Giant Hogweed

2014 Field Activities

SLELO – PRISM Giant Hogweed Control Program

May – June 2014



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

Report prepared by Michael Frank, Mike Parks and Rob Williams, June 2014

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 eradicate[1] Giant Hogweed populations from the region. This report reflects observations and efforts made during the 2014 field season. In some instances, field data is compared to previous years to determine growth dynamics and efficacy.

Beginning in 2012, a total of 134 Giant Hogweed sites were identified 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 treatment sites and the responsible partner are presented in Table 1.

Biology of (*Heracleum mantegazziamum*):

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 [2] .

[1] The biology of this plant allows for potential eradication.

[2] NYS DEC Division of Lands and Forests

Given that the plant takes three years to reach maturity, eradication becomes possible during first and second generation plant growth.

2014 Field Activities:

At the time of this report, the SLELO licensed applicator Mike Parks and Field Assistant Michael Frank (Figure 4) treated 37 sites. Sites treated in Oneida County are estimated and sites within Oswego County were reported by our partners at the Oswego SWCD. Seven sites treated by SLELO's licensed applicator showed no regrowth over a three year period including six sites in Oneida and five sites in Oswego. Based on 2014 field data, **fourteen (14) sites within the SLELO PRISM region have now been eradicated** (Table 1). 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 (Table 2). It should also be noted that (to date) no GH sites have been confirmed in St. Lawrence County**.** The PRISM did receive a report of GH in 2014 which will be confirmed by our partners with the New York Power Authority.

Figure 4: Field Assistant Michael Frank applying a foliar application to GH plants.

Table 1, shows a comparison of treatment sites over a three year period along with eradicated sites which are considered to have no regrowth for three or more consecutive years.

County within SLELO PRISM	Partner Agency	**Eradicated Sites**	Sites Treated in 2012	Sites Treated In 2013	Sites Treated in 2014	Change from 2013 to 2014
St. Lawrence	SLELO	**0**	0	0	0	0
Jefferson	SLELO	**0**	6	4	8	+4
Lewis	SLELO	**7**	36	27	37	+10 new sites
Oneida	DEC	**6**	10	69	69	0
Oswego	SWCD	**1**-an additional 5 sites have reported no regrowth for two consecutive years.	5	35	41	+6
Totals		**14**	57 sites	135 sites	155	= 20 new sites

Discussion:

With continued treatment of GH sites across the SLELO Region and within central 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.

As previously mentioned, 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. It is also helpful to track sites that have consistantly fewer pants over the treatment period. Table 2, depicts an all-inclusive dynamic comparison of sites and status. Note that this table excludes data from Oswego and Oneida Counties as these data have yet to be reported.

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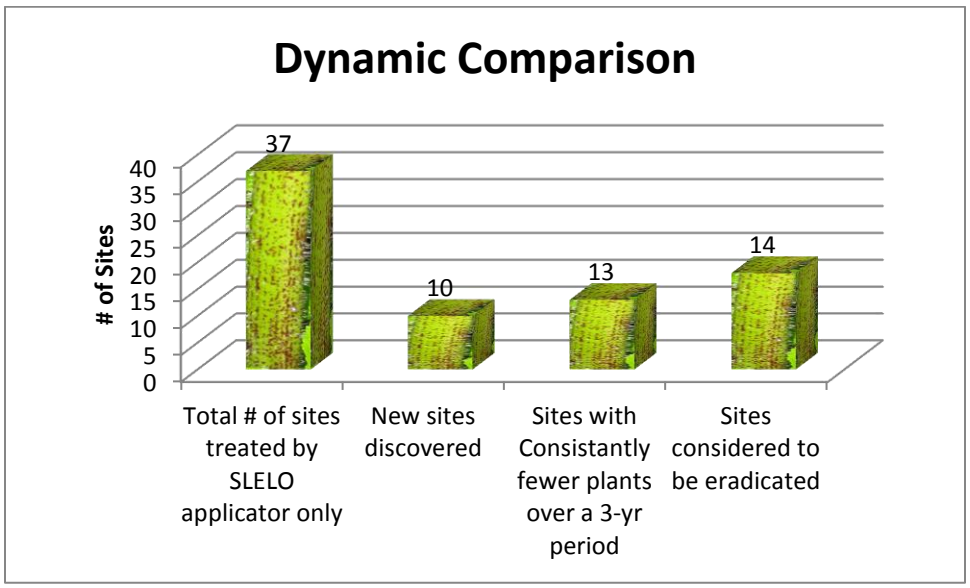

Table 3, showing a summary of field data over the past three years. Data from SLELO applicator only.

2012-2014 Giant Hogweed Summary - SLELO Applicator Only

Site #	2012 # plants	2013 # plants	2014 # plants
13	23	1	0
15	500	500	500
16	50	33	9
17	500	33	51
20	100	10	9
21	500	45	249
22	DEC	DEC	DEC
23	30	30	39
408	50	20	12
419	0	0	0

420	300	80	93
515	17	5	6
556	2	0	0
641	500	100	150
644	0	0	0
651	20	20	4
655	3	16	6
656	0	0	0
658	0	0	0
659	0	0	0
672	6	0	2
805	28	8	7
837	85	40	22
882	100	16	13
883	50	9	9
885	0	0	0
886	15	0	1
930	44	4	6
938	0	0	0
1071	0	0	95
1203	20	0	1
1204	101	8	23
1205	80	20	21
1206	300	13	6
1209	24	8	3
1210	80	6	14
1212	0	0	0
1226	250	80	48
1304	0	0	0
1305	896	15	74
1306	0	3	0
1408	1	2	25
1543	30	4	2
1595	8	4	3
1596	6	3	6
1597	12	17	0
1598	n/a	4	6
1600	6146	150	570
1601	n/a	2	0
1836	n/a	2	0
1847	n/a	2	1
A-14	n/a	n/a	5
B-14			120
Totals	**10,694**	**1,313**	**2,121**

53 total sites

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