Control and eradication of water chestnut (*Trapa natans, L.*) in an Oneonta wetland, 2012 progress report

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The marsh of concern is located within the city of Oneonta, Otsego County, NY. The majority of the shoreline (and site access point) is owned by Louis Blasetti with a number of other landowners along the northwestern shoreline behind Oneida Street. Water chestnut (*Trapa natans L.*) was first observed in the wetland in 2000, though it is likely that it was introduced in years prior but was not documented. A detailed description and history of the management efforts to control and eradicate the water chestnut within the marsh is given in a 2009 Master’s Thesis submitted by W. Eyres (2009) and subsequent report to the NYS Department of Environmental Conservation (Harman et al. 2012). In short, management activities have included a combination of herbicide applications and hand-harvesting of plants since 2006. The combination of chemical and manual control of plants was hugely effective in reducing the population from 2007 to 2010. Native floating-leaved plants were rebounding. Logistical complications resulted in a “missed” herbicide application during the 2010 growing season and subsequent rebound of the population. Following the 2011 herbicide application a second growth of plants was observed in mid-August. These plants were also producing fruits; a major hand-pulling event was held in mid-September, though growth was so prolific that effective harvest of all plants was not achievable.

Herbicide was not applied in 2012 due to complications in obtaining the appropriate state permits. Despite this, the extent of growth was markedly less than it had been in 2011. Water chestnut plants were hand-harvested on 19 August and 8 September 2012 by BFS staff along with volunteers from OCCA and the SUNY Oneonta incoming freshmen and Biology Club members. In comparison to recent years, only a small amount of chestnut was harvested (1 canoe-load) due to its low abundance. In 2011, volunteers removed approximately 12 canoe-loads, and at least that amount was left in place at the end of the effort. Since recent hand-harvesting efforts without herbicide treatment proved effective, treatment will rely solely on manual efforts through at least 2013.

REFERENCES


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