

Little John Wildlife Management Area SLELO-PRISM Early Detection Surveillance

June 24-25, July 8-9, 2013



Figure 1: Panoramic view of Little John WMA

Report prepared by Logan West and Mike McHale, 7/16/2013

Introduction and Background

The Little John Wildlife Management Area (WMA) encompasses roughly 8,000 acres of pristine forest and wetland habitats. It is found on the northwest slope of the Tug Hill Plateau between Syracuse and Watertown just east of Highway 81 in northern Oswego and southern Jefferson Counties (Figures 2 and 3).

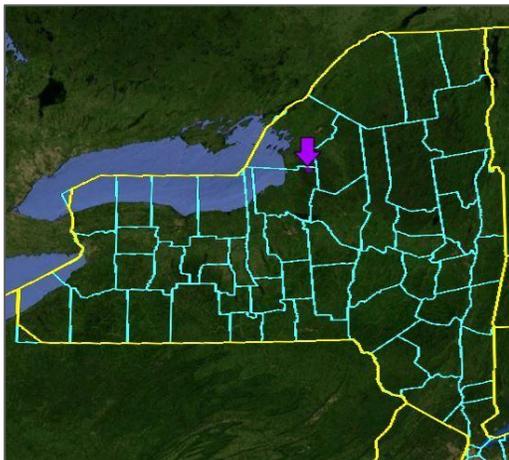


Figure 2: Location of Little John WMA in New York State

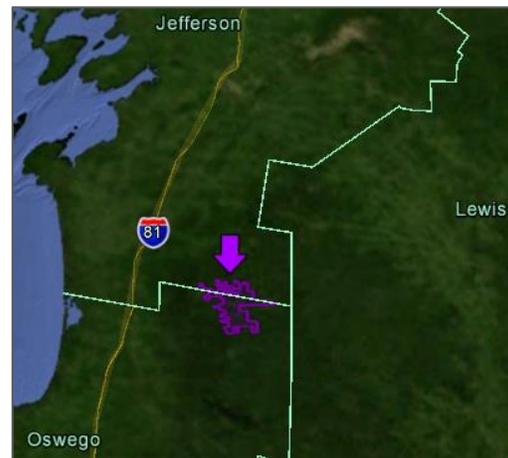


Figure 3: Close up of Little John WMA

Much of the Little John WMA is forested with numerous, fragmented swampy areas formed in depressions resulting from the glacially influenced landscape. Past logging and farming practices have changed the forest composition from native hemlock and spruce stands in some areas to hard and softwood deciduous tree species mixed with hemlock and spruce trees throughout the forest. Less than 200 acres is made up of open grasslands and fields.

Survey Methods and Objectives

In preparation for establishing and conducting Early Detection and Rapid Response surveillance targeting invasive species, a map of Little John WMA with 10 High Probability

Areas (HPA's) was created (Figure 4). HPA's are areas where human activities or site conditions increase the probability that invasive species will be detected and/or become established. Specific HPA locations are presented in (Table 1). A roadside assessment looking for invasive species was also performed while driving to HPA sites in the WMA.

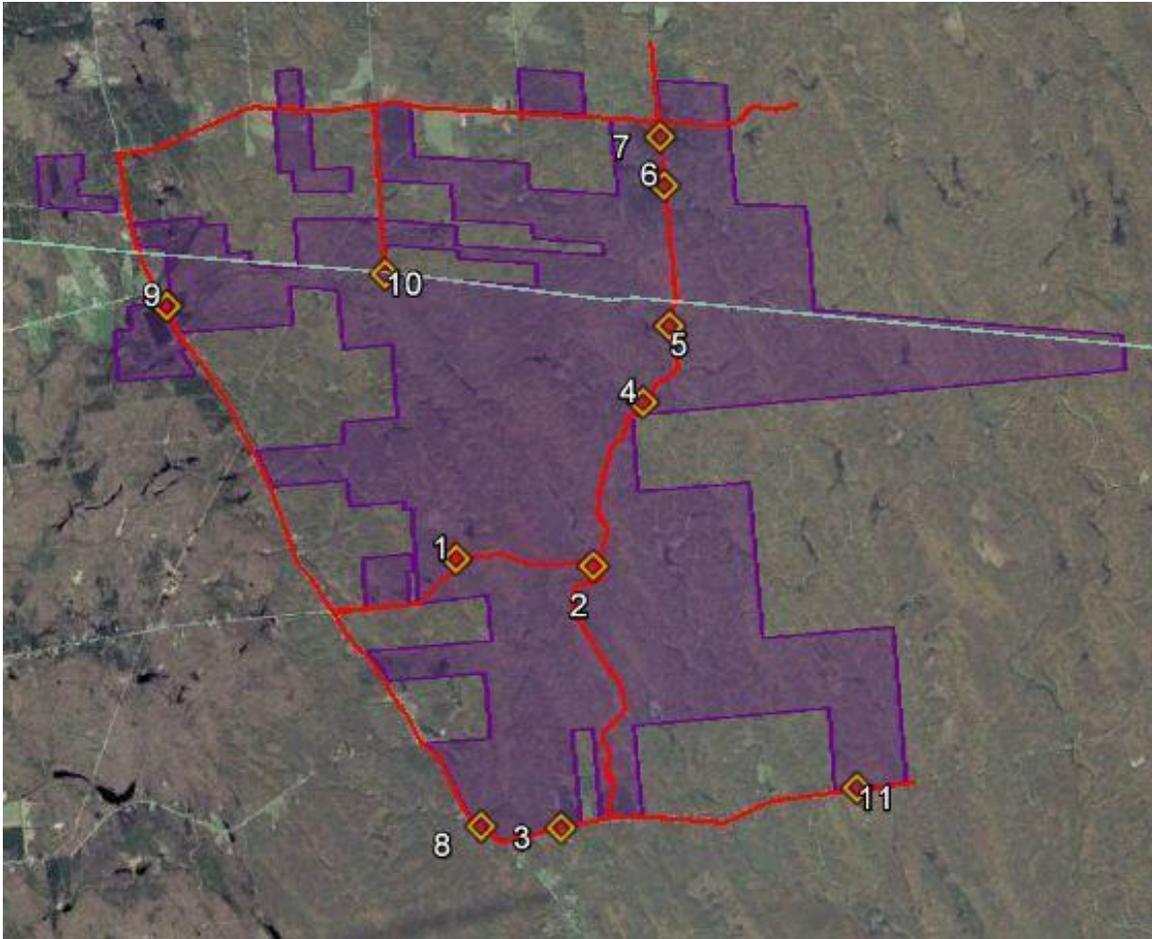


Figure 4: HPA's and survey rout in Little John WMA

Table 1: HPA land use and Latitude/Longitude coordinates

HPA	Land Use	Latitude	Longitude
1	Logged area	43.671044	-75.894987
2	ATV disturbed area	43.670374	-75.877012
3	Parking area	43.645502	-75.881262
4	Parking area	43.685904	-75.870473
5	Parking area	43.693126	-75.866999
6	Parking area	43.706438	-75.867692
7	Parking area	43.711041	-75.868225
8	Parking area	43.645642	-75.891745
9	Parking area and trailhead	43.69507	-75.932989
10	Car turnaround	43.649306	-75.842518
11	Car turnaround and trailhead	43.698087	-75.904299

Snowmobile trails were surveyed on foot for possible invasive species infestations that could have been introduced by means of trail use or maintenance of the trail system (Figure 5). SLELO field technicians were given GPS coordinates of locations where *Phragmites* (*Phragmites spp.*) had previously been identified in the Little John WMA. These coordinates were then used by the crew to verify that the phragmites exists in these locations before an herbicide specialist is sent to these sites for treatment. On June 24th and 25th, 2013, SLELO technicians surveyed Little John WMA via automobile, visiting all HPA's. On July 8th and 9th, the technicians revisited the area and completed the snowmobile trail assessment after hiking approximately 11 miles of trail.

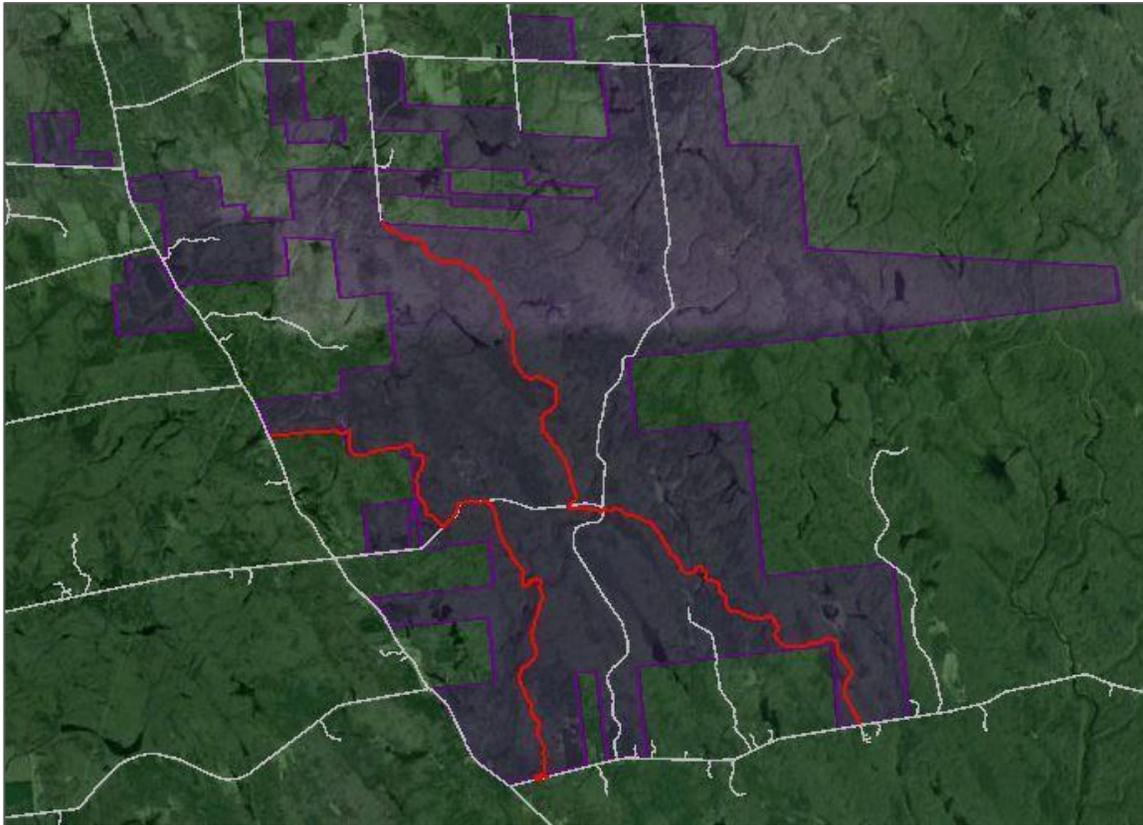


Figure 5: Snowmobile trails that were surveyed by foot

Observations

Upon completing the HPA, roadside and trail assessments, there were no ‘Prevention “Watch-List” Species’ observed by the crew in the WMA. Phragmites, which is a ‘Target Management Species,’ was spotted in several areas by SLELO-PRISM technicians and partners (Figure 6). Specific locations were recorded with a GPS unit and are presented in (Table 2).

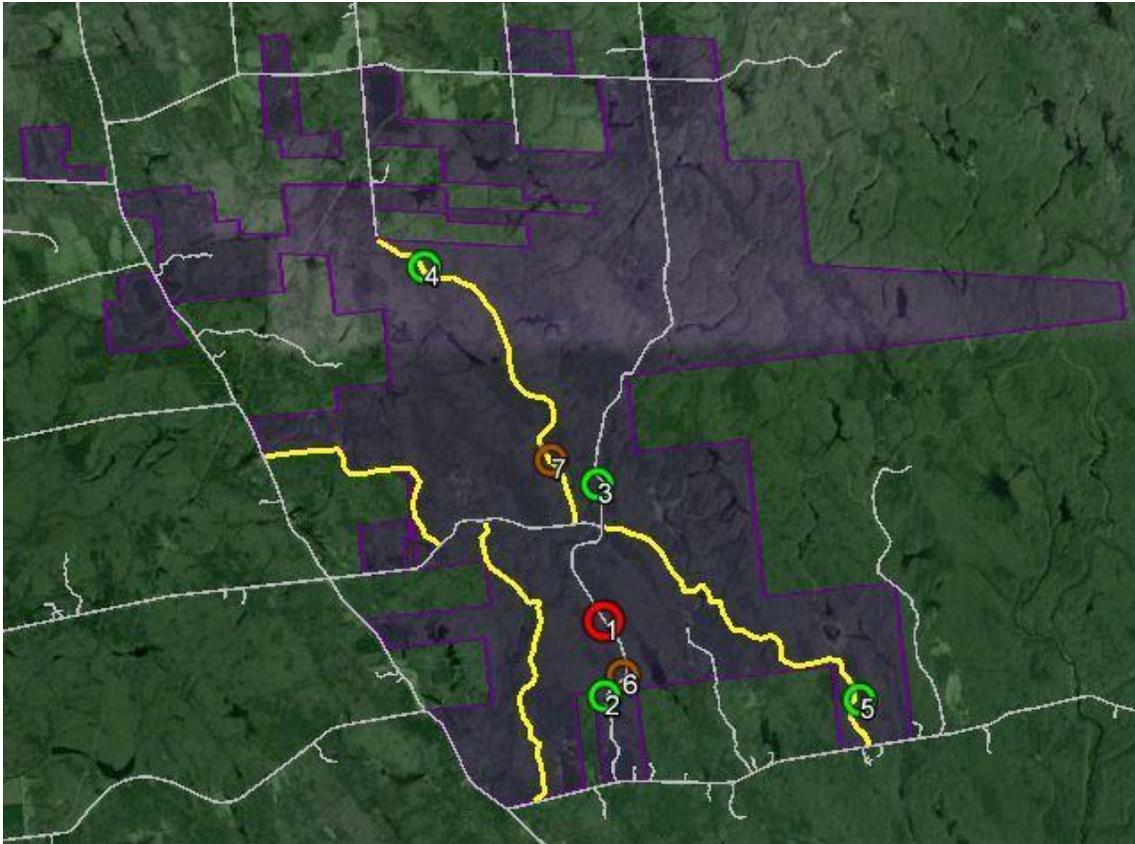


Figure 6: Phragmites site locations in Little John WMA

Table 2: Point data and status for phragmites points

Point	Latitude	Longitude	Status
1	43.661565	-75.875721	new site
2	43.654483	-75.87585	confirmed site
3	43.67445	-75.876133	confirmed site
4	43.695266	-75.898017	confirmed site
5	43.653603	-75.842755	confirmed site
6	43.656416	-75.873412	unconfirmed site
7	43.676816	-75.882121	unconfirmed site

There were very few signs that the trails had recently been used for ATV use, which is prohibited; however, there appeared to have been at least one four-wheeler on the easternmost trail and a single dirt bike track on the western trail, and no signs of the trails being used for hiking. Other than phragmites, there were no invasive species on the SLELO-PRISM ‘General Species of Concern’ list detected by the crew.

Two species found that are worth noting were Coltsfoot (*Tussilago farfara*) and Periwinkle (*Vinca spp.*). Although these species are not on the SLELO-PRISM ‘General Species of Concern’ list, they are non-native and do compete for resources with native species and take advantage of disturbed areas creating dense mats that impede biodiversity.

Coltsfoot was found in several locations along roadsides and in parking areas (Figure 7). A visual observation of Coltsfoot is presented in (Figure 8).

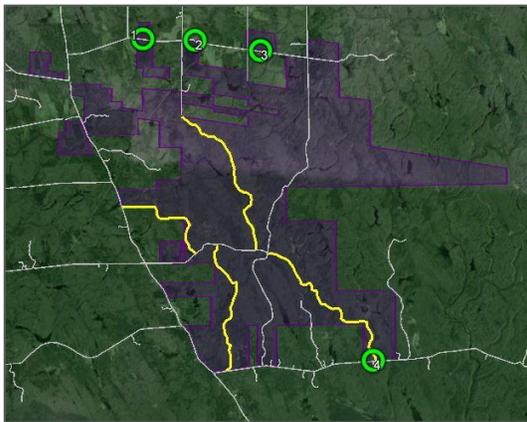


Figure 7: Distribution of Coltsfoot



Figure 8: Visual observation of Coltsfoot

Periwinkle was discovered in a dense mat on both sides of the road in one area of the forest (Figures 9 and 10).

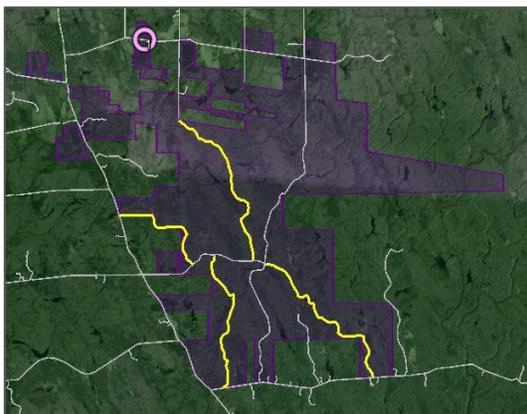


Figure 9: Location of Periwinkle



Figure 10: Dense mat of Periwinkle

Two populations of **Japanese knotweed** (*Polygonum cuspidatum*) were found along Little John Drive (Figure 11 and 12), however it was not found on any WMA land. Since the population is so close to the WMA land, public outreach efforts are being made to involve a local club that has adopted that highway to treat the Japanese knotweed before it spreads further. Another population was found further north (MAP). This population is small and on private land.

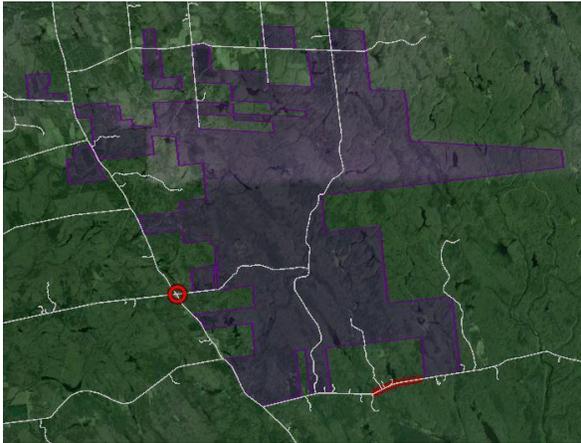


Figure 11: Distribution of Japanese Knotweed at Little John WMA

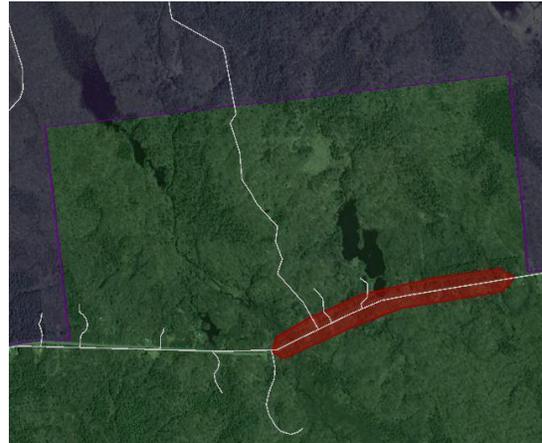


Figure 12: Close up of the population distribution of Japanese knotweed on Little John Drive

Rapid Response

The SLELO PRISM licensed pesticide applicator is collaborating with DEC representatives to treat the phragmites this season in late summer to early fall, when the plants have developed seed heads. The herbicide that will be used for treatment of the phragmites is AquaMaster®, (active ingredient is glyphosate). This aquatic herbicide is non-selective and is formulated for safe use around bodies of water. It is strongly adsorbed by particles in the soil, which prevent the herbicide from leaching or from affecting non-target plants. Glyphosate has not been shown to accumulate in mammals, fish, or birds.¹

¹ Referenced from a US Customs and Border Protection herbicide information pdf, found at: http://cbp.gov/linkhandler/cgov/border_security/border_patrol/border_patrol_sectors/laredo_sector_tx/carrizo_removal/about/herbicides/epa_rik_assess.ctt/epa_rik_assess.pdf

SLELO-PRISM

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