

2000 Water Chestnut Harvest – Summary Report

Dates and Amounts

In the Alewife Brook watershed, just over 12,000 pounds of water chestnut plants were harvested in 2000. On two dates in July, ALL water chestnuts were removed from Alewife Brook, Little River, Perch Pond, and Little Pond. Another try on August 18th found NO plants! Altogether, 194 plants were pulled from 76 locations for about 40 pounds on July 8th. On July 21st only 19 plants were found in 15 locations. These mainly appeared to be fragments broken from an upstream source, as most were not rooted but snagged on other vegetation. Only four ounces were weighed the next day (after drying overnight) so the fragments were quite small, on average.

Blair Pond was a different story. Harvesting began July 5th, but the pond was already 90% covered with rapidly maturing plants. Harvesting occurred on 31 days thru August 21st for a total of six tons, but this merely cleared the Southern third of the pond. After this date, most of the nuts had already dropped from the plants so harvesting further would not be productive. Also, an opportunity arose on Arlington Reservoir to hand-supplement machine harvesting done last year. From August 23rd thru August 30th; 1,350 pounds were removed which had been left around the perimeter in waters too shallow for the machine.

Surveys and Scouting

Small patches of water chestnut were located in Spy Pond and in Yates Pond. Both of these are targeted for expansion of efforts over the remainder of this project. A large infestation is located in Blacks Nook, but I am awaiting formation of a new Fresh Pond oversight committee to target this area. The Mystic River in Medford is heavily infested in multiple locations between Alewife Brook and Craddock Dam.

Found free of this weed were Fresh Pond, Parkway Pond, Gerry's Pit, Claypit Pond, Little Fresh Pond, Lower Mystic Lake, and Hills Pond.

Methods, Timing, and Tools

Harvesting by hand from a kayak seems to work well for all areas. The small volume of plants that can be conveyed was not a hindrance in most locations. A large plus is the minimal amount of bottom sediment stirred by a kayak as compared to someone wading on foot. Shoulder-length rubber gloves provided adequate protection from the

sewage contamination, but inner cotton gloves and long-sleeved shirts proved essential to avoid irritations from the gloves. No tools of any kind were employed in 2000, but use of a small rake to snag plants while younger, smaller, and further underwater is planned for Blair Pond this year to try to ensure a complete harvest there.

Plant Maturation Dates

Blair pond led all other areas by two to four weeks! Probably because of warmer shallow, polluted water. I also saw growth there as a race against rot. Multiple forms of insect attack, and bacterial and viral rot were observed everywhere, but the plants grow phenomenally quickly once they reach the surface.

July 14th – flowers seen on largest plants. Earlier flowers may have failed due to wet weather.

July 17th – first drupes seen forming (seeds)

July 18th – drupes growing larger QUICKLY

August 1st – first possible signs of nut drop beginning

August 8th – definite signs of nut drop occurring

August 13th-15th – nuts drop off as plants are harvested. Muskrat and multiple gnawed nut husks seen

August 21st – last harvest from Blair. Estimate 50% of all nuts have now dropped.

August 19th – Arlington Reservoir seen with mature seeds not yet dropping!

August 30th – Arlington Reservoir at 10% nut drop. Water here is much cooler and is raised early in the summer so plants must again grow to the surface before flowering can occur.

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