

St. Lawrence Eastern Lake Ontario Partnership for Regional Invasive Species Management

Giant Hogweed

2018 Field Activities

SLELO – PRISM Giant Hogweed Control Program

April – May 2018

Report prepared by Mike Parks, Ed Miller and Rob Williams. June 2018

Introduction and Background:

During the first year of the SLELO program, partners at the New York State Department of Environmental Conservation, Division of Lands and Forests, joined forces with the SLELO partnership to collaborate on efforts to eradicate¹ Giant Hogweed populations from the region. This report reflects observations and efforts made during the 2018 field season with some reference to previous years.

Effects on People:

Giant hogweed produces a sap that contains photosensitizing furanocoumarins. When this sap contacts human skin in conjunction with sunlight, it can cause phytophotodermatitis - a serious skin inflammation which can cause third degree burns² and may cause blindness³. Each year people, including children, seek medical attention after coming into contact with this plant.

Biology of (*Heracleum mantegazzianum*):

During the first two years of growth, Giant Hogweed (GH), produces only basal leaves. During the third year of growth and once enough energy is stored within the root system, GH produces a fast-growing terminal leader (primary stalk) often referred to as a bolt which then produces flowering seed heads known as an umbel(s), capable of producing up to 20,000 seeds⁴. Given that the plant takes three years to reach maturity, eradication becomes possible during first and second generation plant growth.



Figure 1. Rapid Response Team member Ed Miller using root cut method on giant hogweed plant. Photo by Mike Parks.

¹ The biology of this plant allows for potential eradication.

² NYS DEC Health Hazards & Safety Instructions for Giant Hogweed.

³ NYS Department of Health.

⁴ NYS DEC Division of Lands and Forests

2018 Field Activities:

At the time of this report, the SLELO licensed applicator Mike Parks and apprentice Ed Miller (Figures 1 and 4) visited 44 active sites in two SLELO PRISM counties Jefferson County and Lewis County. Sites in Oneida County are managed by NYS DEC and sites in Oswego County are managed by the Conservation District. There are no reported giant hogweed plants in St. Lawrence County. Various treatment methods are used depending on the site characteristic's. These methods include herbicide application or manual root cut. In 2018 an effort was made to reduce herbicide usage by manually treating 94% of all active sites. To date **nineteen (19) sites within the SLELO PRISM region have now been eradicated.** A summary of 2018 efforts are presented in Table 1.

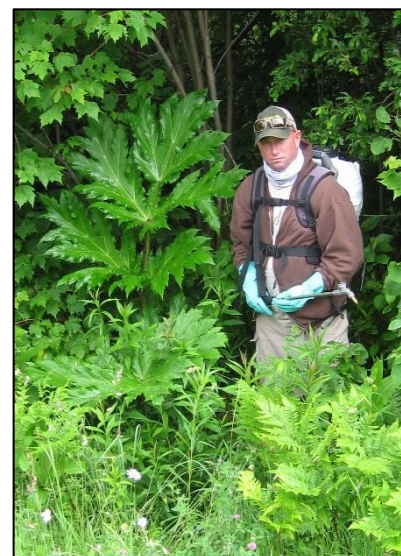


Figure 4: Apprentice Ed Miller applying a foliar application to GH plants.

Table 1. Summary of 2018 giant hogweed efforts.

Total number of sites visited in 2018	44	<i>percentage</i>
Total active sites (with plants)	32	<i>100%</i>
Total number of plants (653 seedlings, 566 juvenile, 202 adult)	1,439	
Sites with no permission granted	1	<i>not included</i>
Sites foliar application	2	<i>6%</i>
Site manually controlled, root cut	30	<i>94%</i>
Sites with no plants	12	

In 2018, 94% of all active sites were treated manually to reduce the use of herbicides.

Discussion:

It should be noted that numerical comparisons of sites treated can fluctuate from year to year. As some sites are eradicated, other new sites, are discovered and added to the list which creates a fluctuating dynamic in sites reported and treated. With continued treatment of GH sites across the SLELO Region and within New York, it is hoped that the number of sites showing no post treatment regrowth for a minimum of three consecutive years, will increase along with a subsequent reduction in overall treatment sites. Partners of the SLELO-PRISM will continue with treatment efforts towards this goal.