E.L. Rose Conservancy

Program: Conservation Enhancements for a Living **Landscape**Kristi L. Sullivan and Stephen J. Morreale



Progress Report 2004 (Year 1)

Habitat Assessment

In 2004, we first focused on assessing the existing habitat of the Highpoint Preserve and

adjacent areas, with the intent of identifying potential conservation enhancements that could be added to the landscape. We conducted a visual assessment of habitat features including spring seeps, wetland areas, snags, coarse woody debris, rock cover, forest type, and vegetative cover. Using GPS (Global Positioning System), we began accumulating data layers. This has allowed us to spatially analyze and map trails, important habitat features, and animal and plant locations (Figure 1).



Habitat Enhancement

For the second phase of our work in 2004 we began enhancing habitat and increasing educational infrastructure at the Preserve. To that end, we constructed a coverboard trail, which not only enhances the forest floor habitat, but also gives visitors a place to observe and learn about the animals that inhabit Highpoint Preserve.

Coverboards serve as cover, or hiding spaces, for a variety of amphibians, reptiles, small mammals, and invertebrates. The proximity of these to the hiking trail and their accessibility make them ideal windows to the special suite of organisms that spend much of their time under cover.

Coverboards for the trail were constructed of rough-cut hardwood, >2 cm thick, with a surface area of 1,000 cm². They were numbered and labeled, and placed in pairs within 2 meters on either side of the trail, with 10 m between each coverboard pair (Figure 2). In all, 50 coverboards were placed along portions of both the red and white trails. Animals colonized these new habitats readily. When they were inspected during an educational program a few weeks later, red-backed salamanders had already taken up residence under many of the boards.



Education Programs



During the summer, we delivered an education program for conservancy members at the E.L. Rose Conservancy's annual meeting. The program focused on the existing habitat features of Silver Lake and surrounding preserve lands, and potential habitat enhancements as they relate to the organisms that live in the area. The information was prepared and presented in three different formats: a powerpoint presentation, a poster display of the natural settings and animals of the area,

and a fact sheet on the amphibians of the Highpoint Preserve and surroundings. The feedback from participants was positive, and questions and comments helped to shape future activities.

During the fall program an interactive educational program was held at Highpoint Preserve entitled "Build it and They Will Come: A Wildlife Habitat Workshop". During this program participants learned about wildlife in the area, essential habitat for wildlife survival, and ways to create or enhance habitat and increase biodiversity. Using the Highpoint Preserve as an outdoor classroom, we were joined by participants in an interactive learning session. We visited the coverboard trail, identified trees and animals,

and discussed important habitat features such as snags, vegetation structure and diversity, coarse woody debris, rock piles, and wet areas. These topics were all discussed in the context of animal abundance, species diversity, unique organisms, and sensitive habitats. Also included in the discussions were possible actions that would either lead to the preservation of unique features, or enhancement of existing habitats.



Education and Outreach Materials

Several educational products (see attached) were developed to illustrate the organisms of the area, and habitat features of importance.

- A powerpoint presentation describing the existing habitats at the Highpoint Preserve and adjacent areas, and possible habitat enhancements.
- A fact sheet on the amphibians of the Silver Lake area.
- A fact sheet describing habitat features and potential habitat enhancements.
- A poster illustrating the animals and habitats of the area.
- An interpretive sign describing the purpose and value of the coverboard trail.

Proposed Activities for 2005

1) We will catalogue and spatially reference the following key environmental and biological attributes of the Preserve.

Trails - GPS coordinates, mapping, highlight special areas

Snag locations – GPS coordinates, mapping, assess distribution and abundance for wildlife needs

Springs and seeps – GPS coordinates, mapping, identify obligate species Coverboard trail – GPS coordinates, mapping, supplement with rocks for additional cover objects

Other habitat features — map all other ponds and wetlands in the surrounding landscape that could serve as sources of existing animals that are living in the Preserve and as potential sources of future colonization

- 2) Implement habitat enhancements that could include: woodland pools, brush piles, log piles, snags, additional coverboards, or a hibernaculum. These habitat enhancements may be incorporated into ongoing research at the Arnot Forest.
- 3) Conduct educational outreach activities for Conservancy members and the public, including a visit to the Arnot Forest to see the enhancements we have implemented there.

