

## **History of the Delaware Native Plant Society (DNPS) Involvement with the Native Plant Demonstration Garden at the University of DE, College of Earth, Ocean, & Environment Hugh R. Sharp Campus, Lewes, DE**

Over the years, many people have contributed to this project, and many hours have been spent in the creation of this great little garden. This report is a summary of all efforts.

### **Historical Achievements**

Historical information about this site can be found online at the following websites (just click on the links):

<http://www.ceoe.udel.edu/nativeplantgarden/index.html>

<http://www1.udel.edu/udaily/2009/mar/nativeplants031709.html>

<http://www.ecodelaware.com/place.php?id=363>

<http://www.delawareestuary.org/publications-2/fact-sheets/> (under native plant conservation, this is the original brochure created for the site).

### **Present Day Involvement**

On **28 October 2017** we embarked on a long-term project to renovate, rehabilitate, and expand the native plant demonstration garden on the north side of the Cannon Marine Studies Library/Laboratory at the University of Delaware College of Earth, Ocean, and Environment Hugh R. Sharp Campus in Lewes located off 700 Pilottown Rd (on College Dr). Working in cooperation with the campus maintenance crew, this day became an important clean up day which laid the ground work for more significant improvements later on. We began by pulling out a lot of non-native plants, pulling out some trash and debris, and cutting back overgrown branches on some of the trees over the entire site.

Two workdays on **12 May 2018** and **3 November 2018** were focused on adding new plants into the southern portion of the site adjacent to the building. We planted close to 500 individual plants of 13 native species, some of which were donated by our good friend and DNPS member Bob Meadows out of his private nursery. The weather cooperated beautifully with our plantings, and a high percentage of them lived. Here's a sampling of what was added.

- *Asclepias incarnata* (marsh milkweed)
- *Eupatorium (Eutrochium) fistulosum* (hollow-stem Joe-pye-weed)
- *Lobelia cardinalis* (cardinal flower)
- *Verbena hastata* (blue vervain)
- *Iris versicolor* (blueflag iris)
- *Opuntia humifusa* (Eastern prickly-pear cactus)
- *Yucca filamentosa* (yucca)

The **13th of July 2019** saw our fourth volunteer workday in which we pulled out more non-native plants, and did a general cleanup of the entire area. We also began to plan for the renovation of the northern half of the site, and over the next few months we discussed turning

this section into a pollinator garden. At 3,973 square feet, it is slated to be one of the largest pollinator gardens that we know of.

Renovation of the northern half of the site began on **9 November 2019** with a high profile volunteer workday. Press releases were submitted to ten newspapers around Delaware, and Ron MacArthur from the Cape Gazette, was on-site taking photos and later wrote up an [article about the event](#). The Delaware Beekeepers Association also advertised the event and came out to help. In all, we had 18 volunteers helping out this day. During the last half of **October**, Eric Zuelke purchased the seeds of 15 species of native herbaceous wildflowers and one grass from Ohio Prairie Nursery and Prairie Moon Nursery in Minnesota. The following is a list of what was seeded that day:

<i>Asclepias syriaca</i>	common milkweed
<i>Asclepias tuberosa</i>	butterfly milkweed
<i>Baptisia tinctoria</i>	yellow wild indigo
<i>Chamaecrista fasciculata</i>	partridge pea
<i>Helenium autumnale</i>	autumn sneezeweed
<i>Helenium flexuosum</i>	purple-headed sneezeweed
<i>Monarda punctata</i>	spotted beebalm
<i>Penstemon digitalis</i>	tall white beardtongue
<i>Pycnanthemum tenuifolium</i>	slender mountain-mint
<i>Rudbeckia laciniata</i>	green-head coneflower
<i>Schizachyrium scoparium</i>	little bluestem
<i>Senna hebecarpa</i>	wild senna
<i>Solidago juncea</i>	early goldenrod
<i>Solidago odora</i>	sweet goldenrod
<i>Symphyotrichum novae-angliae</i>	New England aster

The soil was tilled by hand using stiff-tined rakes, a handful of unhealthy & dead vegetation, and small trees that were now out of place were removed, and the site was hand-sown with the seeds mixed into a filler of rice hulls, then covered with pine needles. The *Schizachyrium scoparium* was not mixed into the overall mix, but sown separately in 10 distinct patches to keep the grass from being widely dispersed. We wanted the grass to remain in its own small bunches. It was a very successful day.



The dry pollinator garden before seeding and planting began (9 Nov 2019).

Eric Zuelke and Eric Wahl visited the site on **17 April 2020** to check on germination progress. Seeds were just starting to pop open and there was not too much to see on this day.



The humble beginnings of our dry pollinator bed (17 Apr 2020)

Throughout the Spring and Summer of 2020, Eric Zuelke occasionally visited the site and as of **14 August 2020**, we were sad to report that only a handful of seedlings survived the harsh heat and sun exposure of the site. But this was only a temporary setback because during **August and**

**September of 2020**, we had the opportunity to apply a Minigrant that was provided by the First State Resource Conservation and Development Council, Inc.-USDA-NRCS Cooperative Agreement (2017-2020) for Pollinator Habitat Projects. We received \$1200.00 in grant money which helped us purchase live plants, seed, and materials. The DNPS also agreed to a 100% in-kind match which meant that we committed to \$2400.00 for the entire project. During the application period, we also decided to expand our efforts at the site into the wet meadow section in the southwest corner near the roof drain downspout. This area is constantly wet and provided a great opportunity to plant it full of wet meadow species. We also took out some lawn area adjacent to pollinator garden to increase its size and scope.

A volunteer event was completed on **12 September 2020** in which we planted containerized plants that were purchased from the Adkins Arboretum Fall native plant sale in Ridgely, MD using the RCD/NRCS grant money. We planted 10 plants into the new wet meadow (which was officially created during this work day), and 40 into the dry pollinator bed to help bolster the seed bank. Here's the list of what we planted this day.

<i>Asclepias syriaca</i>	common milkweed
<i>Asclepias tuberosa</i>	butterfly milkweed
<i>Baptisia tinctoria</i>	yellow wild indigo
<i>Eupatorium coelestinum</i>	blue boneset
<i>Helenium autumnale</i>	autumn sneezeweed
<i>Iris versicolor</i>	blueflag iris
<i>Monarda punctata</i>	spotted beebalm
<i>Pycnanthemum tenuifolium</i>	slender mountain-mint
<i>Schizachyrium scoparium</i>	little bluestem
<i>Symphotrichum novae-angliae</i>	New England aster



The dry pollinator bed after the first planting of containerized wildflowers (12 Sep 2020).

Another volunteer day was completed on **4 Oct 2020** in which we planted another lot of containerized plants (103 plants total to be exact). These plants were purchased from Edge Of The Woods Native Plant Nursery in Orefield, PA with the in-kind DNPS match funds that we spoke of in the above comments about the Aug/Sep 2020 grant. Below is the list of what we planted this day into the dry pollinator garden (70 individual plants). Additionally, we laid down some black colored, biodegradable mulch film on a section of lawn to kill off the grass and begin the expansion of the dry pollinator garden.

<i>Andropogon gerardii</i>	big bluestem
<i>Asclepias tuberosa</i>	butterfly milkweed
<i>Eupatorium dubium</i>	three-nerved joe pye weed
<i>Eupatorium fistulosum</i>	hollow joe pye weed
<i>Eupatorium perfoliatum</i>	boneset
<i>Lobelia siphilitica</i>	blue lobelia
<i>Rudbeckia laciniata</i>	cut-leafed coneflower
<i>Schizachyrium scoparium</i>	little bluestem

To finish off the plants purchased at Edge Of The Woods Nursery, we had another volunteer day on **10 Oct 2020** when we planted the following into the wet meadow (33 individual plants, and one donated *Lobelia cardinalis*). On this day, we also sowed another lot of seed that was the same species composition as what we sowed in Nov 2019, again to help bolster the seed bank.

<i>Asclepias incarnata</i>	swamp milkweed
<i>Chelone glabra</i>	white turtlehead
<i>Juncus effusus</i>	soft path rush
<i>Lobelia cardinalis</i>	cardinal flower



The wet meadow after the first round of planting (10 Oct 2020).



This finished off the work for **2020** and it was a very successful year, and we'd like to thank all the volunteers that came out to help.