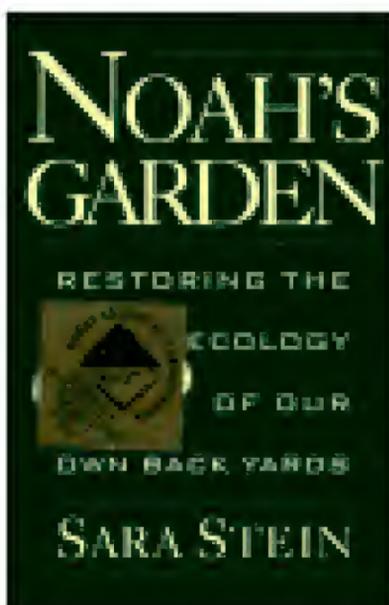
Native Plant Resources

DNPS member Quentin Schlieder had developed a native plant brochure for the Friends of Bombay Hook Garden Keepers. It is titled "50 Great (and neat) Native Plants for Delaware Gardens". You can view and access the document at www.FriendsofBombayHook.org/pdf/species.

DNPS member David Smith has a wonderful native plant website with photographs at www.delawarewildflowers.org.



The Xerces Society has just released a new book "Gardening for Butterflies". They introduce you to a variety of butterflies who need our help, and provides suggestions for native plants to attract them, habitat designs to help them thrive, and garden practices to accommodate all their stages of life. Go to www.Xerces.org for more information.



These two books by Sara B. Stein follows her efforts to restore the native ecology of her own property. The first book is "Noah's Garden: Restoring the Ecology of Our Own Backyards" and "Planting Noah's Garden: Further Adventures in Backyard Ecology". In the second book she visits other landowners who have implemented the practices described in her own journey.

Springtime Means It's Serviceberry Time!

Serviceberry, also called Juneberry, is a purple fruit from a shrub or tree 6 to 16 feet high, found in thickets or borders of woods. Serviceberries are small, rounded, purple-black, edible and sweet. You have to beat the birds. The berries have a pleasing, unique flavor and are high in iron and copper. They can be eaten raw, cooked in puddings, pies, and muffins, or used in combination with other berries. Here are some delicious ways to use the berries:



Serviceberry in bloom on March 30, 2016 in Glasgow behind Frenchtown Woods development. Photo by Rick Mickowski

Serviceberry Muffins

1 1/2 cups all-purpose flour
 2 tsp. baking powder
 1 egg
 1/4 cup oil
 1/2 cup sugar
 1/2 tsp. salt
 1/2 cup milk
 3/4 cup serviceberries

Lightly oil muffin pans. In a bowl, measure and mix together flour, sugar, baking powder, and salt. In another bowl, beat egg; add milk and oil. Pour liquid ingredients into the dry ingredients and mix just until moistened, about 15 strokes; batter should be lumpy. Fold in the berries. Fill muffin cups about 2/3 full and bake at 400 degrees for 20-25 minutes or until golden brown. Remove and cool on a wire rack. Yields 12 muffins.

Serviceberry Jam

4 cups serviceberries
 2 oranges
 1 1/2 cups water
 1/2 cup lemon juice
 3 cups sugar

Prepare jar lids. Put berries through food chopper with a medium fine blade. Juice the two oranges and put the peel through the food chopper. Combine berries, orange peel and water in a large saucepan; boil gently until fruit is tender. Add juice from oranges, lemon juice, and sugar. Boil for 20 minutes or until the desired consistency is reached. Pour hot jam into hot pint or half-pint jars, leaving 1/4 inch headspace. Wipe jar rims and add prepared two-piece lids. Process 15 minutes in a boiling water canner.



Recipes from the article "Serviceberries" by Cooperative Extension Service, University of Alaska Fairbanks

Photo by David Smith

Photo by Mt. Cuba Center



Membership Application

Delaware native Plant Society

Member Information

Name:

Business Name or Organization:

Address:

City and Zip Code:

Telephone (home/work):

Full-time Student \$10.00

Individual \$15.00

Family or Household \$18.00

Contributing \$50.00

Business \$100.00

Lifetime \$500.00

Donations are also welcome \$_____

Membership benefits include:

Total Amount Enclosed: \$
Make check payable to:
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