

Land Restoration Update

by Joanne Donohue, Assistant Director of Land Restoration



During the growing season, Land Restoration staff is often found out in the field, monitoring for invasives, checking on restoration sites, or conducting vegetation studies. Whatever the task may be, we are always focused on increasing biodiversity and moving our woodlands and meadows to a healthier state. In case you're wondering, here's what we've been working on:

- Our 2007 Native Plant Sale was a huge success! We sold out of many species, but what we were most pleased about was the enthusiasm we witnessed among our patrons. It's wonderful to see the evolution of gardening from a leisurely hobby to

an obligation to encourage biodiversity. Thank you to all our volunteers who contributed their time and energy to this cause.

- Plans are in the works to erect a state-of-the-art greenhouse, which will support our Native Plant Nursery. The greenhouse will be used not only to raise locally gathered seed and to propagate native species, but also for educational purposes. Under the controlled environment of the greenhouse, we will be able to propagate many species, thereby preserving local genotypes, and to use them in our restoration projects. In addition, our greenhouse will be “green”- only sustainable practices will be employed in its operation.
- Speaking of the Native Plant Nursery, it’s growing! This year, with the help of volunteers, we planted six species out into the field where they will grow on for several years until harvest. The plants are fed organically with mushroom compost, natural fertilizers, and nitrogen-fixing cover crops. And thanks to the hard work of a local Boy Scouts troop, we have a newly constructed compost bin, made from recycled wood, and a permanently erected deer fence.
- Recent visitors may have noticed a change to the solar panel array by our main building. The area in front of the panels has been transformed from turf to meadow. Warm season grasses and forbs were seeded in last fall to provide habitat for a number of native insects, pollinators, birds, and even small reptiles and amphibians. Underneath the panels, trials are underway to determine which native species will perform best in the dry shade the panels create. Stay tuned for our findings in this exciting study!
- In fall of 2005, the uppermost section of our Butterfly Meadow received a makeover. The area was mowed, invasive woody species were removed, and a seed mix was sown. This year, we are seeing much diversity, including beebalm, sunflower, beardstongue, black-eyed susans, and warm season grasses. These species will provide nectar, pollen, and seed for our native pollinators, birds, and small mammals. Be sure to check it out the next time you visit!
- Exciting news from one of our original restoration sites, the Kentucky Warbler Habitat Enhancement Area. We’ve been monitoring this site for several years, and we’re beginning to notice some interesting native species making a return on their own, including pinxterbloom azalea, maple-leaf viburnum, and low-bush blueberry. These plants disappeared by the mid-80’s with the explosion of development and subsequently, the deer population. To see sprouts of these shrub species once again is good news for ground nesting birds like the Kentucky Warbler, who uses the base of multistemmed shrubs to make its nest.
- The American Chestnut Grove received a third generation of open pollinated American chestnut saplings this spring with the help of the 7th graders from Green Woods Charter School. As some of the more mature trees succumb to chestnut blight, the saplings will serve as their replacements. Elsewhere in the Grove, what was formerly a tangle of invasives (tree of heaven, multiflora rose, and Oriental

bittersweet) is now a diverse plant community going through succession. Planted species are thriving and many natives have moved in on their own! The thick understory provides food and cover for many species.

- The Smith's Run Streambank Restoration project is now one year old and we ask ourselves one question: did our efforts work? Absolutely! The streambanks are secure and native vegetation is slowly reclaiming the regraded banks. Planted species of trees, shrubs, and herbaceous plants are becoming established. And perhaps most importantly, water quality has improved. This spring, students from Philadelphia University studied both water chemistry and macro invertebrates and compared their findings to data collected last year prior to the start of the restoration. Overall, dissolved oxygen in the water increased and quality assessment scores improved. We hope this trend continues as we closely monitor this site over the next few years.
- Penn's Native Acres, our largest restoration site, is the focus of our invasive removal efforts this season. Last year, we began Project PennSylvania, an initiative to train volunteers in invasive ID and removal in this restoration site. With the dedication of a few community volunteers and interns from various educational institutions, invasive species citations in Penn's Native Acres are on the decline! If you would like to be a part of this team, please contact Joanne Donohue at 215-482-7300 x144 or email jdonohue@schuylkillcenter.org.



Pinxterbloom Azalea (*Rhododendron periclymenoides*)



Maple-leaf Viburnum (*Viburnum acerifolium*)



Rudbeckia hirta in bloom in front of the Solar Panel Array.

Saturday, September 15th: Restoration Volunteer Workday

10am-12pm and 12:30pm-2:30pm

Come help us restore our grounds! Join the Land Restoration Department in returning our forests, meadows, and streams to a healthy, diverse state. Projects range from invasive vine clearing and native species planting to trail maintenance. Dress appropriately for outdoor work (long pants recommended), wear sturdy shoes or boots, and bring bottled water. Light refreshments provided. If staying for the afternoon session, please pack a light lunch.

To volunteer, contact Joanne Donohue at (215) 482-7300 x144.