

The Woodland Restoration Projects

The “Habitat” and the “Corner”

at Fresh Pond Reservation

2024 Report

We will remember 2024 as a year of weather extremes, both local and worldwide. In Cambridge, excessive rain in January and March caused flooding of roads and paths throughout the Reservation, inundating parts of the Woodland Habitats that are usually dry ground with water that was deep enough for mallards to swim. Normal amounts of rain from April through June gave the growing season a good start, but extended drought from mid-August to mid-November left the ground parched and many plants wilting and dropping leaves.

To the volunteers in the Reservation’s Woodland Restoration Projects, the drought seemed unusually harsh. We were able to protect our newest plants using water from our rain barrels, but the soil in other areas became so dry, we worried that we would lose many of our established plants. We did lose a few but, for the most part, plants endured even though they looked stunted and produced fewer flowers.

I wondered whether the year’s drought was a rare event, so I looked up precipitation records for the Cambridge area. I learned that, although annual precipitation averages about 44 inches of rain, it ranges from about 30 to more than 60 inches. The records also showed that in the past decade there have been four years of serious drought with less than 38 inches and, at the other extreme, four years when we averaged close to 60 inches. Only occasionally did we actually have a “normal” amount. In 2024, because of our wet spring, we had slightly above average annual precipitation, with just over 48 inches. Despite that reassuring statistic, we are still suffering from the deficit of summer rain. In December 2024 the status for most of Massachusetts was at the “Significant Drought” level.

Surprisingly, extreme drought and flood years in the Habitats appear not to have caused lasting damage. When I look at my photos of our project from the last ten summers, I see that areas which were sparsely vegetated in 2014 are now filled with plants, creating multi-layered green habitats. Trees that we planted as small seedlings in 2013 are now more than 20 feet tall. Groundcovers are everywhere. A variety of shrubs fill in the understory. The Habitats are flourishing.

I now think that the sad-looking condition of most of our drought-stricken plants was not a sign of impending doom, but simply an indication that the plants were thirsty. Our native plants have been growing in these variable conditions for a very long time, perhaps thousands of years. They survive because they have evolved ways of enduring weather extremes. Most of our trees have long taproots that are able to find water far below ground. Perennial wildflowers and grasses also have roots that reach deep into the ground. Many of our other perennials have fleshy bases or tuberous roots that can store water until it is needed. Plants that have not developed such adaptations do not survive for long in these woods.

In the future (and perhaps already) climate change is going to have an impact. Our precipitation extremes are predicted to become even more extreme. Temperatures are already rising and will continue to do so. It remains to be seen whether our resilient native plant species are able to adapt to this increasingly erratic weather. The best scenario may be that many adapt and persist while others that cannot adapt survive by relocating northward or to higher elevations with more moderate conditions. We can contribute to the future well-being of our project area by focusing on cultivating tough plants that will thrive without our tender loving care.

We spent our time in 2024 on the regular chores of weeding out non-native weeds, cutting up and removing fallen branches and limbs, placing and repairing cages, pruning shrubs, spreading leaf mulch and watering our most recently planted, small plants. Richard and Ralph continued their projects of digging out invasive buckthorns from the woods beyond our work area. They are focusing on mature buckthorns that produce an abundance of berries. Birds consume those berries, then fly from place to place excreting and spreading the highly viable seeds. The men’s efforts have resulted in a welcome reduction of buckthorn seedlings in the entire area.

Again this year we received welcome help from the Cambridge Water Department in our endeavors to limit the damage caused by herbivorous rabbits and deer. Using a strong, ecologically safe animal repellent, they sprayed the understory plants in the Habitats every month during the growing season. That spraying, in addition to our poultry netting cages and our own limited spraying of repellents on our most vulnerable plants, has made a very noticeable difference.

Elizabeth Wylde
February 5, 2025

Volunteer work hours in the Habitats in 2024: about 583 (plus many unrecorded hours.)

Volunteer Stewards in 2024: Richard Bosel, Ralph Clover, Pamela Hart, Chantal Legare, Betsy Meyer, Joanne Mullan, Julia Sayre, Franziska Schuerpf, 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 equipment, caging materials, and animal repellents

Thanks also to the Volunteers who donated plants they purchased or cultivated for the projects:

Betsy Meyer purchased cardinal flower, (*Lobelia cardinalis*) plants

Candace Young purchased Pennsylvania sedge, (*Carex pensylvanica*) plugs

Elizabeth Wylde grew from seed American spikenard (*Aralia racemosa*), white wood aster (*Eurybia divericata*), and zigzag goldenrod (*Solidago flexicaulis*.)