

## **November 2016 Report on the Hermitage Natural Area project and proposal for wildflower/tall grass meadow**

I wish to propose that the Trustees expand the scope of the “Hermitage Natural Area”, formerly Hermitage Wildlife Area to include the creation and ongoing stewardship of a meadow area of grasses and wildflowers on acres of our lot.

In February of 2016 the Trustees voted to allocate \$25,000 for the initial phase of work on a “Hermitage Wildlife Area” involving creation of trails and planning for and building an observation tower for birding.

Since then, approximately \$3,000 has been spent on clearing trails and land between the parking lot and the marsh, printing preliminary trail signage and planting grass and wildflower seed in the cleared area. Volunteers helped in clearing and trail maintenance during the spring. I and Antonio Landscaping cleared the rest.

Experts from different organizations have walked the trails, including the American Birding Association, DNREC, National Park Service, Delaware Wildlands, UD extension agent and landscape design, and most recently Longwood Gardens. They uniformly praised the beauty of the site; the mixture of meadow, forest and wetlands; the resident and migrant bird populations, the proximity of the site for New Castle residents; and the proximity to schools offering possibilities for environmental education.

After discussion with the Corps of Army Engineers it appears that a visit by the USACE for a “Jurisdictional Determination” and probable application for a permit will be required for us to build an observation platform. Given the 30-90 days required to schedule a visit, the delay to get a permit approved and the probable need to have an architect design the platform for safety purposes (rather than just hire a normal deck contractor), it seems unlikely that the platform will be built in this fiscal year.

Work on the rest of the area can proceed in the meantime. The forest needs no help except possibly thinning the deer population. The major problem is invasive plants in the meadow area below the parking lot.

In the area marked “Meadow” in the map below, the ground is completely covered by invasives, including: Japanese knotweed (up to 12’ tall and impenetrable), wild grape (covering the ground and trees), prickles (multiflora rose and blackberry), oriental bush honeysuckle, and “tree of heaven” (oriental sumac).

Tom Brightman, the Longwood Gardens Land Steward (creator and director of their Meadow Garden) walked through our tract and suggested a multi year approach to maximize likelihood of success, to minimize total cost and difficulty in long term maintenance, and to maximize diversity of flowering plants which in turn will maximize the number of species of pollinating insects which in turn will maximize diverse bird populations.

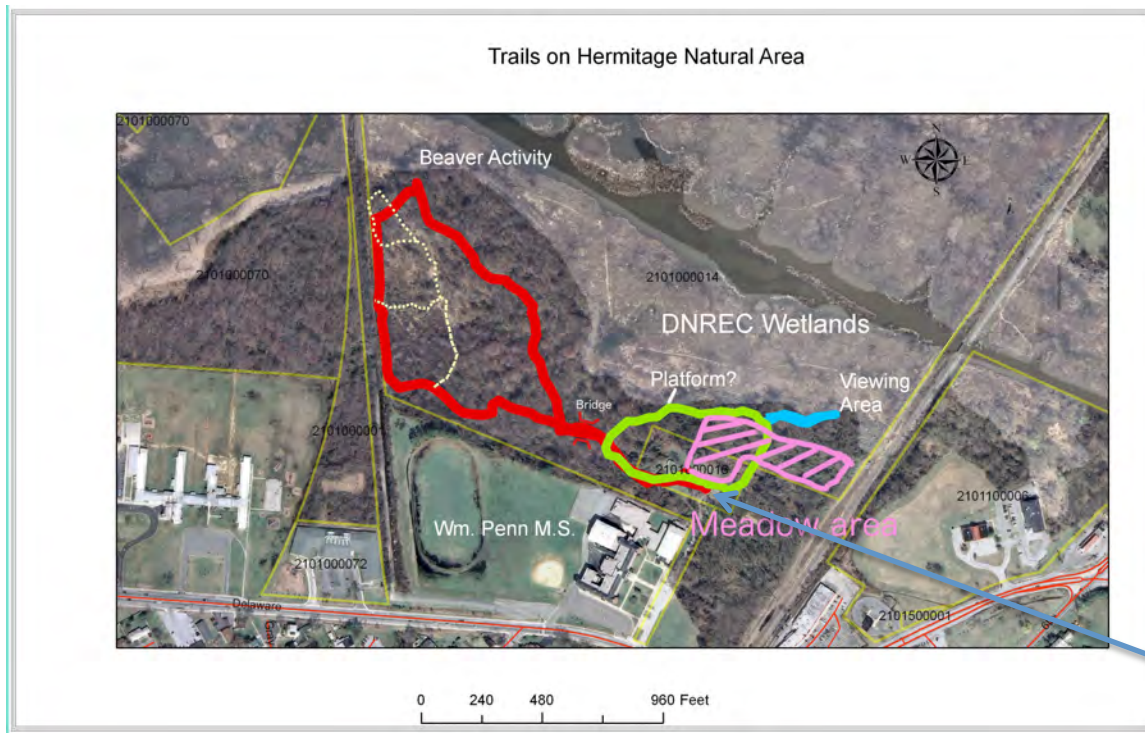
His plan:

Year 1: clear the land with bush hog or bobcat/forestry cutter or hydro ax, rake up the resulting mulch and treat with herbicide at least four times;

Year 2: plant with grass and wildflower seed mixes from Ernst Seed, mow several times

Year 3 and 4: mow and start to involve volunteers who know what are the invasives for hand removal of invasives or spot spraying

Total cost should be modest: <\$15,000 total for the first 2-3 years and much less in subsequent years.



Parking lot



View from the parking lot down to the marsh. The area in front of you is tall grasses, all the area to the right is covered with wild grape and or Japanese knotweed.



The trails were initially cleared with a machete, then bush hog, and maintained manually by pulling up the grape and knotweed roots, scalping to the ground with an Ames double sided weed cutter and spraying with glyphosate. The area alongside the trails was sprayed in spring and early summer glyphosate. This killed only the leaves, not the whole plant. Spraying in late August, September and October when the knotweed was blooming appears to have worked.

The future tall grass area between the parking lot and marsh was cleared with a bush-hog, treated with glyphosate then planted with two seed mixes from Ernst Conservation Seed Co., one containing wildflowers. Some of the grasses (Indian grass, big bluestem) were too tall for good sightline to the marsh and need to be replaced. Knotweed re-grew and treatment with glyphosate was unsuccessful until the fall. My recommendation when knotweed recurs is to trim with a machete in early summer then allow to regrow to a manageable height and spray with glyphosate in the fall. It is difficult to spray when the weeds are 10-12' tall. Spraying with broadleaf herbicide did control wild grape, but at the cost of killing the wildflowers that were emerging.

---

---



Proposed platform location and plank bridge in the forested area

---

## SIGNAGE FOR CHILDREN AND PLAYGROUNDS

One of the visitors said the only thing she would do would be to make the area useful to the immediately adjacent local schools.

To get ideas, I visited Greenwood Elementary, a Kennett Consolidated school near Longwood which has an immediately adjacent nature trail, and Ollies Owl's nature playground at the ChesLen nature preserve of the Natural Lands Trust, a 1200 acre preserve near Coatesville PA.

<https://natlands.org/preserves-to-visit/list-of-preserves/cheslen-preserve/>

The school's nature trail is a simple plank walkway through a wooded wetlands with interpretive signs talking about fallen trees, bird habitats, insects, amphibians and mammals that live in the forest etc. The school assistant principal says the trail is used throughout the year by all grades during the regular science classes. I will contact Carrie Downie school and the NC middle schools to find out whether they would like to use the Hermitage area.



The ChesLen natureplayground is a nice area and something that could be done in our woods for something quite different from conventional playgrounds. Attractive interpretive signs, and reuse of logs, branches and sticks allow imaginative outdoor play.



Ollie Owls say: “We love trees. Many animals and birds spend much of their time in trees. Trees provide a safe place to perch ... Climb up a perch. What can you see?”

And adjacent logs provide a good place to climb with a log for balance.

Sticks are left for building, logs for climbing, a teeter-totter ...

