

Swallow-wort Control SLELO-PRISM Swallow-wort Control – Multiple Sites

2012 - 2014 Field Seasons



Figure 1: Swallow-wort images.

Report prepared on 9/2/2014 by Mike Parks, Ed Miller and Rob Williams

Introduction and Background

Swallow-wort (*Cynanchum spp*) is a highly invasive plant that has established itself in numerous areas throughout the SLELO region. As one of SLELO's target management species, our rapid response field crew continues to control this plant at several strategic sites within the region. Rather than report on each site separately, we have folded all sites into this single report.

Perch River Wildlife Management Unit – Cooke Road:

This 7862-acre WMA is located in central Jefferson County five miles northwest of the City of Watertown. The primary access points for recreationists are along the Vaadi, Dog Hill, and Allen roads -**Figure 2**.

Perch River is dominated by its wetland and open water habitats but also offers woodland, early succession, and grassland habitats. The area is well known for its waterfowl and furbearer populations and also supports deer, upland small game, and variety of unique non-game species. The grasslands are mowed periodically in late summer to inhibit brush growth and maintain the diversity of habitat.

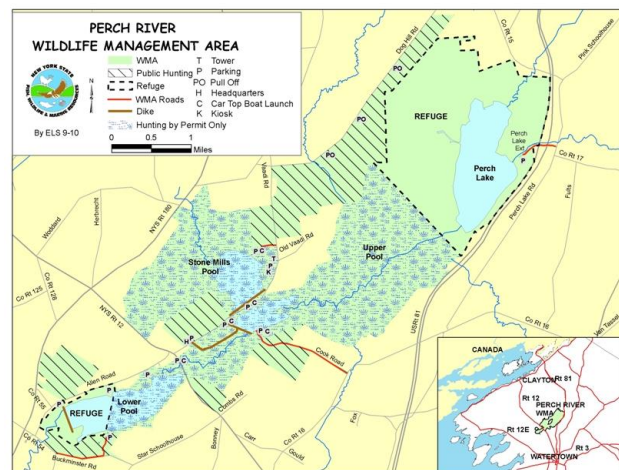


Figure 2: Map of the Perch River WMU and Cooke Road.

Actions Taken:

2012 Field Season

Two areas along Cooke Road totaling 5,500 square feet (0.126 acres) were treated for Swallow-

wort using a foliar application of glyphosate applied by SLELO's licensed pesticide applicator Mike Parks. Area No. 1 was approximately 1,500 sq. ft. and area No. 2 was approximately 4,000 sq. ft.

2013 Field Season

In 2013 boundary stakes were repainted and remarked. **At the request of NYS DEC Swallow-wort control at this site was transferred to Ducks Unlimited.** Ducks Unlimited reported that they treated 0.5 acres of Swallow-wort using Garlon 4. It was treated on July 16, 2013. The project was funded through Great Lakes Restoration Initiative funded by USFWS Atlantic Coast Joint Venture (project name: St. Lawrence Valley Habitat Protection and Enhancement: award number F12AP01070).

Chaumont Barrens:

Shallow soils, barren limestone bedrock and austere, windswept vegetation characterize the Alvar Barrens and Grasslands of Jefferson County -**Figure 3**. A globally imperiled habitat, the barrens support several rare plants and animals. At this site Swallow-wort is threatening the native habitat and a long-term effort to suppress Swallow-wort is under way.



Figure 3: Chaumont Alvar Barrens. Photo by Shelby Alaveckios

Actions Taken:

2012 Field Season

A total of 21 Swallow-wort sites have been treated using a foliar application of glyphosate.

2013 Field Season

19 sites have been treated totaling 44.42 acres.

2014 Field Season

20 sites were treated totaling 44.53 acres. Garlon 4 Ultra was used.

Black Pond WMA / El'Dorado Preserve:

This is a freshwater dune barrier system which includes preserve lands and wildlife management areas directly adjacent to El'Dorado Preserve **Figure 4**.



Figure 4: Foreground El'Dorado Preserve. Background entrance to Black Pond WMA. Photo by Carl Heilman II

Actions Taken:

2012 Field Season

Numerous Swallow-wort populations occur in this area of which **26 sites** have been treated with a foliar application of glyphosate. Several sites have been treated and work continues at this supersite. Limited secondary spraying also occurred in August.

2013 Field Season

In 2013 a total of 3.6 acres was treated on July 8th.

2014 Field Season

In 2014 a total of 3.6 acres was again treated on June 20th using Garlon 4 Ultra.

Three Mile Creek – OBI, Couch Easement:

This 413-acre property in northern Jefferson County, NY, is one of the few alvar habitats in North America. Several rare plant and animal species live in this unique and environmentally significant Alvar landscape. In 2006, Ontario Bays Initiative, Inc. acquired a conservation easement on the private property. The easement prohibits development of the property, which includes 5,000 feet of road frontage on the Three Mile Creek Road (County Route 5), **Figure 5**.

Actions Taken:**2012 Field Season**

A 5.6 acre site was treated with Garlon-4 Ultra.

2013 Field Season

A 5.6 acre site was treated with Garlon-4 Ultra.

2014 Field Season

A 5.6 acre site was treated with Garlon-4 Ultra.



Figure 5. Couch Easement Alvar along Co. Route 5.

Mud Bay:

Located along the south side of Mud Bay, there is a boat launch and access road owned by NYS DEC Region 6. While conducting aquatic surveillance, the SLELO field crew observed two areas infested with Swallow-wort.

2012 Actions Taken - Rapid Response: Upon observation, the SLELO field crew hand-pulled approximately 3 cubic yards of Swallow-wort plants. Another area located along the access road hosted a population of Swallow-wort that exceeded hand-pulling capacity. This site was reported to our licensed pesticide applicator who, upon obtaining permission from the landowner (DEC) applied a foliar application of Glyphosate to an area approximately **4,756 square feet**. A followup/secondary foliar application was needed towards the end of July.

2013 Actions Taken – A foliar application of Glyphosate was applied to approximately 4,700 square feet (.11 acres) equaling a 1% reduction from 2012.

2014 Actions Taken:

21 sites were treated totaling 9.78 acres using Garlon-4 Ultra.

Lakeview Wetland Complex:**2012 Field Season**

There were five Swallow-wort sites identified in iMap that prompted the SLELO field crew to conduct a site assessment of these sites in 2012. Surveillance of these sites revealed that no plants were present (perhaps a data entry error within iMap), however one single site revealed a population of plants that was subsequently treated (**rapid response**) with a foliar application of Glyphosate.

2013 Field Season

In 2013 an approximate 17,000 square foot (0.39 acres) site was treated with a foliar application of Glyphosate.

2014 Field Season

1.6 acres were treated using 1.5 % solution of Garlon-4 Ultra.

Renshaw Bay:

A small embayment (**Figure 6**) located along the eastern shore of Lake Ontario which borders sand dunes to the south was investigated, specifically at property owned by Tom McLeod. No plants were found at this site. A population of Swallow-wort plants was observed along the main access road leading to Renshaw Bay. Since this site is not a priority area for SLELO, no follow-up treatment is scheduled.

2014 Field Season

No treatment



Figure 6: Renshaw Bay

Southwick Beach:

On August 14th 2013 surveillance was conducted at this site. Only one plant was found and subsequently hand dug. No work was required in 2014.

Black River Trail:

2012 Field Season

On August 21st, following a report from one of SLELO's partners that Swallow-wort was present along a popular access trail leading to a section of Black River in Jefferson County, two new Swallow-wort populations were observed. Within two weeks a **Rapid Response** was completed – two distinct sites found, set up and sprayed with a foliar application of Glyphosate. First site sprayed using Turbo surfactant.

2013 Field Season

In 2013 two sites were treated with a foliar application of Glyphosate. Site #1 was 61,132 square feet (1.40 acres) in size. Site #2 was 10,121 square feet (0.23 acres) in size. Total acreage treated = 1.63 acres.

2014 Field Season

Two separate sites were treated on June 19, 2014 totaling 1.6 acres using Garlon-4 Ultra.

Deer Creek:

2014 Field Season

22 sites totaling 2.5 acres were treated using a 1.5% solution of Garlon-4 Ultra. Work was completed on June 30, 2014.

Limerick Cedars Preserve – Rapid Response:

In 2014 the SLELO PRISM received a report that swallow-wort was observed on the Limerick Cedars Preserve. After confirmation by the PRISM's early detection team, our rapid response team travelled to the site and initiated an initial rapid response treatment.

2014 Rapid Response

Two separate sites totaling 0.56 acres were treated using a 1.5% solution of Garlon-4 Ultra.

A total of 69.77 acres of Pale Swallow-wort (*Cynanchum rossicum*) was treated by the SLELO PRISM rapid response team in 2014.