

Oswego County Soil and Water Conservation District
3105 State Route 3
Fulton, New York 13069

Oswego County 2013 Water Chestnut Control Program

Introduction

The 2013 Water chestnut (*Trapa natans*) control program included various physical hand pulling events as well as a large chemical treatment approach throughout Oswego County.

Multiple hand pulls were orchestrated on three different water bodies: Oswego River, Oneida Lake and the Salmon River. Chemical treatment took place on the Oswego River only.

Chemical Treatment

Preparations and planning began during the winter and spring of 2013. Discussions took place between NYS Department of Environmental Conservation (DEC)/Division of Environmental Permits, Onondaga County Health Department and this office pertaining to the coordinated approach in controlling Water chestnut in the CNY Three Rivers area of New York State. Based upon the appeared effectiveness from last year's treatment, Clearcast was once again chosen to be the chemical of use for 2013.

Clearcast comes at a much higher cost, thereby placing a higher demand for supportive financial resources. A total resources package was then developed between: St. Lawrence-Eastern Lake Ontario (SLELO) PRISM via The Nature Conservancy, the NYS Environmental Protection Fund via the Finger Lakes-Lake Ontario Watershed Protection Alliance (FLOWPA) and an additional state grant from NYS Senator Patty Ritchie. Treatment cost is to be estimated around \$90,000 for 2013.

During the latter part of the spring, site assessments and treatment locations were identified and prioritized based upon 2012 control efforts. These included eight different plots/locations in the Oswego River stemming from just south of Minetto to just north of Phoenix, New York. All sites totaled up to 219.5 acres of expected Water chestnut, an increase from 2012.

Bid packages were then developed and sent out for performing the 2013 treatment. Letters to riparian property owners were sent out advising them of the potential spraying.

Selection of a certified applicator was then made based upon bid responses. Allied Biological was selected for the 2013 season. Application was then made to NYS DEC for an Aquatic Pesticide Application Permit. Permit was approved on May 15, 2013 having an end date of August 31, 2013. DEC required that water samples be taken and analyzed for chemical residual shortly after treatment at specific locations, both upstream as well as downstream from the actual treated areas.

Treatment in the Oswego River began on July 30th and continued up thru August 31st, 2013. This overall time period included in having the contractor come back after a short break of time and spray the remaining 'green stripes' left by the airboat when they first sprayed. A total of 219.5 acres were targeted for treatment between the eight different plots: Minetto Causeway, Rookey's, Gentile's, Battle Island, Pathfinder Island, City of Fulton, Gale

Island and Ox Creek Area. More acreage was treated up in Ox Creek than ever before, due to the fact the heavy spring flows in the Oswego River and cooler, wetter environmental conditions prevailed; resulted in some previous treated areas of having none to very little Water chestnut present. It would be premature to say that our recent use of the Clearcast chemical had something to do with this unusual occurrence, but this office is remaining hopeful that our efforts are now beginning to be noticed.

Results from this year's application look favorable. The real proof will be in what comes up next year.

Physical Removal

Oneida Lake

The New York Bass Chapter Federation, led by member club Salt City Bassmasters continued their water chestnut abatement efforts in 2013. Various hand pull events were held during the month of August. Big, Muskrat and Three Mile Bays were the concentrated areas of concern that received attention in 2013.

In addition, the Oneida Lake Association members orchestrated a hand pull in early August as well to provide additional relief to the other hand pulling efforts.

Water chestnut was also recently seen and reported in South Bay (southeastern corner of Oneida Lake). With the assistance from Madison County Planning Department, some inroads have been established with the Oneida Indians, having them take on the hand pulling of Water chestnut in and around their properties at South Bay. The Brewerton Rotary Club still has a mission in hand pulling water chestnut along the southern shoreline between the Route 11 and Route 81 Bridge Overpasses. They have been performing this effort for a number of years.

Oswego River

A hand pull was scheduled for July 13th but there were very little plants to worry about at that time. On Saturday, July 27th a hand pull did take place along the Old Erie Canal section and in & around Battle and Factory Island areas. These efforts were again coordinated by Dick Drosse and successful by the number of individual volunteers who participated via canoes and/or kayaks.

Salmon River

On July 13th this office sponsored an organized hand pull event at Port Ontario in the Salmon River Estuary. Nearly forty volunteers participated in pulling over 500 pounds of Water chestnut. Credit goes to the Oswego County River Guides Association, NY Sea Grant, SLELO PRISM, NYS Office of Parks, and Recreation & Historical Preservation and to the many private individuals who gave up their Saturday morning. Special thanks to Shawn Doyle who graciously donated the coffee and morning treats. Many more Water chestnut plants still remain at this site, for which needs close attention in 2014.

Oneida River

This year's populations have been diminished to the level that individual hand pull efforts by riverfront property owners can control this infestation of Water chestnut. This condition again was influenced by the heavy river flows and cooler temperatures earlier this spring/summer, as well as to an active and intense hand pull effort in 2012.

Observations

The early results of the chemical treatment appear to be very favorable. Clearcast seemed to burn down the plant material quicker as compared to Rodeo. As far as the destruction to the nuts and their future capability of sprouting,

time will tell. The routine nut sampling conducted later this fall and next spring may also provide an indicator as to the nut viability.

Of the known areas of hand pulling, vigilant effort continues to be the strategy for controlling water chestnut. The Oneida Lake site is a prime example of letting one's guard down and becoming complacent in thinking that water chestnut has been controlled and not a problem for the future. It doesn't take but only a year or two without a watchful eye for Water chestnut to spread quickly and begin altering our native aquatic habitats.

The success of the hand pull events goes to the many volunteers that make it possible. Without their concerned willingness to help improve our waterways, Water chestnut would take over; destroying fish habitat, choking out native aquatic vegetation, making life miserable for the recreational boater, and causing great angst for the waterfront property owners. Should we become more successful in reducing Water chestnut via chemical treatments, there will be an increasing demand for more volunteers to conduct hand pulling efforts. May we be blessed with such a future effort.

For 2014, continue with hand pulling every where possible. Chemical control may need to resort back to Rodeo, depending upon adequate funding.

Credits/Acknowledgments

The 2013 Oswego County Water Chestnut Control Program would like to thank the support of the many others that have made this year's program what it is.

Robert Tetro, Matt Chesbro, and Michelle Tompkins for allowing the use of their private property.
Don Nelson, NYS DEC Division of Environmental Permits for issuing the aquatic pesticide permit.
Russ Nemecek, Onondaga County Health Department for collaborating effort based upon a watershed approach for controlling and researching Water chestnut in the Three Rivers System.
Allied Biological Company for their application treatments.
Dick Drosse and to the many other volunteers involved with hand pulling efforts.
The Nature Conservancy through the cooperative Saint Lawrence Eastern Lake Ontario PRISM.
NYS Senator Patty Ritchie's office and the NYS Department of Environmental Conservation.
Finger Lakes Lake Ontario Watershed Protection Alliance.

See attached photos and images of the 2013 control season.

(this report was submitted by John DeHollander, District Manager)

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The targeted species – Water chestnut (*Trapa natans*)



Water chestnut plants in 2011
prior to treatment
Oswego River area near Ox Creek
(view looking south)

Water chestnut plants in 2013
prior to treatment
Oswego River area near Ox Creek
(similar view, looking south)





**Pine Grove at Port Ontario
Salmon River Hand Pull**

July 13, 2013

Nearly 40 participants

19 bags harvested

Over 530 pounds removed





**Application of Clearcast -
Water chestnut Control:
Oswego River Area near
Gale Island**



**Hand Pull Event
Oswego River Area – near
Old Erie Canal section**





(photo courtesy of Mike Cusano)

2013
Oneida Lake Hand Pull
One evening amongst many
Less water chestnuts this year

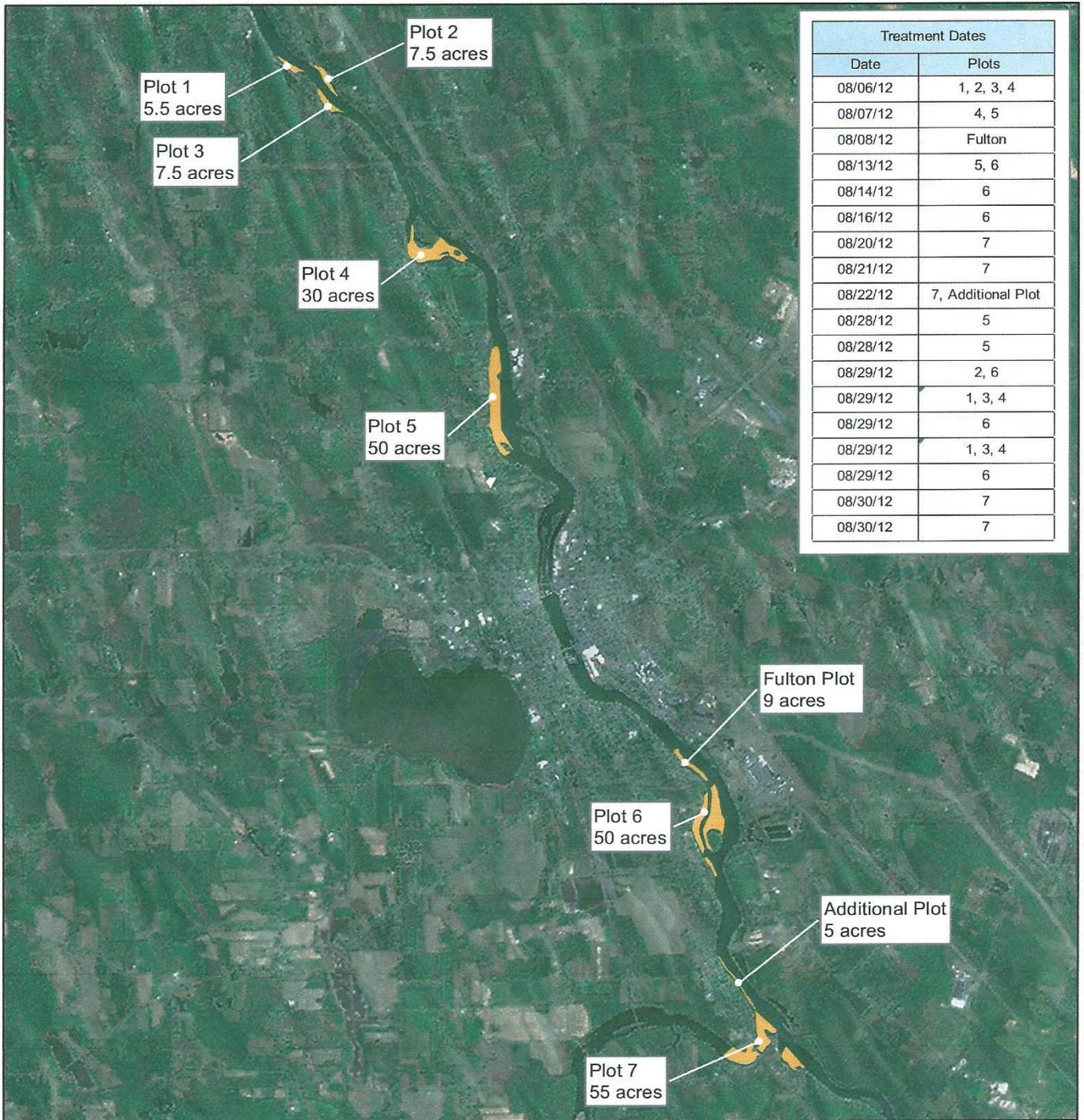
2012
Oneida Lake Hand
Pull
More chestnuts –
bigger haul
Perseverance
Pays Off!



(photo courtesy of Mike Cusano)

Oswego River System Oswego County, New York

2012 Herbicide Application Map



Corporate Office: 580 Rockport Road, Hackettstown, NJ 07840
Northern NY Office: 338 Mather Rd., Suite 1, Oneonta, NY 13820

1-800-245-2932

www.alliedbiological.com

 Areas treated with Clearcast to control Water Chestnut (*Trapa natans*)

Treatment dates: 8/6/12 - 8/30/12



0 4,250 8,500 Feet

Date: 2/20/13, Rev 3/11/13
File: OswegoRiver_2012HerbAppMap.mxd