

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

Giant Hogweed

2017 Field Activities

SLELO – PRISM Giant Hogweed Control Program

May – June 2017



Figures 1,2,3) (*Heracleum mantegazzianum*) Flowering head (Umbel). Main stem showing identifying purple blotches and white hairs and characteristic seeds. Photos by Naja Kraus.

Report prepared by Mike Parks and Ed Miller, June 2017

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 2017 field season. In some instances, field data is compared to previous years to determine growth dynamics and efficacy.

Beginning in 2012, numerous Giant Hogweed sites were reported within the five counties representing the SLELO region. Control of these sites was distributed among regional partners possessing the capability to administer control measures. A breakdown of sites and treatments conducted by the SLELO Rapid Response Team are presented in **Table 1**.

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.

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.

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 a flowering seed head known as an umbel, which is capable of producing up to 20,000 seeds ⁴. Given that the plant takes three years to reach maturity, eradication becomes possible during first and second generation plant growth.

2017 Field Activities:

At the time of this report, the SLELO licensed applicator Mike Parks and apprentice Ed Miller (Figure 4) visited 48 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 Soil & Water Conservation District. Various treatment methods are used depending on the site. These methods include herbicide application or manual root cut. To date **fifteen (15) sites within the SLELO PRISM region have now been eradicated with an additional four sites currently being evaluated.** A summary of 2017 efforts are presented in Table 1. It should also be noted that (to date) no GH sites have been confirmed in St. Lawrence County.



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

To date fifteen (15) sites within the SLELO PRISM region have now been eradicated with an additional four (4) sites currently being evaluated

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 will increase along with a subsequent reduction in overall treatment sites. Partners of the SLELO-PRISM will continue with treatment efforts towards this goal.

⁴ NYS DEC Division of Lands and Forests

Table 1. Summary of 2017 giant hogweed efforts.

Total number of sites visited in 2017	48
Sites with no permission granted	2
Sites foliar application	13
Site manually controlled, root cut	14
Sites with no plants	19
Estimated area treated	93,772.54 sq. meters or 23.17 acres