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

Tug Hill Invasive Species Prevention Zone (ISPZ) Survey

SLELO-PRISM

August 15, 16, 17 & 20, 2012

Figure 1: Panoramic view of an abandoned home and agricultural land along the northwestern portion of the Tug Hill ISPZ boundary. Photo by Mike McHale.

Report drafted by Greg Chapman and Mike McHale, 8/27/12.

Introduction and Background

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.

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.[1]

Figure 2: The boundary of the Tug Hill Invasive Species Prevention Zone (in red) within central/northern New York.

[1]Tug Hill demographic and ecological information summarized from the "Tug Hill Forest Owner's Handbook," published in 2004 by The Nature Conservancy's Northern New York Project Office.

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 (see Figure 2 on the previous page, and full detailed map under "Maps and Data Tables" at the end of the report) to monitor and prevent the establishment of high-priority invasive species within the Tug Hill Core Forest.

Figure 3: SLELO-PRISM Field Crew Member Mike McHale searches for invasive species occurrences at a Public Fishing Access point along the Tug Hill ISPZ perimeter. Photo by Greg Chapman.

Survey Methods and Objectives

A visual survey of the Tug Hill Invasive Species Prevention Zone perimeter was conducted by SLELO-PRISM Field Crew Members Mike McHale and Greg Chapman assisted by Rob Williams, PRISM Coordinator. The survey aimed to detect any occurrences of SLELO-PRISM Prevention Species[2], specifically Emerald Ash Borer (EAB) (*Agrilus planipennis*), Hemlock Wooly Adelgid (HWA) (*Adelges tsugae*), Asian Long-horned Beetle (*Anoplophora glabripennis*), Mile-A-Minute Vine (*Persicaria perfoliata*) and Kudzu (*Pueraria montana* var. *lobata*), none of which have been previously noted to occur within the Tug Hill Region. Occurrences of SLELO-PRISM Target Management Species[2] were also noted. All invasive species occurrences were reported to the iMapInvasives invasive species database.

The survey also served to identify High-Probability Areas (HPAs) along the ISPZ perimeter. HPAs were identified as those areas where the introduction of invasive species would be most likely to occur, and included areas of high public use such as parking areas, public fishing access points and trailheads as well as disturbed areas such as logging landings. All HPAs were closely inspected for invasive species occurrences. A "windshield survey" for invasive species was also conducted while driving between HPAs, with occasional stops for spot checks at areas with high concentrations of Ash trees (host for EAB) and Hemlocks (host for HWA).

A portion of the southern boundary was modified during the course of the survey due to exceedingly rough road conditions on a portion of Sullivan Road. While travelling east along the southern boundary, instead of turning left on to Sullivan Road, the route was changed to continue straight on Hanifan Road, followed by a left on Gubbins/46 Road, and then a left onto Sullivan Road, at which point the perimeter continued as originally planned.

Targeted Locations

A total of **21 HPA's** were identified along the Tug Hill ISPZ perimeter. See the HPA map and table on the following pages for locations and details.

[2]For a list of targeted and prevention species, see the SLELO-PRISM 2012–2016 Strategic Plan, pp. 36 & 37.

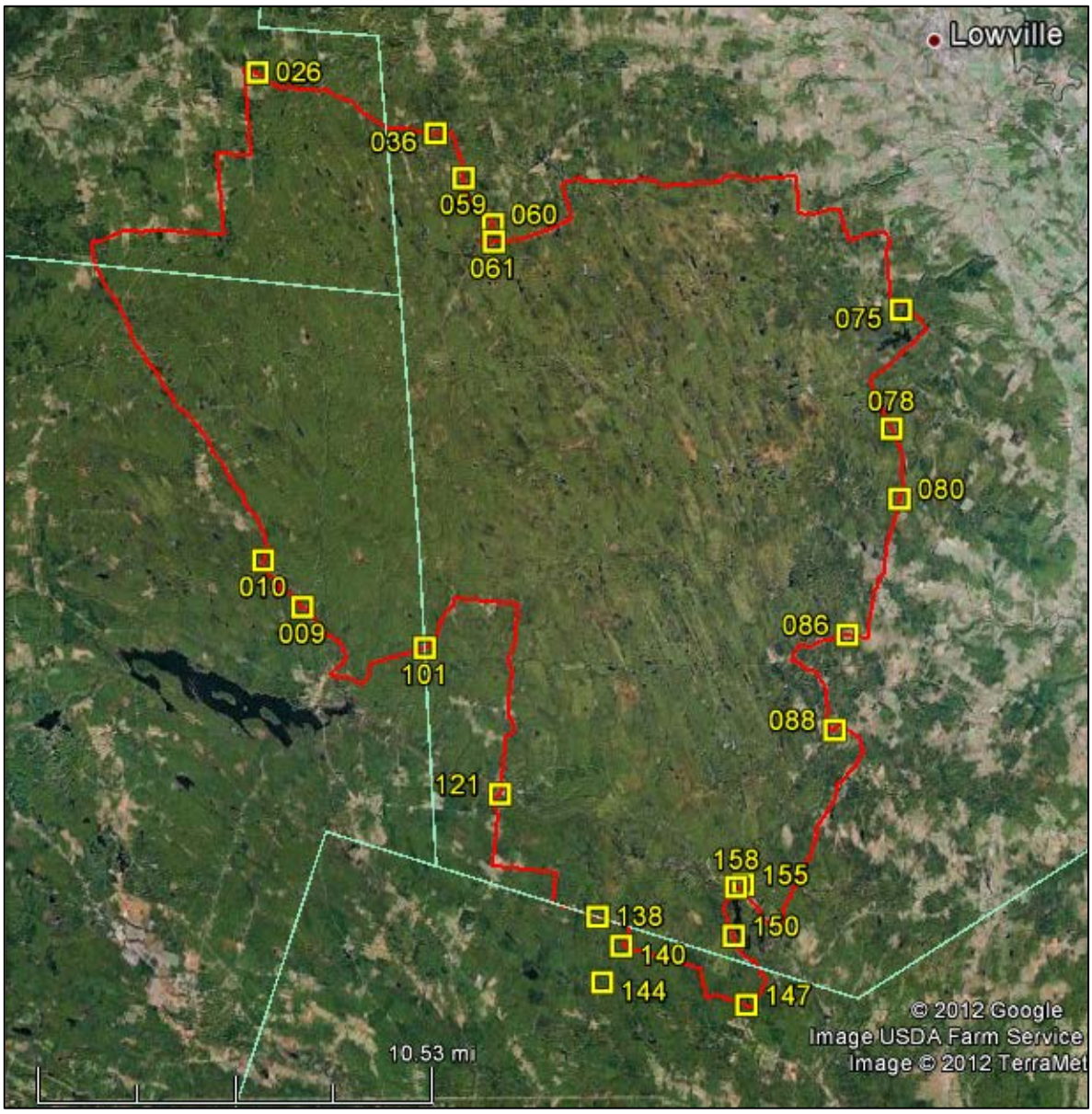


Figure 4: Tug Hill HPA locations. See table below and on following page for details.

Table 1: HPA coordinates and notes for Tug Hill ISPZ perimeter survey.

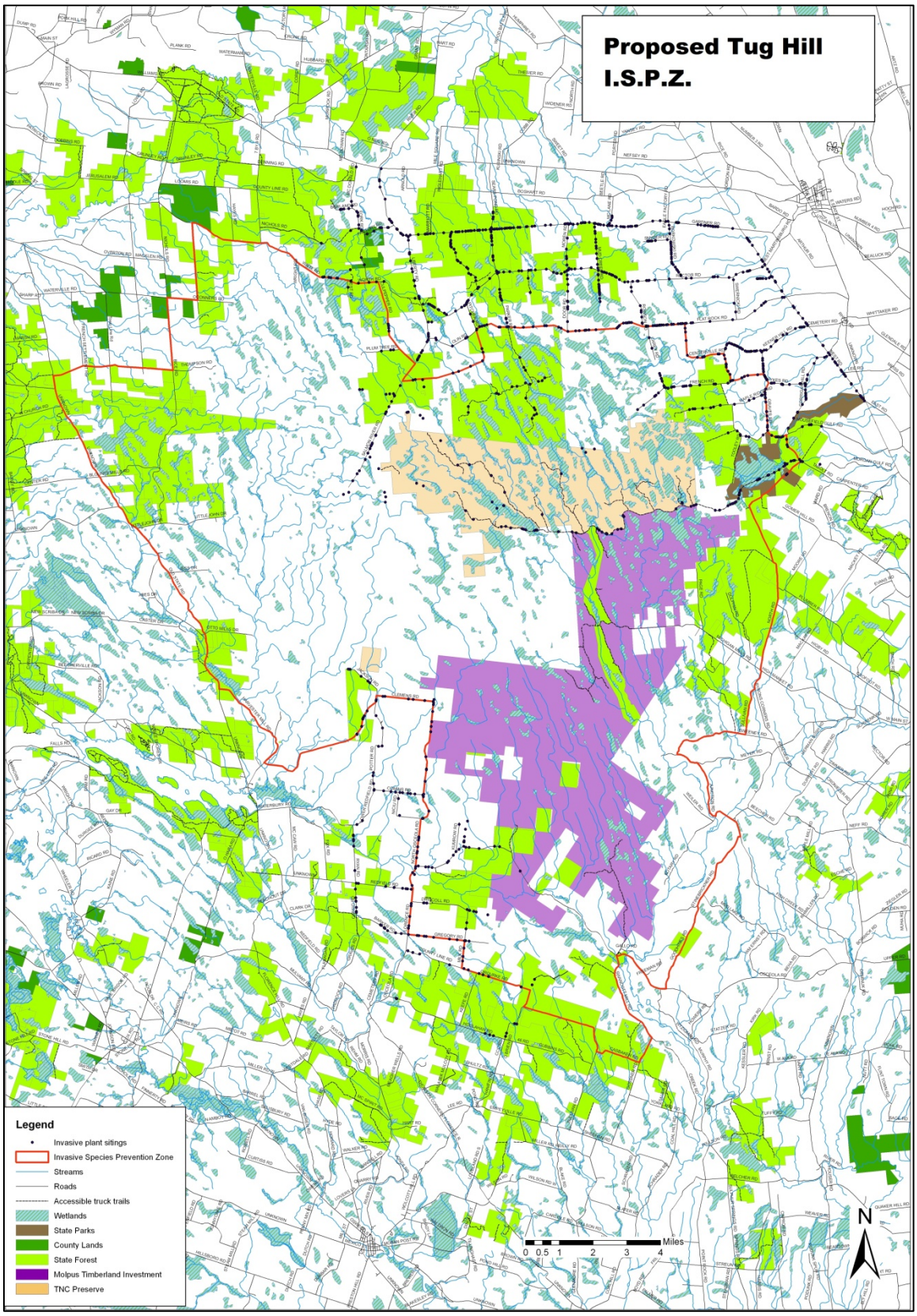
HPA ID	Lat.	Long.	Notes
009	43.56965672	-75.8269054	Public Fishing Access
010	43.58750783	-75.84784918	Public Fishing Access
026	43.77447196	-75.8509276	Jefferson County Forest logging platform/parking area
036	43.75093558	-75.75600665	Lewis County logging platform
059	43.73373541	-75.74112425	Parking, ATV trailhead and "No Fish Pond" access
060	43.71605974	-75.72542234	Parking area (ATV and Snowmobile)
061	43.70940618	-75.72497785	Parking area in Sears Pond State Forest
075	43.68302624	-75.50978892	Whetstone Reservoir Dam and Boat Launch
078	43.63766204	-75.51487195	Logging platform
080	43.61086065	-75.51076926	Area with many ash trees
086	43.55899075	-75.53849132	Public Fishing Access
088	43.52258069	-75.545382	Public Fishing Access
101	43.5540715	-75.76188496	Snowplow turnaround
121	43.49798743	-75.7224119	Public Fishing Access
138	43.4510885	-75.67082481	Big Brook State Forest logging platform
140	43.43989447	-75.65837483	Campsite
144	43.42590616	-75.66845918	Campsite
147	43.41735075	-75.59228973	Campsite & Access to small lake
150	43.44380479	-75.59883574	Public Fishing Access Parking Lot (Fish Creek Reservoir)
155	43.4634389	-75.59393786	Public Fishing Access (Fish Creek)
158	43.46248764	-75.59763537	Public Fishing Access (Fish Creek)

Observations

No occurrences of SLELO-PRISM Prevention Species were detected during the course of the ISPZ perimeter survey. A total of 82 observations were recorded for Target Management Species (Phragmites, Japanese Knotweed, Purple Loosestrife and Glossy Buckthorn), as well as two occurrences of Himalayan Balsam (*Impatiens glandulifera*), a species of concern within the Tug Hill Region. See maps and data table in the following section for information about these occurrences.

Figure 5: Japanese Knotweed observed growing at Jefferson County Forest Parking Area (HPA-026).

Data Tables and Maps



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Rob Williams, Coordinator

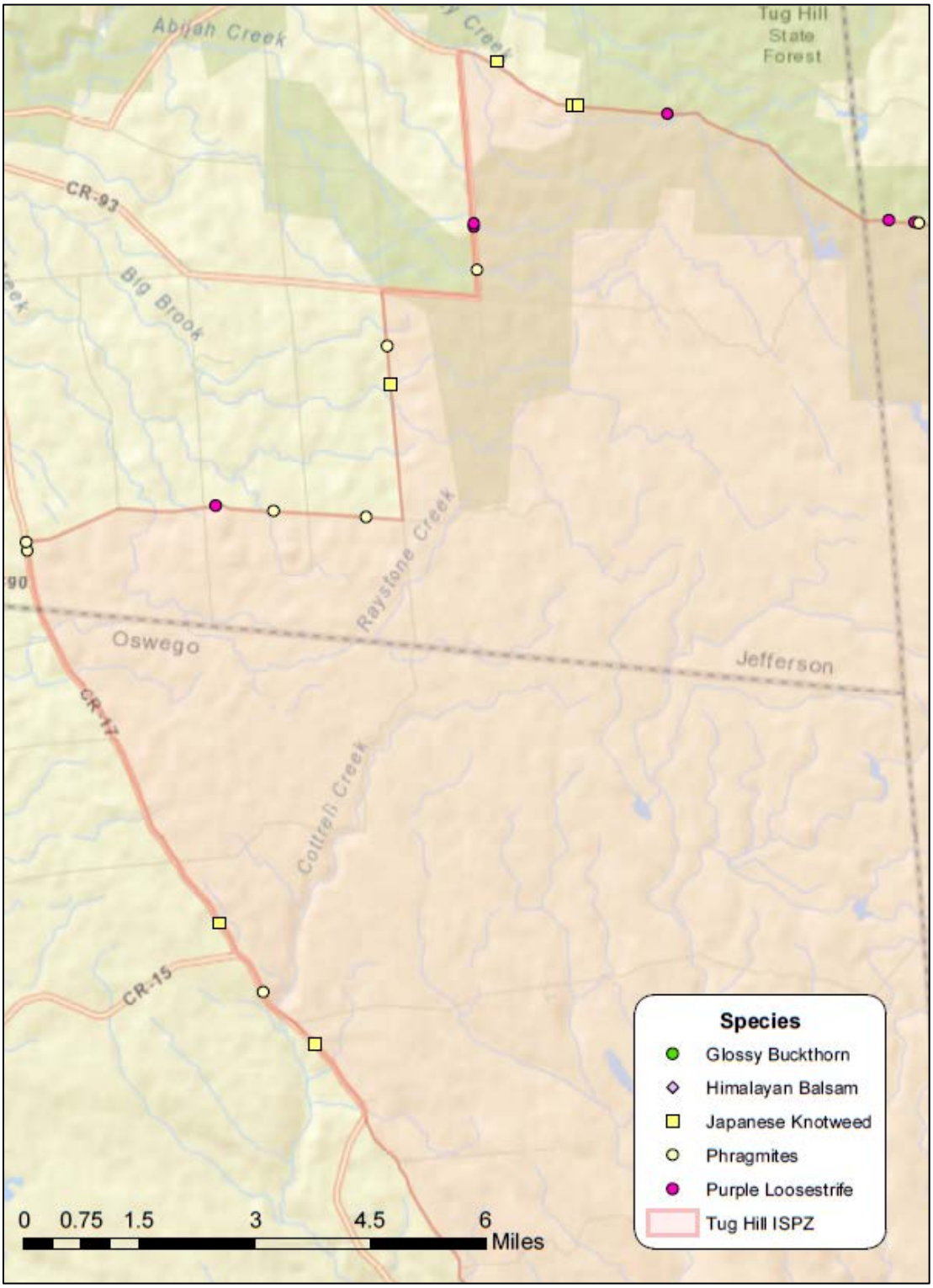

Figure 6: Invasive species observations along northwestern portion of Tug Hill ISPZ perimeter.

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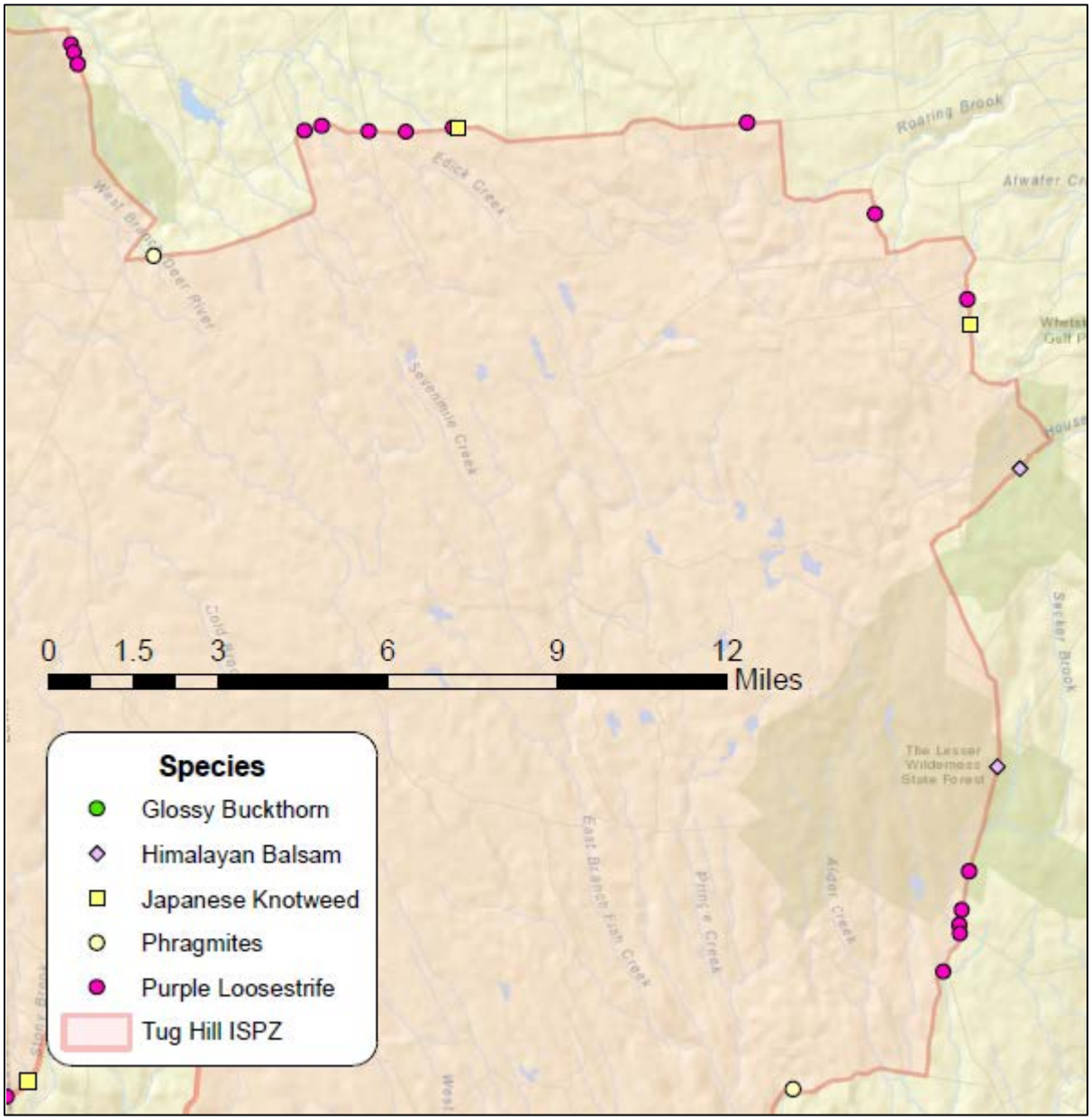

Figure 7: Invasive species observations along northeastern portion of Tug Hill ISPZ perimeter.

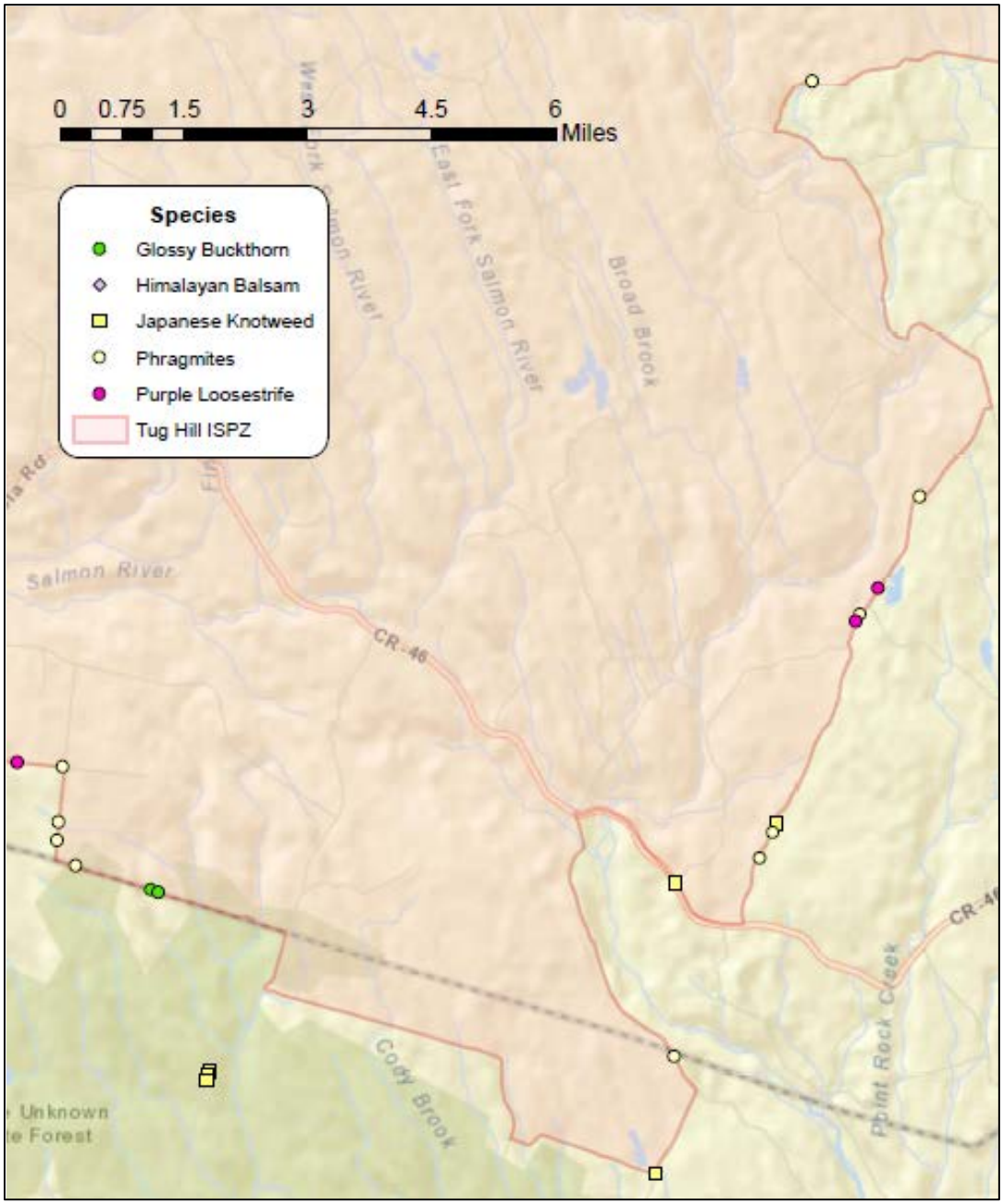

Figure 8: Invasive species observations along southeastern portion of Tug Hill ISPZ perimeter.

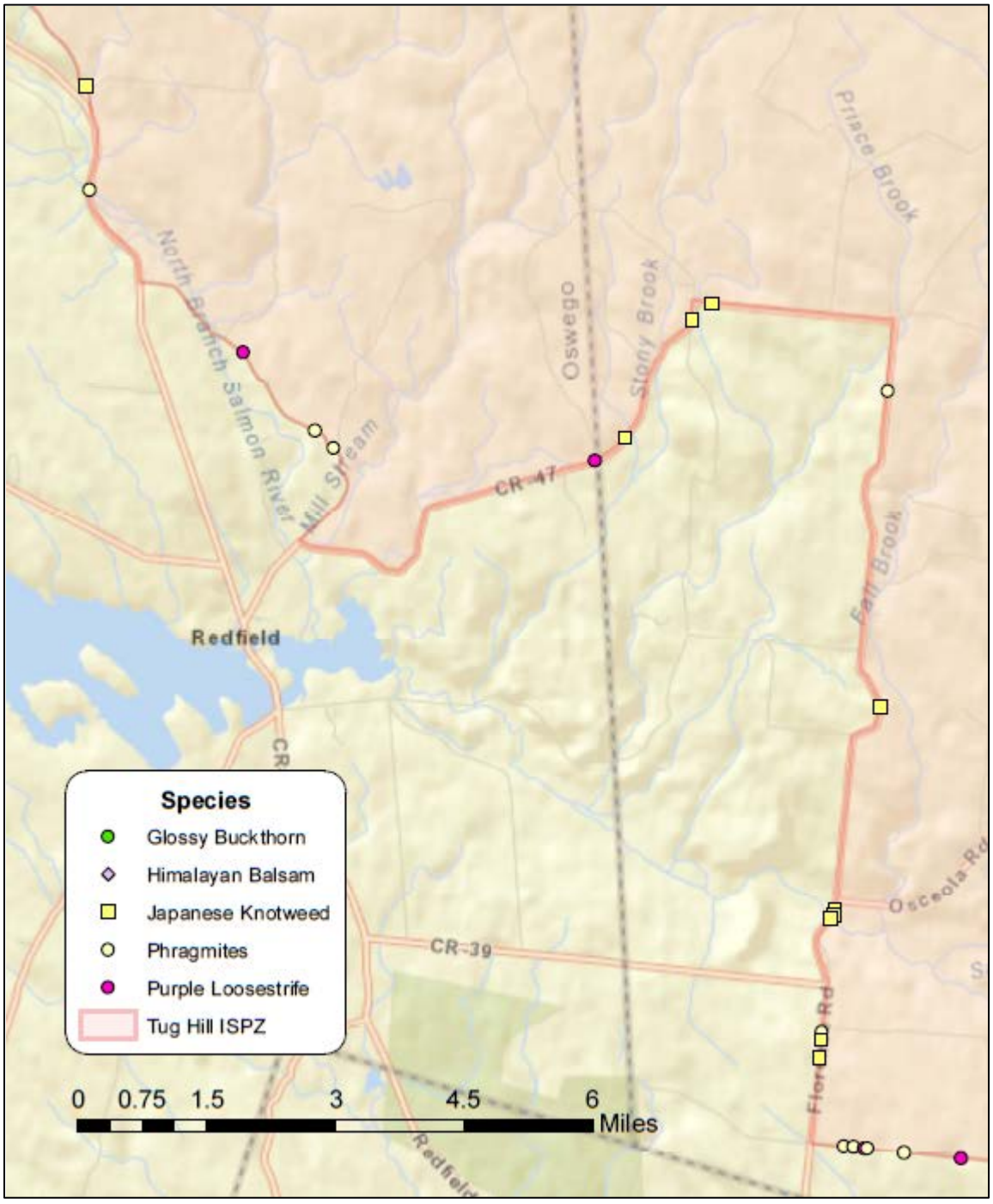

Figure 9: Invasive species observations along southwestern portion of Tug Hill ISPZ perimeter.

Table 2: Individual invasive species occurrence data for the Tug Hill ISPZ perimeter survey. (*Continued on following page.*)

Pt.	Lat.	Long	Species	Notes
006	43.55539349	-75.80653452	Phragmites	Both sides of road, small patches along ditch
007	43.5575271	-75.8096334	Phragmites	Small patch
008	43.56706906	-75.82167819	Purple Loosestrife	Small patch, approx. 12' x 3'
011	43.58683485	-75.84754718	Phragmites	Approx. 18' x 6' patch, mixed with native veg.
012	43.59949487	-75.84826861	Japanese Knotweed	Approx. 48' x 12', additional patches along stream
013	43.64130506	-75.88515669	Japanese Knotweed	Large patches, both sides at creek
014	43.64834737	-75.89479269	Phragmites	Approx. 30' long patch
015	43.65773225	-75.90305398	Japanese Knotweed	Patch near shed
016	43.70825216	-75.93902425	Phragmites	Three to four plants
017	43.70942219	-75.93925559	Phragmites	Approx. 12 plants mixed in with native veg
018	43.7143541	-75.90370827	Purple Loosestrife	Approx. 3' x 3' patch
019	43.71361985	-75.89285228	Phragmites	Approx. 24' x 24' patch, mixed with native veg.
020	43.71285508	-75.87543746	Phragmites	Three plants
021	43.7308553	-75.87090821	Japanese Knotweed	Approx. 50' x 50' patch near house in woods
022	43.73599953	-75.87157541	Phragmites	Approx. 6' x 6' patch
023	43.74633417	-75.85463776	Phragmites	Approx. 6' x 6' patch
024	43.7521968	-75.85523967	Purple Loosestrife	Approx. 3' x 3' patch
025	43.75262596	-75.85525962	Purple Loosestrife	Approx. 6' x 3' patch
027	43.7746572	-75.85096808	Japanese Knotweed	Several patches along hillside behind parking area
028	43.76867915	-75.8367455	Japanese Knotweed	Both sides of road
029	43.76864034	-75.83583506	Japanese Knotweed	Both sides of road
031	43.76747643	-75.81896061	Purple Loosestrife	Approx. 3' x 3' patch
032	43.75307665	-75.77740045	Purple Loosestrife	Along road, single plants to small patches
034	43.75274121	-75.77261145	Purple Loosestrife	Single plant
035	43.75270072	-75.77173915	Phragmites	Approx. 6' x 6' patch
056	43.74844481	-75.74609899	Purple Loosestrife	Single plant
057	43.74698527	-75.7454084	Purple Loosestrife	Three plants
058	43.74475602	-75.74438212	Purple Loosestrife	Small patch
062	43.70940199	-75.72496989	Phragmites	Approx. 25' long patch mixed with native brush
064	43.73243881	-75.68643576	Purple Loosestrife	Approx. 4' x 4' patch along roadside
065	43.73337264	-75.68213945	Purple Loosestrife	Single plant
067	43.73240327	-75.6700618	Purple Loosestrife	Several plants
068	43.73232189	-75.660532	Purple Loosestrife	Single plant
069	43.73299797	-75.64843959	Purple Loosestrife	Two plants
070	43.73302463	-75.64733134	Japanese Knotweed	Approx. 35' x 35' patch
071	43.73399634	-75.57325082	Purple Loosestrife	Patches along road in ditch next to wetland
072	43.71712256	-75.54059593	Purple Loosestrife	Approx. 1' x 2' patch
073	43.70132628	-75.51698176	Purple Loosestrife	Approx. 3' x 3' patch
074	43.69672772	-75.51642395	Japanese Knotweed	Approx. 12' x 12' patch
076	43.67016278	-75.50360508	Himalayan Balsam	Along roadside mixed in with native veg.
079	43.61502235	-75.50937854	Himalayan Balsam	Approx. 20' x 20' patch in clearing
081	43.59556577	-75.5165195	Purple Loosestrife	Multiple single plants
082	43.58845088	-75.51840669	Purple Loosestrife	In patches along approx. 75' of roadside
083	43.58565216	-75.51901957	Purple Loosestrife	Single plant in ditch
084	43.58396874	-75.51882645	Purple Loosestrife	Single small patch
085	43.57700539	-75.52316333	Purple Loosestrife	Single plant in ditch
087	43.55522191	-75.56157583	Phragmites	Approx. 6' x 6' patch

090	43.50251248	-75.5427536	Phragmites	Mixed in wetland
091	43.4908245	-75.55006413	Purple Loosestrife	Small patch in field on west side of road
092	43.48754207	-75.55315806	Phragmites	Approx. 12' long patch along roadside
093	43.4866825	-75.55390622	Purple Loosestrife	Small patch
094	43.46099826	-75.56782538	Japanese Knotweed	Approx. 15' x 15' patch
095	43.45982638	-75.56845662	Phragmites	Mixed in native veg.
096	43.45656984	-75.57074153	Phragmites	Several plants
100	43.55383772	-75.76250003	Purple Loosestrife	Approx. 3' x 3' patch
102	43.55665195	-75.75744524	Japanese Knotweed	Approx. 60' long patch along roadside
103	43.57107142	-75.74623352	Japanese Knotweed	Approx. 20' long patch along roadside
104	43.57300303	-75.74280666	Japanese Knotweed	Approx. 35' long patch along roadside
117	43.5623415	-75.71325492	Phragmites	
118	43.52381014	-75.71448631	Japanese Knotweed	Approx. 3' x 3' patch
119	43.49915469	-75.72220537	Japanese Knotweed	Approx. 12' x 12' patch
120	43.4984683	-75.72233529	Japanese Knotweed	
122	43.49800075	-75.72291523	Japanese Knotweed	Along creek
123	43.48416718	-75.7243617	Phragmites	In mowed area
124	43.48323016	-75.72447745	Japanese Knotweed	
125	43.48110259	-75.72476009	Japanese Knotweed	
126	43.47020687	-75.72056704	Phragmites	Several plants
127	43.47009229	-75.71900818	Phragmites	
128	43.46996128	-75.71723783	Purple Loosestrife	
129	43.46993353	-75.71665688	Phragmites	Near pond on north side of road
130	43.46946767	-75.71045587	Phragmites	Several plants
131	43.46874917	-75.70089983	Purple Loosestrife	
132	43.46818976	-75.69288187	Phragmites	Mixed with native veg.
133	43.46116807	-75.69364135	Phragmites	Along wetland on east side of road
134	43.45881469	-75.69392634	Phragmites	Two plants in ditch
135	43.45559478	-75.69056712	Phragmites	
136	43.45253387	-75.67741105	Glossy Buckthorn	
137	43.45225895	-75.67618847	Glossy Buckthorn	
141	43.42949881	-75.66729393	Japanese Knotweed	
142	43.42893287	-75.66748981	Japanese Knotweed	
143	43.42830833	-75.66772174	Japanese Knotweed	
148	43.41650468	-75.5890849	Japanese Knotweed	Approx. 40' x 40' patch along pond
149	43.43136203	-75.58574606	Phragmites	Around pond on east side
157	43.45341406	-75.58555637	Japanese Knotweed	Along both sides of road