Water Chestnut Pull on Fish Creek with Saratoga PLAN (2019)

**Prepared by Gwendolyn Temple, Aquatic Invasive Species Coordinator**

On June 29th at 8:00 a.m., over 50 volunteers gathered at the Kayak Shak in Saratoga Springs to pull invasive European water chestnut from Fish Creek. This was part of a multi-year process to reduce the impact of invasive water chestnut on Fish Creek, the outlet of Saratoga Lake. Volunteers will be continuing to go out during three other times this season in order to reduce the population size of water chestnut within the creek.

**Project Description:** Removing European water chestnut from Fish Creek using hand-harvesting methods.

**Date:** June 29, 2019

**Participants:** Gwendolyn Temple / Anna Kuhne / Kelsey Stevens / Saratoga PLAN / Local volunteers

**Point of Contact:** Capital Mohawk PRISM / Saratoga PLAN

**County:** Saratoga

**Fish Creek (City of Saratoga Springs, Saratoga PLAN):** No prior scouting on part of Capital Mohawk PRISM was performed before the event took place. Volunteer Tom Federlin and Lorraine Skibo both identified patch locations, noting that on the eastern side of Fish Creek beyond the bridge were smaller populations of the invasive, while the western side had more extensive patches. Determining that the best course of action was to remove the smaller patches first, volunteers focused on those sections prior to moving to the western side to begin tackling the historic patch. Unfortunately, there was no way for a significant dent to be made in the western population due to its overall density. However, the eastern side is now far more contained as a result of this volunteer effort.

Over 60 cubic feet, or roughly 11 bathtubs worth of water chestnut was removed from Fish Creek on June 29th.

Invasive Species Present at Fish Creek:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Common Name | Scientific Name | Locations (GPS) | Growth Type | Phenology |
| Water Chestnut | *Trapa natans* | 43.0765, -73.6915 | Floating leaf aquatic invasive | Seed dispersal |
| European Frogbit | *Hydrocharis morsus-ranae* | 43.0811, -73.6860 | Free floating aquatic invasive | Primarily turion dispersal |
| Curly leaf pondweed | *Potamogeton crispus* | 43.0807, -73.6864 | Submerged aquatic invasive | Primarily turion dispersal |

**Treatment Method:** Manual removal

**Summary of Work Completed:**

1. Education and outreach: Identification of water chestnut and best methods for removal occurred before the event took place
2. Invasive species removal
	1. Over 50 direct contacts/participants
	2. 60 cubic feet of water chestnut removed
	3. Enough biomass to fill 11 bathtubs

**Recommendations for the Future:** The smaller patches of water chestnut on the eastern side of Fish Creek should be monitored and maintained in order to reduce the population size of water chestnut for the following year. Some discussion on the use of an aquatic harvester to remove the historical patch of water chestnut on the western side may be warranted, but may not be cost effective. A continued effort by local volunteers and a yearly event put on by Saratoga PLAN in partnership with Capital Mohawk PRISM will help to significantly reduce the population of water chestnut in Fish Creek, which will lead to a reduced potential for spread.

**Figure 1:** Numerous volunteers came out to pull invasive water chestnut on Fish Creek.

