The Woodland Restoration Projects

The "Habitat" and the "Corner" at Fresh Pond Reservation
2022 Report

One April day in 2007, while walking around Fresh Pond, Cambridge resident Suzanna Black spotted a clump of flowering white trilliums growing in the midst of a dense patch of weeds. Suzanna, a long-time gardener and reservation volunteer, asked Reservation Site Supervisor Vince Falcione for permission to "adopt" the area in order to weed and protect the wildflowers. Permission granted, Suzanna began weeding, and by mid-June had uncovered the trilliums and amassed enormous piles of garlic mustard and other weeds she had extirpated from the area. Thus began a project that continues to this day under the name "The Woodland Restoration Projects." Suzanna's initial few square yards of rescued land has grown to almost an acre of urban forest that is now planted with a variety of locally native wildflowers, shrubs and trees.

Suzanna has recently moved to Virginia to live closer to her son and his family, but she leaves behind this monument to her love of nature and willingness to take action on behalf of the native plants at Fresh Pond Reservation. Her mission is being carried on by other volunteers who, like her, have been drawn to the rewards and challenges of working to restore and preserve this woodland habitat. The group gathers every Tuesday, weather permitting, to weed, water, mulch, prune, plant, and experience the beauty of a healthy natural habitat.

In 2022, after a normally rainy early spring and an abundance of rain the year before, the plants in the Habitats got off to a good start, with lots of flowering blue and yellow wild violets, marsh marigolds, foam flowers, wild geraniums and bloodroot lighting up the understory. The months of May through August, however, were some of the driest we have ever experienced: we had less than half of the normal amount of rain. We spent most of our volunteer time during those months hauling water and spreading mulch to keep our youngest plants alive.

The poor condition of the thirsty plants was exacerbated by the fact that they provided less food than before for our resident populations of rabbits and deer. Many perennials, such as violets were eaten down to the ground whereas in a normal year only the tender young leaves were eaten. The growing Fresh Pond population of deer were especially destructive. They were able to reach the leaves and twigs of taller shrubs as well as many low-growing plants that the rabbits have found unpalatable. Deer completely defoliated all of our large, mature mountain laurels, killing them.

When Watershed Manager Dave Kaplan learned of our predicament, he hired the company "Oh Dear" to spray the project area with a deer-repelling botanical solution that does not harm the animals or plants. The spraying did make a difference and a number of plants that were badly damaged by deer the year before survived in reasonably good condition.

Fortunately, not all plants in the woods were seriously impacted by the combination of drought and herbivory. Clethra flowers still perfumed the woods in August. Goldenrods and white wood asters bloomed profusely in September and October. Witch hazels were aglow with yellow flowers in November. And the leaves of our maples, ashes, sassafras, black gums and oaks turned red, orange and yellow right on schedule.

It is likely that deer, rabbits and weather extremes will have a major impact on the Woodland Habitats, as well as the entire Reservation from now on. Watering, mulching, caging and spraying plants require a lot of human effort, and we have been thinking about how to cultivate a more self-sustaining population of native plants in these woods. Most of the trees and many of the shrubs we have planted are large and tall enough that they are too tough for rabbits to gnaw and beyond the reach of deer, so our focus is on perennials. The obvious solution would be to only plant perennials that herbivores don't like to eat. That would considerably reduce plant diversity but would maintain the "green mulch" layer of ground covers that help keep the soil healthy and discourage the growth of weeds. Achieving this goal would still require a considerable amount of work because many of the unpalatable plants are slow to spread and would need to be divided and transplanted, and new perennials would need to be purchased and planted. We will continue to investigate how other conservationists deal with these problems, and weigh our options.

Our plant additions in 2022 included a large number of ferns of several varieties that do well at Fresh Pond. We also planted a variety of wildflowers that we grew from locally collected seeds. We planted the wildflowers in a

sparsely vegetated area near our main gate where nothing seemed to grow. For the past several years, we have spread large amounts of leaf mold in the area to improve the soil. Spring will tell whether we have succeeded.

Elizabeth Wylde February 5, 2023

Volunteer work hours in the Habitats: 854 (plus many unrecorded hours.)

Volunteer Stewards in 2022: Suzanna Black, Richard Bosel, Sara Gardner, Pamela Hart, Betsy Meyer, Joanne Mullan, Chris Powers, Rebecca Ramsay, Elizabeth Wylde, Candace Young.

Thanks to Water Department Staff for their support: Vince Falcione, Dave Kaplan, Brian Mulrenan, and Tim Puopolo, as well as the landscape crew members who delivered leaves to our leaf mulch piles.

Thanks to The Friends of Fresh Pond Reservation for covering various expenses, including the purchase of plants.

Thanks also to the Volunteers who donated plants they purchased for the projects, plants they grew from seeds, and plants from their own gardens.

Friends Group and Volunteer Purchases

Common Name	Botanical Name	# plants
Marginal wood fern	Dryopteris marginalis	96
Goldie's Fern	Dryopteris goldiana	32
American Mountain Ash	Sorbus Americana	1
Cinnamon Fern	Osmunda cinnamomea	6
New York Aster	Symphyotrichum novi-belgii	1
Gray Goldenrod	Solidago nemoralis	1
Packera	Packera aurea	2

Cambridge Water Department Purchases

Common Name	Botanical Name	# plants
Swamp White Oak	Quercus bicolor	1
Gray Birch	Betula populifolia	3
Clethra	Clethra alnifolia	3
Ostrich Fern	Matteuccia struthiopteris	10

Plants Grown From Locally Collected Seeds

Common Name	Botanical Name	# plants
American Spikenard	Aralia racemosa	5
Swamp Milkweed	Asclepias incarnata	3
Butterfly Weed	Asclepias tuberosa	7
Pennsylvania Sedge	Carex pensylvanica	2
Flat-topped Aster	Doelengeria umbellata	2
Large-leaved Aster	Eurybia macrophylla	3
N.E. Blazing Star	Liatris scariosa	5
Slender Mountain Mint	Pycnanthemum tenuifolium	4
Silverrod	Solidago bicolor	6
Blue-stemmed Goldenrod	Solidago caesia	1
Zigzag Goldenrod	Solidago flexicaulis	6
Sweet Goldenrod	Solidago odora	5
Showy Goldenrod	Solidago speciosa	4
Blue Vervain	Verbena hastata	4