2016 Field Survey

Tug Hill Invasive Species Prevention Zone (ISPZ)

SLELO-PRISM Early Detection Surveillance

August 9th, 10th, 11th, and 15th, 2016

Report prepared by Ashley Gingeleski and Ben Hansknecht on August 26th, 2016

Figure 1. Picture of Tug Hill ISPZ at Site 085. Photo by Ashley Gingeleski.

Introduction and Background[1]

New York State's Tug Hill Region is a 2,100 square mile area situated between Eastern Lake Ontario and the Black River Valley, and includes lands in Jefferson, Lewis, Oneida and Oswego counties. The largely undeveloped area includes important wetland and forested habitats, as well as an abundance of ponds and lakes. Numerous streams and rivers have their headwaters located within the Tug Hill, and Tug Hill's watersheds are important sources of clean water for Oneida Lake and Lake Ontario in addition to themselves providing high-quality aquatic and riparian habitats (**Figure 1**).

Within the larger Tug Hill region lies the Tug Hill Core Forest, comprised of nearly 150,000 acres of nearly contiguous forested lands. This large forested tract provides a variety of recreational opportunities, and managed forestry operations on both public and privately held lands, provides employment and helps support the area's rural economy. The core forest also provides valuable habitat for a variety of game species, as well as 29 rare animals and 70 rare plant species.

The Tug Hill Core Forest remains an area dominated by native species with relatively little impacts from many invasive species. Because of this, an Invasive Species Prevention Zone (ISPZ) was established to monitor and prevent the establishment of high-priority invasive species within the Tug Hill Core Forest (**Figure 2**).

Figure 2. Tug Hill ISPZ outlined in red and surrounding areas.

[1] Introduction and Background taken verbatim from the 2012 SLELO-PRISM Tug Hill ISPZ report, by Greg Chapman and Mike McHale; http://www.sleloinvasives.org/wp-content/uploads/2012/07/Tug-Hill-I-S-P-Z-Field-Report-2012.pdf

Survey Methods and Observations

In August of 2016, the SLELO Early Detection team surveyed the Tug Hill Invasive Species Prevention Zone (ISPZ) for terrestrial invasive species. This was accomplished by means of visual observations, which involves the surveying of one's aquatic and terrestrial surroundings for noticeable, defining attributes of target and watch-list species. Areas where this survey method was employed in 2016 are known as HPAs, or Highly Probable Areas (**Figure 3**). HPAs are environments where invasive species are likely to be found as a result of certain characteristics, including high rates of human activity. Areas within Tug Hill chosen for this survey included logging platforms, ATV trail access sites, and fishing access sites. All HPAs and other points of interest were marked using a Garmin handheld GPSMAP® 62.

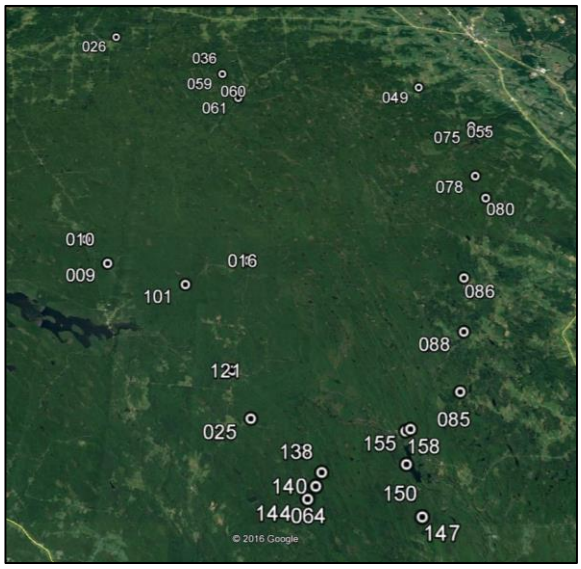

Figure 3. Map of Tug Hill Highly Probable Areas (HPAs).

No Prevention "Watch-list" species were found in the 2016 survey.

The following target list species were observed during the 2016 field survey of the Tug Hill ISPZ: Japanese knotweed and phragmites. Japanese knotweed was seen at HPAs 26 and 121 (**Figure 4**). Phragmites was seen at HPA 61 (**Figure 5**).

Figures 4 - 6. (Left to right) Japanese knotweed; phragmites; Eurasian bush honeysuckle. Photos by Ashley Gingeleski.

In addition, Eurasian bush honeysuckle, a general species of concern, was determined to be in the priority conservation area. Eurasian bush honeysuckle was seen at HPAs 88 and 121 (**Figure 6**).

During the 2014 survey of the Tug Hill ISPZ, the Early Detection team recorded the presence of glossy buckthorn and phragmites at a majority of the HPA locations forming the perimeter of the Invasive Species Prevention Zone. These results contrasted greatly with the findings of this 2016 survey, in which no glossy buckthorn was observed and only one location was found to have phragmites. Regrettably, the 2014 field report lacked accompanying photographs of their observations to help with the confirmation of their sightings for future readers.[2]

Additionally, the 2016 survey did not find any giant hogweed to be present, but this discrepancy with the 2014 report is more likely to be an indicator of treatment success by the Rapid Response team in the early spring of 2016 than a sign of misidentification by the 2014 Early Detection team. This is further corroborated by the picture of hogweed shown in **Figure 4** of the 2014 report.

Table 1. Highly Probable Areas (HPAs) within the Tug Hill ISPZ and results of visual observations.

Priority Conservation Area: **Tug Hill Invasive Species Prevention Zone (ISPZ)**					
HPA	Description	Latitude	Longitude	Invasives	Notes
009	North Branch Salmon River Public Fishing Access	43.56970	-75.82695		Lots of cow parsnip, checked for crayfish
010	Public Fishing Access	43.58751	-75.84785		Cow parsnip, checked for crayfish
016	Two Intersecting Dirt Roads on Corner of Main Road	43.57101	-75.71210		No PH
025	Snowplow Turnaround and Trailhead	43.46912	-75.70787		No PH
026	Jefferson County Forest Logging Platform/Parking Area	43.77444	-75.85076	JK	Cow parsnip
036	Lewis County Logging Platform	43.75070	-75.75495		Nothing
049	Side of Road	43.72037	-75.55274		Cow parsnip, no giant hogweed
055	Stand of conifers	43.67731	-75.49802		Nothing
059	Parking, ATV Trailhead, and "No Fish Pond" Access	43.73374	-75.74126		No PH
060	Parking Area	43.71614	-75.72524		
061	Parking Area in Sear Pond Forest	43.70939	-75.72497	PH	
064	Bridge on Hanifan Rd.	43.43259	-75.66260		
075	Whetstone Reservoir Dam and Boat Launch	43.68292	-75.50970		No PH
078	Logging Platform	43.63765	-75.51490		No PH
080	Area with Many Ash Trees	43.61959	-75.50930		
085	Side of Road	43.48499	-75.55481		
086	Big Alder Creek Public Fishing Access	43.55904	-75.53874		No PH or BT
088	East Branch Fish Creek Public Fishing Access	43.52236	-75.54545	BH	No PH or BT
101	Snowplow Turnaround and Trailhead	43.55413	-75.76201		No PH
121	East Branch Salmon River Public Fishing Access	43.49802	-75.72250	JK, BH	Crayfish check
138	Big Brook State Forest Logging Platform	43.45109	-75.67082		
140	Campsite	43.43984	-75.65820		
144	Former Campsite	43.42600	-75.66839		
147	Campsite and Access to Small Lake	43.41716	-75.59201	N/A	Blocked by a locked gate
150	Fish Creek Reservoir Public Access	43.44420	-75.59919		
155	Fish Creek Public Fishing Access	43.46356	-75.59393		
158	Fish Creek Public Fishing Access	43.46240	-75.59746		

Key: PH = Phragmites JK = Japanese knotweed

BH = Eurasian bush honeysuckle BT = Glossy buckthorn

[2] The 2014 SLELO-PRISM Tug Hill ISPZ report can be found through the SLELO-PRISM's website or directly via the following hyperlink: http://www.sleloinvasives.org/wp-content/uploads/2014/04/Tug-Hill-ISPZ-Report-2014-PDF.pdf