

Surveying Newton's Nature

By Patricia G. Goldman

Wednesday, January 3, 2007

"I first came to Newton with preconceived ideas regarding the quality of urban-centered conservation areas...I did not really think that I would find much of interest...how terribly wrong I was. Newton's conservation areas are rich in beauty and wildlife," said consultant John Richardson in his 1996 report to the Board of Aldermen.

Ten years later, a group of volunteers from the non-profit Newton Conservators have been out walking once a week to document the current status of Newton's natural open spaces. They are carefully noting every type of tree, shrub, fern, wildflower, and wildlife they encounter. They are particularly noting invasive species that may be crowding out native plants. And they are noting where illegal dumping may be endangering these environments.

Where Richardson looked closely at seven areas, the Conservators have tackled over 30 sites, as part of their mission to preserve and maintain open spaces in Newton for public use and enjoyment.

"We wanted to do something outdoors, hands-on to preserve these places," says Beth Schroeder, co-chair of this land management committee with Cris Criscitiello. "We didn't even know where all these open spaces were until we met with Martha Horne of the Newton Planning Department. My interest came from enjoying my own garden, doing landscape design for clients, and wanting to know more about which plants are native to this area."

Says Criscitiello, a retired physician, "We initially intended a survey of what's growing in the different conservation habitats in Newton, in the wetlands and elevated hillsides, the sunny areas and shady areas. We wanted people to have a good time walking around and really seeing things."

Florrie Funk, a member of the committee notes that "it's hard to appreciate what's here if all you do is look around and see green stuff. If you can identify trees and shrubs, it becomes more exciting and you're more likely to be interested in protecting good native plants."

Funk is particularly interested in identifying and preventing the spread of invasive species. Plants like Japanese knotweed, goutweed, garlic mustard, purple loosestrife and Oriental bittersweet tend to crowd out native plants. Even though some invasives may be attractive plants, they are tending to endanger rare and beautiful native species, such as gentians and cardinal flowers.

The volunteer group has a fern expert, bird experts, people particularly interested in wildflowers and mushrooms, even a research botanist who is an expert in plant classifications. They are waiting for their vernal pool expert to have time to help

identify amphibians. When an expert cannot immediately identify something, they turn to their Field Guides and even take photos to match up on internet sites.

The group intends to keep up their weekly survey trips all winter long. "Even in the snow and ice, we can identify trees and bushes by their structure, the shape of their leaf buds and whether the leaves grow opposite each other or in an alternating pattern," says Schroeder.

Thus far the group has produced extensive spreadsheets with checkmarks indicating every time any of hundreds of species has been found in each of the 30 Newton conservation sites. "This document establishes a baseline of existing species, which allows us to detect changes over time," Schroeder notes.

"As we get the information we compare it with the 1996 Richardson report," says Criscitiello. "We would also like to track the species during different seasons and make all the information available for educational purposes on our website (NewtonConservators.org), at the library, in the Newton Planning Department, and in an episode of the Environmental Show on NewTV."

"We could use an insect expert in our group," he says. Funk adds that it would also be nice to have someone who knows grasses and sedges. "To identify sedges, you have to look at the seeds under a microscope," she notes.

Has the group identified anything surprising thus far? "We have found over twenty types of ferns, Jack-in-the-pulpit, pink lady's slipper, trout lily, bloodroot, trillium and huge sassafras trees," says Schroeder. "There are a lot of things you wouldn't see unless you look carefully. Our group has located many of the plants listed in Richardson's 1996 report and quite a few new ones."