



2016

**OUTREACH, SURVEILLANCE AND
CONTROL OF INVASIVE WATER
SOLDIER**



Invading Species Awareness Program
March 22, 2017

Project Update

The water soldier monitoring and surveillance activities commenced on Lake Seymour, Crowe Bay, and Percy Reach in June of 2016. Monitoring on Lake Seymour saw a reduction of water soldier populations in direct result from the 2015 fall herbicide treatment where 169 hectares of water soldier was treated. Due to the lack of treatment on Crowe Bay in 2015, there was a slight increase in the water soldier populations (increase of 2.66 ha). In Percy Reach, the water soldier monitoring protocol was implemented and there was less water soldier in 2016 compared to that of 2015.

Following the monitoring at Percy Reach, staff found one population of water soldier that was a suitable candidate for the implementation of the shade cloth enclosures (jute mats). The shade cloth enclosures were installed on June 30, 2016 in Percy Reach (44° 13' 29" N / 77° 46' 39" W) and were left in the water, covering the water soldier plants until August 30, 2016. This treatment resulted in all of the water soldier plants within the enclosure dying. There were two additional shade cloth enclosures installed in Crowe Bay; they generated equal results as those in Percy Reach.

In September, the Invading Species Hotline received a report from a kayaker that found water soldier in Percy Reach that was not detected while conducting the monitoring. The Water Soldier Management Technician went to investigate the report and found several populations of water soldier. Parks Canada, the Ministry of Natural Resources and Forestry (MNRF), and the Ontario Federation of Anglers and Hunters (OFAH) took quick action to hand pull and rake out these populations.

In October, staff assisted with the coordination of the herbicide application to control populations in Lake Seymour, Crowe Bay, and Percy Reach. In total, 125.39 hectares of water soldier was treated. The breakdown is as follows:

- Lake Seymour – 113.02ha
- Crowe Bay – 6.41ha
- Percy Reach – 5.96ha

Project Challenges

This project faced some minor challenges. Staff had initially planned to systematically sample/monitor for water soldier populations between Percy Reach and Glen Ross; however, due to a lack of available resources and time, staff worked with other agencies in order to collect this information. The OFAH relied on Parks Canada to systematically monitor Percy Reach, and this enabled staff to free up resources and time to perform reconnaissance in 40 kilometres of prime habitat from Hickory Island to Glen Ross.

As a result, six new, isolated populations were detected just outside of the known extent of the infestation in Percy Reach. Parks Canada, MNRF, and the OFAH visited these sites and removed the biomass of water soldier and Parks Canada secured funds to perform a herbicide treatment in the fall of 2016.

Landowners Engaged

Water Soldier Watch Day was held on July 16, 2016. A total of 27 volunteers sampled the shoreline of Crowe Bay for nearly 5 hours, covering over 10 kilometers, and equalling 108 hours of surveillance time. This event was promoted in Northumberland County and Hastings County.

The Water Soldier Open House was held on September 7, 2016, with 51 members of the community in attendance to learn about the monitoring and control efforts for the 2016 season.

The Peterborough District MNRF invited public comment on the proposed control of water soldier in the Trent Severn Waterway. A Class B environmental assessment was implemented in August to inform the public of future control measures. In total, 916 residents adjacent to the proposed treatment areas received a direct mail ad and were allowed a 30 day comment period so the public could express their opinion on the matter.

Total number of landowners engaged: 994

Communications

A number of different means of communication were utilized to inform the public about the outreach, surveillance, and control of water soldier in 2016. A summary of communications is as follows:

Media Releases

- Two media releases were issued to profile the Water Soldier Open House and the Water Soldier Watch Day.

Print Publications

- A quarter page newspaper ad for the Water Soldier Open House ran in the Quinte West News (Circulation 15,992).
- Water Soldier Watch Day was advertised in Ontario OUT OF DOORS magazine (Circulation 100,000).
- The Peterborough District MNRF invited public comment on the proposed control of water soldier. A total of 916 residents adjacent to the proposed treatment areas received a direct mail ad.

Website

- Staff coordinated the posting of the Water Soldier Open House on the Town of Trent Hills events calendar.
- The Invading Species Awareness Program and Lower Trent Conservation posted the Public Notice on their websites.
- The ISAP website hosts a page dedicated to providing up-to-date information on the project.

Presentations

- Invading Species Hit Squad summer students (31) delivered over 100 presentations about invasive species, including water soldier.

Community Information Session

- The Water Soldier Open House was held on September 7, 2016 in Campbellford, Ontario to inform local residents of the monitoring and surveillance season and future control efforts.

Twitter Posts - Water Soldier Watch Day Poster

Date	Reach (How many people saw)	Engagement (How many likes/ retweets)
06/29/16	884	12 (1 retweet, 1 like)
07/04/16	1584	35 (6 retweets, 6 likes)
07/06/16	5365	78 (22 retweets, 10 likes)
07/11/16	1468	13 (4 retweets)

Facebook Posts - Water Soldier Watch Day Poster

Date	Engagement (How many likes/ shares)
06/20/16	3
06/29/16	9
07/04/16	1
07/06/16	3
07/11/16	2
