

The SER Mid-Atlantic Chapter Conference 2014 Presents Three Field Trip Options Saturday March 22, 2014 9:15 AM to 3:45 PM

Buses leave from Temple Univ. - Ambler Campus

SER Mid-Atlantic is pleased to announce three field trips to be held in conjunction with the 2014 conference. Please register for the field trip of your choice when you register for the conference. Field trips require some walking along unpaved surfaces and possibly wet ground. Sturdy, water-resistant shoes and weather-appropriate apparel are recommended. Participants may want to bring binoculars, cameras, and note-taking supplies. <u>All Field Trips include some walking through either hilly or uneven terrain</u>. Field Trips #2 and #3 involve walking for 1 to 2 hours. For Field Trip #3, waterproof, knee-high mud boots (not waders) are recommended. Boxed lunch sandwiches, with vegetarian options, will be provided.

Field Trip # 1 - A Tour of Four Restoration Projects in the Wissahickon Valley of Fairmount Park, Philadelphia, PA

Piecing together funding from various sources, the Philadelphia Parks and Recreation Department (PPR) and others, including the Fairmount Park Commission and Philadelphia Water Department (PWD), have completed a series of well-planned restoration projects within Fairmount Park's Wissahickon Valley. Field trip # 1 will visit four projects sites to present the outcomes and discuss restoration challenges such as access difficulties, storms during construction, herbivory, etc.

<u>Stop 1</u>: **Houston Meadows** restoration includes 30 acres of meadow and 15 acres of peripheral woodland to recreate natural area for wildlife, in particular birds, by eliminating invasive and early growth species and restoring native grasses and forbs. Hosts **Tom Witmer, PPR Director of Natural Resources,** and **Keith Russell, PA Audubon Society,** will present the restoration story, maintenance challenges, and talk about the value of these restored meadows to both wildlife and people.



<u>Stop 2 and 3:</u> Public works projects that direct runoff from impervious areas to tributaries unintentionally may cause scouring and erosion of stream channels that can create deep gullies. The gullies alter watershed hydrology, lead to wetlands losses, eliminate habitat, and maybe safety hazards. At District 4 gully repair, hosts **Tom Witmer, PPR**,



and ecological restoration design/builder Joe Berg of Biohabitats, Inc. will showcase a Gully & Slope Repair Project that addresses a deep gully and stormwater runoff within a 10foot deep, 250-foot long former gully. Tom Witmer will also lead the tour of a 1,000-foot long gully repair at W.B. Saul High School. Both of the reconstructed channels have restored minimized sediment runoff habitat, to Wissahickon Creek, and eliminated safety hazards for trail users.



<u>Stop 4:</u> Agricultural runoff from pastures and stables at the **W.B. Saul High School's working farm** had degraded downstream waters. **PPR's Tom Witmer** will lead the trip to the **Bio-Infiltration Swale and Stormwater Management Pools** that were created to address runoff from a 23-acre drainage area. The project involved grading the 1,000-foot long swale through the pasture; creation of three pools to slow and detain stormwater; implementation of rock energy dissipaters, aerators, a concrete spreader at the downstream end; and a cattle crossing.





<u>Stop 5:</u> **Wises Mill Wetlands Restoration.** In partnership with numerous volunteer organizations, PWD has restored 19 acres of lands at the headwaters of the Wises Mill stream. The restoration created four distinct habitat areas including riparian forest, upland scrub/shrub, wetlands, and warm season grasslands. Invasive plants were removed and replaced with native species adapted to each restored habitat. **Host Rick Anthes, Scientist with PWD's Ecological Restoration Group, and Tom Witmer** will lead the field trip.

Field Trip # 2 - Community-Based Restorations in Montgomery County & Pennypack Ecological Restoration Trust



Within the **Schuylkill River Watershed** there are numerous recently completed, smallscale restoration projects that were established in order to manage stormwater, restore lost wetlands, naturalize channels, and enhance habitats of tributaries to the Schuylkill River. Three of these restoration projects in Montgomery County, PA were selected for this field trip. **Host Tom Davidock from the Partnership for the Delaware River Estuary** has worked closely with community groups at the three sites from the fund-raising through installation and monitoring phases. At each site, he will be joined by community leaders who were closely involved with restoration projects. <u>Stop 1</u>: At **Germantown Academy** wetlands and riparian zones were ecologically restored with a commitment to long-term management of restored areas. The school has named the restored areas "The Preserve."

<u>Stop 2</u>: At **Aidenn Lair Park** a dry, 18,000-square-foot stormwater management basin with an upper basin was redesigned to incorporate wetlands. Water in the upper basin may percolate through the ground or discharge to a lower, grass-lined 21,500-s.f. basin before flowing through a 240-foot long grass swale with check dams to retard flow and encourage groundwater recharge. <u>Stop 3</u>: The community at **E. Norriton Middle School** restored 150 linear feet of banks and habitat associated with Stoney Brook which abuts the campus and occupies approximately 40% of the property.

<u>Stop 4</u>: The 812-acre Pennypack Preserve, a suburban natural area owned and managed by the non-profit **Pennypack Ecological Restoration Trust (PERT)**, was established in the mid-1970s just north of Philadelphia in Huntingdon Valley, Pennsylvania. Field trip host: **Dr. David Robertson, PERT's Executive Director,** will guide participants through 25-year-old forest restoration projects, newly initiated woodland restorations, and native grassland creations focusing on long-term management challenges of invasive plants, white-tailed deer herbivory, and riparian zones that are subject to catastrophic flooding events. **Dr.**



Eugene Potapov of Bryn Athyn College, who is conducting collaborative research at PERT, will share highlights from ongoing studies that employ telemetry to monitor movement patterns of the white-tailed deer herd inhabiting the Pennypack Preserve.



Field Trip # 3 - A Tour of a 150-Acre Wetlands and Riparian Zone Mitigation Project and Native Plant Nursery <u>Stop 1</u>: The 150-acre **Barkers Brook Wetlands Mitigation Project** in Westhampton, NJ was installed to mitigate wetlands losses that resulted from the New Jersey Turnpike Authority's Exit 6 to 9 Widening Project. Site selection, planning, and installation were conducted by **Dr. Doug Freese of Amy S. Greene Environmental Consultants, Inc. (ASGECI)**, who will host this site visit. The project involved the creation of wetlands habitat, including vernal pools;



relocation and naturalization of an agricultural ditch system; and enhancement of native riparian zone habitats. Before creating the wetlands ASGECI prepared a hydrologic budget and detailed site plans that met stringent permitting requirements. Ongoing maintenance and monitoring includes qualitative and quantitative assessments of the development of wetlands hydrology using 12 groundwater monitoring wells; the vegetation component, including plant coverage, survival, growth, and development; and hydric soil development. Three miles of deer fence were installed to manage herbivory and invasive plant management is ongoing.



<u>Stop 2</u>: For 20 years, **Pinelands Nursery & Supply** has been a go-to destination for restorationists in search of expertly propagated native plant material. The nursery collects native seeds from Virginia to New York and produces plant stock that is genetically adapted to local conditions within the Mid-Atlantic states. Pinelands Nursery also stocks supplies for streambank stabilization and bio-engineering applications such as coir logs and erosion control blankets. Pinelands' well-trained staff is appreciated for providing expert advice and services to any size restoration or horticulture project from the planning stage through installation. Their informative website demonstrates Pinelands Nursery's commitment to the principles of ecological restoration. Owners Don and Suzanne Knezick, who are long-time supporters of SER Mid-Atlantic, have generously volunteered to host our visit during the height of Pinelands' distribution season.

