

Adirondack Aquatic Invasive Species Response Team 2016 Report



Prepared by:

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Acknowledgements



The Adirondack Park Invasive Plant Program (APIPP) is one of eight Partnerships for Regional Invasive Species Management (PRISM) in New York State whose mission is to protect the Adirondack region from the negative impacts of invasive species. The Adirondack Watershed Institute (AWI) is a program of Paul Smith's College that conducts work to protect and conserve water resources of the Adirondack Park. The narrative, data, and results presented in this report were synthesized by Sean Regalado, Lindsey Pett, Demetra Panos, and Peter Murphy who constituted APIPP's Aquatic Invasive Species (AIS) Regional Response Team in 2016. These individuals also conducted the aquatic plant surveys and performed the spatial analysis to develop the lake maps featured in this report. Project planning and lake prioritization was conducted by Erin Vennie-Vollrath, APIPP's AIS Project Coordinator. Field work and reporting was conducted under the supervision of Dr. Daniel L. Kelting, AWI Executive Director, with assistance from Corey Laxson, AWI Research Associate. This project was advanced by APIPP, under contract with AWI, with funding from New York State's Environmental Protection Fund.

Introduction

Invasive species cause approximately \$120 billion in environmental damages and economic losses in the United States annually (Pimentel et al. 2005). In response, many state and local governments have funded strategies to implement multi-scale AIS spread prevention and early detection/rapid response efforts (Vander Zanden et al. 2010).

The Adirondack Park Invasive Plant Program (APIPP), in collaboration with partner organizations such as the Paul Smith's College Adirondack Watershed Institute (AWI), Lake Champlain Basin Program, Lake George Association, and others, utilize state, federal, and private funds to implement aquatic invasive species (AIS) prevention, early detection and rapid response strategies across the entire Adirondack Partnership for Regional Invasive Species Management (PRISM). Since 2002, APIPP, through its volunteer monitoring program and partners, has conducted AIS early detection surveys on more than 300 Adirondack lakes and ponds. Similarly, AWI has been conducting comprehensive aquatic plant surveys of Adirondack waters since 2011.

Strategies advanced over the past decade have more recently expanded to include deployment of AIS early detection/rapid response teams. In 2015, APIPP contracted with AWI to deploy the regions first AIS response team which surveyed 38 priority waters located in the PRISM's southeastern watersheds. In 2016, APIPP again contracted with AWI to deploy an AIS response team in the PRISM's western watersheds: the Grass, Oswegatchie, Raquette and Black. APIPP plans to rotate the response team through three regions of the PRISM, defined by watersheds, annually (refer to Map 1). The regions described above and surveyed in 2015 and 2016 constitute Region 1 and 2 respectively. This report outlines the work undertaken and progress made by APIPP's AIS early detection/rapid response team in Region 2 over the course of the 2016 summer field season.

Objective

The 2016 response team's objective was to detect and document the distribution of aquatic invasive plant infestations, in prioritized Region 2 Adirondack lakes, through systematic vegetative surveys of each lake's littoral zone. The team also monitored each lake for invasive animals such as spiny waterflea (*Bythotrephes longimanus*), using plankton tows, and Asian clams (*Corbicula fluminea*), using sediment sieves. A secondary objective of the team was to perform rapid response management actions on any new, small, or isolated aquatic invasive plant infestations discovered upon survey. APIPP's AIS Project Coordinator, Erin Vennie-Vollrath, used GIS and land use characteristics/historic monitoring data for the region to prioritize lakes to be surveyed by the response team in 2016 (Table 1). Lakes over 4,500 acres in size were excluded from the selection process due to time and resource constraints. One exception was Raquette Lake, which the team surveyed in 2016. APIPP hopes to balance resources by utilizing response teams to survey one large Adirondack lake (>4,500 ac.) each summer. Additionally, lakes under 5 acres and lacking a public launch were excluded given the absence of anthropogenic AIS invasion pathways and subsequently lower likelihood for invasion. The remaining lakes were prioritized according to the following criteria:

Priority 1

- Lakes having a public boat launch that have never been monitored for AIS.
- Lakes having a public boat launch that have only been partially monitored for AIS in the past three years.

Priority 2

- Lakes having a public boat launch that have not been professionally monitored for AIS in the past three years.

Priority 3

- Lakes having a public boat launch that were last professionally monitored for AIS in 2013.

Priority 4

- Lakes having a private boat launch that are monitored annually for AIS by volunteers.
- Lakes having a public boat launch that were last professionally monitored for AIS in 2014.

Objective

Table 1" List of priority Region 2 lakes.

Priority	Waterbody	County	Watershed	Last Year Monitored
1	Blake Falls Reservoir	St Lawrence	Raquette River	2012
1	Blue Mountain Lake	Hamilton	Raquette River	2013
1	Brown's Falls Reservoir	St Lawrence	Raquette River	2007
1	Carry Falls Reservoir	St Lawrence	Raquette River	2014
1	Chase Lake	Lewis	Black	2010
1	Clear Pond	St Lawrence	Raquette River	2012
1	Eighth Lake	Hamilton	Black	2015
1	Joe Indian Pond	St Lawrence	Raquette River	2008
1	Lake Rondaxe	Herkimer	Black	2012
1	Little River (pond/flow)	St Lawrence	Oswegatchie	2012
1	Little Wolf Pond	Franklin	Raquette River	2009
1	Long Lake	Hamilton	Raquette River	2012
1	Long Lake	Oneida	Black	2015
1	Moshier Reservoir	Herkimer	Black	2012
1	Oswegatchie River Impoundment	St Lawrence	Oswegatchie	-
1	Payne Lake	Lewis	Black	2012
1	Quiver Pond	Herkimer	Black	2012
1	Rainbow Falls Reservoir	St Lawrence	Raquette River	2012
1	Rock Pond	Lewis	Oswegatchie	2012
1	Round Lake	Hamilton	Raquette River	2008
1	Soft Maple Reservoir	Lewis	Black	2012
1	Stark Falls Reservoir	St Lawrence	Raquette River	2012
1	West Lake	Herkimer	Black	2009
2	Brown's Tract Pond (Lower & Upper)	Hamilton	Raquette River	2015
2	Hitchins Pond	St Lawrence	Raquette River	2013
2	Little Tupper Lake	Hamilton	Raquette River	2013
2	Nicks Lake	Herkimer	Black	2013
2	Raquette Lake	Hamilton	Raquette River	2015
3	Big Moose Lake	Herkimer	Black	2013
3	Forked Lake & Little Forked Lake	Hamilton	Black	2013
3	Fourth Lake	Herkimer	Black	2014
3	Seventh Lake	Hamilton	Black	2015
3	Horseshoe Lake	St Lawrence	Raquette River	2013
3	Star Lake	St Lawrence	Oswegatchie	2014
4	Brantingham Lake	Lewis	Black	2015
4	First Lake	Herkimer	Black	2014
4	Sixth Lake	Hamilton	Black	2015
4	Piercefield Flow	Franklin	Raquette River	2014
4	Stillwater Reservoir	Herkimer	Black	2013

Methods

Aquatic plant surveys

The Adirondack AIS response team conducted comprehensive aquatic plant surveys of each lake's littoral zone using a combination of visual surveys, rake tosses, and snorkeling. The team surveyed the entire littoral zone of each lake from canoes; paddling in a serpentine pattern and documenting the location, species composition, and percent cover of all aquatic plant beds discovered. Percent cover estimates for each species were made in a ranked system of 1 (rare, <5% coverage), 2 (occasional, 5 to 15% coverage), 3 (present, 16 to 25%), 4 (common, 26 to 50%), and 5 (abundant, >50%). The perimeter of each plant bed was delineated by paddling and mapping its extent using a handheld GPS and depth sounder. Taxonomy of aquatic plants followed the work of Crow & Hellquist (2000). Each crew was equipped with a bathymetric map of the lake, portable depth sounder, handheld GPS unit, two-sided rake toss, snorkel and fins, and a digital camera (Fig. 1).



Figure 1. Depth sounder utilized to determine the extent of the littoral zone as well as the location of the deep hole where plankton tows were deployed. The digital display reads 37.3ft, too deep for aquatic plants.

Visual surveys were supplemented by periodic (and equidistant) rake tosses. Often the water clarity hindered the surveyor's ability to see submerged vegetation. Rake tosses allowed the surveyor to estimate the true spatial extent of aquatic plant beds and increased the probability of discovering AIS infestations. At least four snorkel sites per lake were selected: the area surrounding each boat launch and three random plant beds where the substrate was not visible from the surface. Once the full species composition of each snorkeled plant bed was ascertained, newly found species were appended to visual survey findings. All field data was collected via paper data forms and entered into GIS to create lake specific aquatic plant maps. The NYS Area Hydrography 1:24,000 GIS shapefile was used to create these maps.

Methods

Aquatic animal surveys

For each lake, two plankton tows, using two different net mesh sizes (250 micron and 73 micron), were performed to sample the lakes plankton community. One sample per net was taken from the lakes deepest section and towed through the entire water column. At boat launches and access points with coarse, sandy substrates, a 2mm test sieve was used to monitor for invasive molluscs. At each location seven sediment sample points, arranged in a ray pattern (Figure 2), were collected.

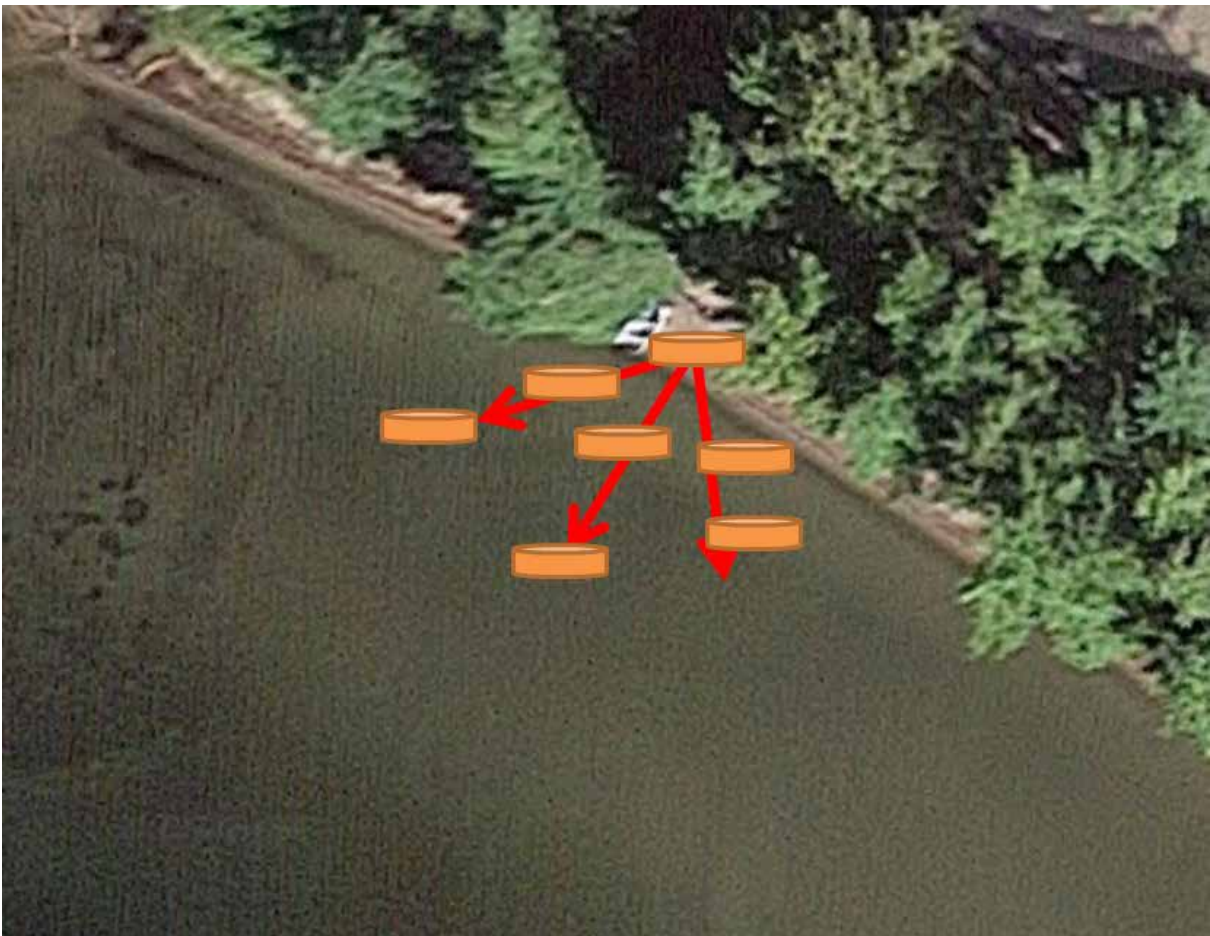


Figure 2. Aquatic animal survey scheme for boat launch locations with coarse, sandy substrates.

Results



Between June 13 and September 1, 38 lakes were surveyed (Table 2, Map 1). Of these lakes, 15 contained historic infestations of AIS with only 1 (Oswegatchie River Impoundment) discovered as newly invaded. Variable leaf milfoil (*Myriophyllum heterophyllum*) was the most common AIS found (15 Lakes), followed by Eurasian watermilfoil (*M. spicatum*) (4 lakes), and curly leaf pondweed (*Potamogeton crispus*) (1 lake). No invasive animals were documented.

A total of 392 miles of shoreline was surveyed by the response team in 2016. On average each lake took approximately 6.6 hours to survey, ranging from 1 hour for the 18 acre Quiver Pond to 42 hours for the 5300 acre Raquette Lake.

Approximately 3400 acres of plant beds were surveyed and mapped (Fig. 4). Plant beds ranged in size from 250 square feet to 158 acres, averaging approximately 4.5 acres. 1624 rake samples were retrieved, of which 585 returned plant samples.

The most abundant native plant taxa found were *Sagittaria graminea* (36 lakes), *Eriocaulon sp.* (33 lakes), and *Eleocharis sp.* (34 lakes). The least abundant native plant taxa found were spotted pondweed (*Potamogeton pulcher*) (1 lake), low watermilfoil (*Myriophyllum humile*) (1 lake), and Richardson's pondweed (*Potamogeton richardsonii*) (1 lake) (See community matrix on page 9).

The plankton community sampled was composed largely of *Daphnia sp.*, calanoid copepods (*leptodiatomus sp.*), *Cyclopoida*, and to a lesser extent a diverse community of rotifers from the genera *Asplanchna*, *Kelliocottia*, and *Keratella*.



Figure 3. Variable leaf milfoil (*M. heterophyllum*) in flower. Rainbow Falls Reservoir.



Figure 4. AIS response team conducting data entry and GIS work.

Results



Map 1. Locations of Surveyed Lakes

Table 2. List of lakes surveyed for AIS by date.

Lake Name	Survey Date	Lake Name	Survey Date
Lake Luzerne	6/13/2016	Seventh Lake	7/21/2016
Blue Mountain Lake	6/14/2016	First Lake	7/25/2016
Utowana Lake	6/15/2016	Second Lake	7/25/2016 - 7/26/2016
Eagle Lake	6/15/2016	Third Lake	7/26/2016
Brown's Tract Pond	6/15/2016	Fourth Lake	7/26/2016 - 7/27/2016
Lake Eaton, Clear Pond	6/16/2016	Fifth Lake	7/28/2016
Raquette Lake	6/20/2016 - 6/23/2016	Sixth Lake	7/28/2016
Blake Falls Reservoir	6/28/2016	Oswegatchie River imp.	8/1/2016
Carry Falls Reservoir	6/29/2016	Brown's Falls	8/1/2016
Stark Falls Reservoir	6/30/2016	Star Lake	8/2/2016
Forked Lake	7/4/2016 - 7/6/2016	Rock Pond	8/3/2016
Horseshoe Lake	7/7/2016	Payne Lake	8/3/2016
Long Lake (Hamilton)	7/11/2016 - 7/14/2016	Long Lake (Oneida)	8/4/2016
Little Wolf Pond	7/14/2016	Soft Maple Reservoir	8/8/2016
Little Clear Pond	7/18/2016	Brantingham Lake	8/9/2016
Joe Indian Pond	7/18/2016	Nick's Lake	8/10/2016
Rainbow Falls Reservoir	7/19/2016	Quiver Pond	8/10/2016
Eighth Lake	7/20/2016	Lake Rondaxe	8/23/2016
		Big Moose Lake	8/24/2016 - 8/25/2016

Management

Between August 15 and August 18, the response team hand harvested a 2.6 acre infestation of variable leaf milfoil (*M. heterophyllum*) and Eurasian watermilfoil (*M. spicatum*) adjacent to the boat launch for Fish Creek Pond (Map 2). APIPP prioritized management of this infestation in order to reduce the likelihood that boaters accessing or exiting the lake would transport invasive material to uninvaded sections of the lake or surrounding waters.



Figure 5. An estimated 750 pounds of harvested invasive milfoil that was transported, covered, to a disposal site near Saranac Lake, NY

The crew utilized a Hooka Dive System, which allowed three divers to perform management simultaneously. One team member remained at the surface to retrieve plant fragments and notify boaters that divers were down. The team harvested 164 bags of invasive milfoil (Fig. 5), an estimated 3000 pounds of material and disposed of the material in an upland area.



Map 2. Location of management site in Fish Creek Pond

Data Limitations

The methodologies utilized to inventory the aquatic plant communities of prioritized lakes during this project have shortfalls. These shortfalls most commonly revolved around quantitative estimates of species abundance and GPS inaccuracies.

The serpentine search pattern utilized in our methodology maximizes the total littoral area surveyed and survey efficiency, but may suffer statistically from not stratifying species abundance estimates. Other methodologies used in aquatic plant surveys, such as transect and point intercept, conversely sacrifice area covered and efficiency for more statistically rigorous estimates of species abundance (Madsen 1999) (Fig. 6). Rigorous assessments of species community inventory methods deployed in other systems have found that visual searches are the most cost effective (Ellison et al. 2007). Unfortunately, statistical analysis of visual searches relative to aquatic plant communities has yet to be done.

The Garmin® GPS receivers utilized during our surveys provide 10 foot accuracy. Due to their open nature, lakes offer a study system where interference from solid objects is minimal. Random accuracy checks throughout surveys often confirmed accuracy of 10 feet. However, when obstacles do exist accuracy can suffer greatly, in some instances surpassing 60 feet of error (Bolstad et al. 2005).

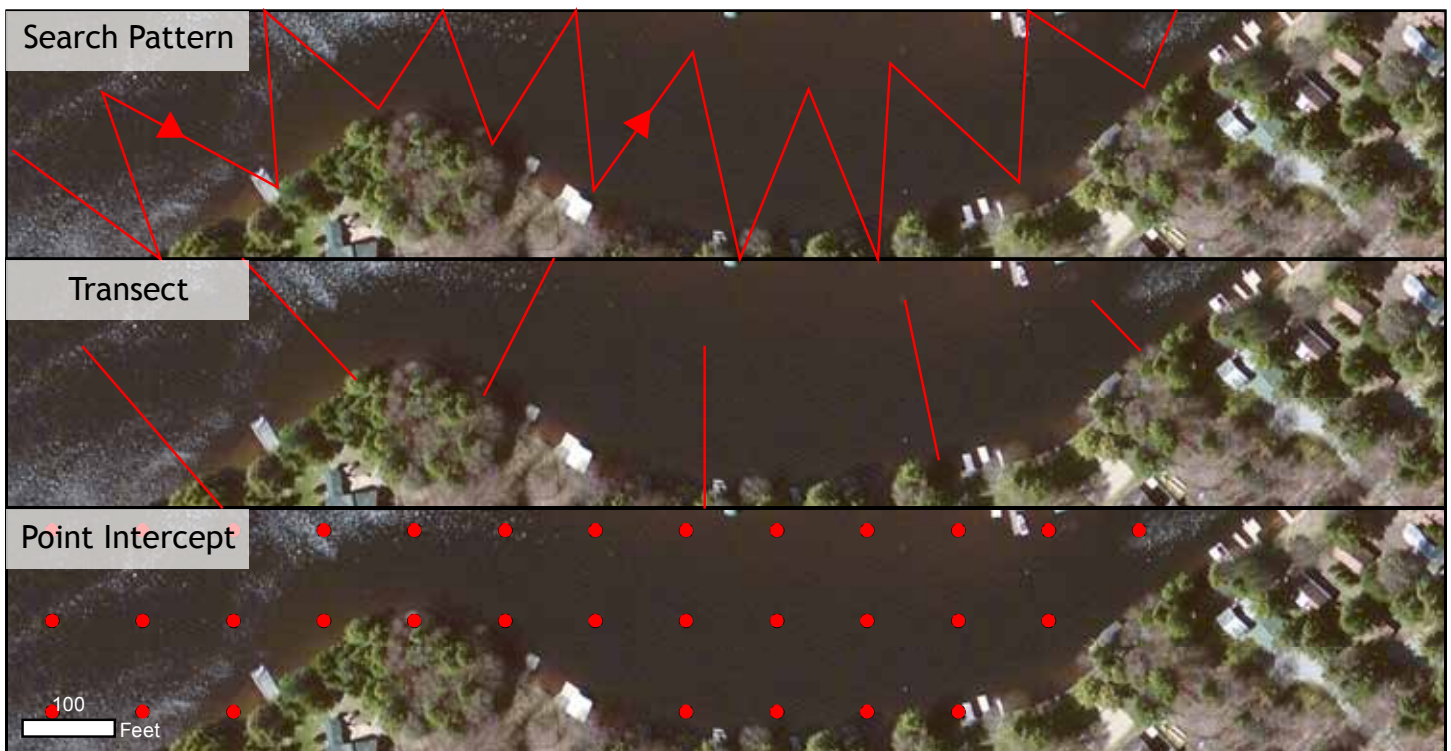


Figure 6" Examples of aquatic plant community methodologies.

Discussion & Conclusion

2016 represented the second season in which AWI provided APIPP's AIS Regional Response Team. During the 2015 season, the team focused their efforts in the Hudson, Sacandaga, Mohawk, and Lake Champlain watersheds, designated by APIPP as Region 1. Thirty-eight lakes were surveyed, 48 species were identified, and three unreported infestations were discovered.

In 2016, the team focused on the Black, Oswegatchie, Grass, and Raquette watersheds; Region 2. Thirty-Eight lakes were surveyed, 53 species were identified, and only one new infestation of variable leaf milfoil was discovered in an impoundment of the Oswegatchie River. Up stream of this impoundment there are several known infestations of variable leaf milfoil which are a likely source of this new infestation. This year's aquatic plant surveys failed to detect five historically known infestations of AIS: Eurasian watermilfoil in Fourth and Second Lakes of the Fulton Chain and variable leaf milfoil in Carry Falls Reservoir, Soft Maple Reservoir, and Nick's Lake. AWI's Aquatic Plant Management Team managed the Fulton Chain infestations in the summers of 2012, 2013, and 2014. The Fourth Lake infestation was an isolated bed less than 1 acre in size and the Second Lake infestation was also a small infestation of similar size. The absence of these infestations in 2016 gives evidence to effective rapid response efforts. Carry Falls and Soft Maple Reservoirs both experience dramatic changes in depths due to Brookfield Power's management of these reservoirs. Dam drawdowns have been shown to reduce invasive milfoil biomass by over 90% (Siver et al. 1986). Drawdowns in the above mentioned reservoirs may explain not observing the infestations in 2016.

Excluding Tupper Lake, the team surveyed all the major waters of the Raquette River watershed, providing the most extensive, single season aquatic plant community survey of this watershed ever conducted. Several of this season's prioritized lakes were historically surveyed by AWI, providing a unique comparative dataset of baseline aquatic plant community information for the Adirondacks.

This summer, the team did not find any invasive animals in either the plankton tows or sediment sieves. The plankton tows did discover a diverse community of rotifer genera across the park. Although studies on this community in the park are sparse, they find that the diversity of rotifers is highly correlated with lake acidity, similar to the relationship with aquatic plant diversity and lake acidity (Siegfried et al. 1989).

This season the team also managed a 2.6 acre variable leaf and Eurasian milfoil infestation located adjacent to the boat launch to Fish Creek Pond in Franklin County. Although this management action did not technically constitute early detection/rapid response, hand harvesting this infestation reduced the likelihood of further spread via the overland or interconnected water transport of recreational watercraft.

AWI and APIPP's work monitoring and removing AIS fits directly into the global framework for AIS spread prevention. Programs across the United States and Europe have in the past decade produced a wealth of knowledge not only on the distribution and impacts of invasive species but also on the fundamentals of aquatic plant community ecology. AWI and APIPP are committed to continuing this work in the Adirondacks as well as providing important information to multi-scale spread prevention efforts.

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The background of the slide is a close-up photograph of a pond. The water is covered with numerous green lily pads of various sizes and shapes. Some lily pads have small white flowers with yellow centers. The overall scene is lush and green, with some lily pads showing signs of aging or damage. The text is centered over this background.

Aquatic Plant Maps by Lake

Blue Mountain Lake Aquatic Plant Survey 2016

Aquatic Plant Beds

Open Water

Roads ● Hard Launch ● Hand Launch

County: Hamilton

No AIS Observed

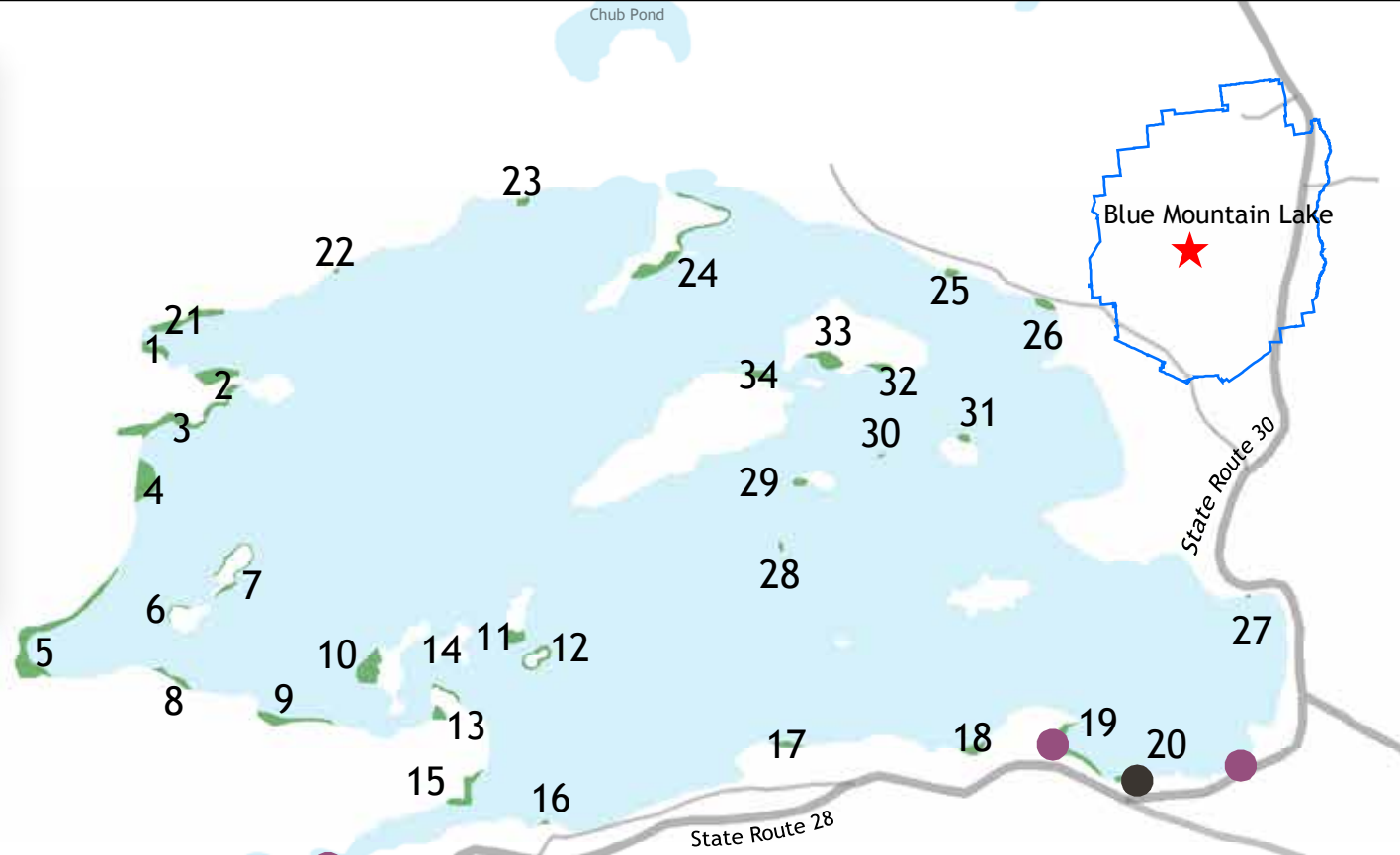
Town: Indian Lake

Species Richness: 17

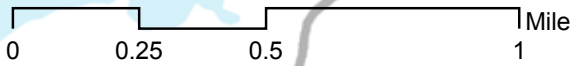
Bed Area (acres): 25.6

Lake Area (acres): 1258

Map by: **Paul Smith's College**
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Bed ID	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34		
Acres	0.6	1.4	2.5	1.7	3.3	0.2	0.7	0.5	1.0	1.5	0.6	0.6	0.4	0.3	0.9	0.1	0.3	0.5	1.2	0.3	1.4	0.1	0.2	2.2	0.2	0.4	0.0	0.1	0.2	0.1	0.2	0.4	1.0	0.6		
Pipewort	1	0	3	3	3	2	3	3	3	3	3	2	3	0	3	3	0	4	2	0	3	3	3	4	2	2	0	3	3	3	3	3	1	1		
<i>Eriocaulon</i> sp.																																				
White water Lily	0	0	1	0	2	0	0	0	0	2	3	3	3	2	0	0	0	0	0	3	0	0	0	1	2	0	1	0	1	0	0	0	0	0		
<i>Nymphaea odorata</i>																																				
Slender watermilfoil	0	0	4	0	0	0	2	3	0	3	3	3	3	0	3	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<i>Myriophyllum tenellum</i>																																				
Hair grass	1	0	2	0	0	0	0	0	0	0	0	0	2	0	2	0	2	3	0	0	0	0	0	2	0	0	0	0	0	0	0	1	0	0	0	
<i>Eleocharis</i> sp.																																				
Bur reed	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2	0	0	1	0	0	2	3	1		
<i>Sparganium</i> sp.																																				
Grassy arrowhead	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	1	2	0	1	0	0	0	0	1	0	0	0		
<i>Sagittaria graminea</i>																																				
Water lobelia	0	0	2	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	
<i>Lobelia dortmanna</i>																																				
Quillwort	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2	0	0	2	1	0	0	0	0	0	0	0		
<i>Isoetes</i> sp.																																				
Ribbon leaf pondweed	0	2	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<i>Potamogeton ephedrus</i>																																				
Spatterdock	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<i>Nuphar variegata</i>																																				
Common bladderwort	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<i>Utricularia vulgaris</i>																																				
Floating leaf pondweed	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<i>Potamogeton natans</i>																																				
Eel grass	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<i>Vallisneria americana</i>																																				
Interrupted bladderwort	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<i>Utricularia intermedia</i>																																				
Chara algae	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<i>Chara</i> sp.																																				
Grass leaved pondweed	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<i>Potamogeton gramineus</i>																																				
Canadian waterweed	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<i>Elodea canadensis</i>																																				



0 Absent 1 Rare (< 5%) 2 Occasional (6 to 15%)
3 Present (16 to 25%) 4 Common (26 to 50%) 5 Abundant (> 50%)

Brown's Falls Reservoir Aquatic Plant Survey 2016

Aquatic Plant Beds

Open Water

Roads

Hard Launch

County: St. Lawrence

No AIS Observed

Town: Clifton

Species Richness: 13

Bed Area (acres): 3.9

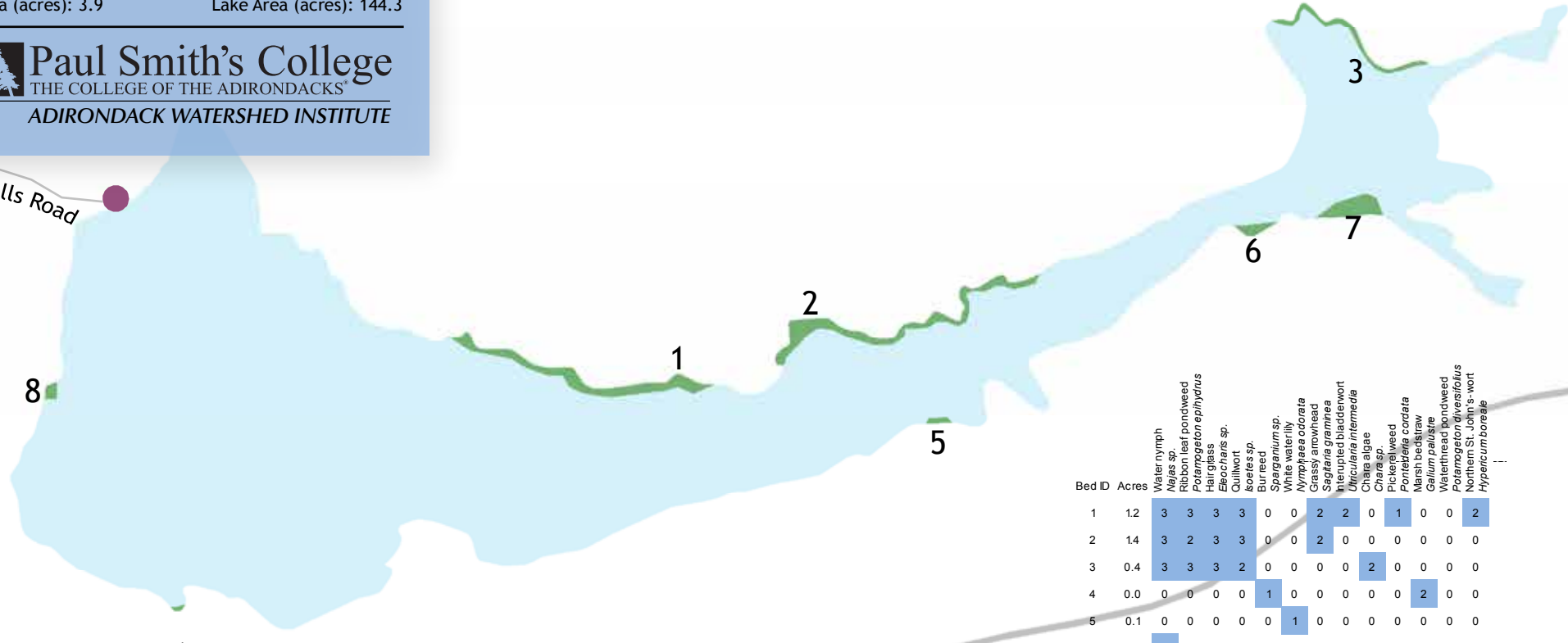
Lake Area (acres): 144.3

Map by:

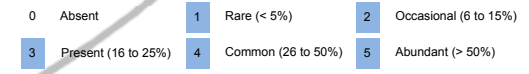
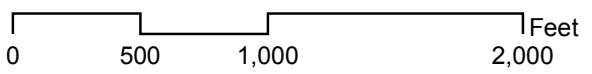
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Browns Falls Road



Bed ID	Acres	Water nymph	Algae sp.	Ribbon leaf pondweed	Potamogeton raphidolobus	Hairgrass	Echinochloa sp.	Culmwort	Roraria sp.	Sparganium sp.	White water lily	Najas	Sagittaria arifolia	Sagittaria graminea	Utricularia bladderwort	Utricularia intermedia	Chara algae	Chara sp.	Potamogeton	Portulaca cordata	Marsilea	Galium palustre	Waterhead pondweed	Potamogeton diversifolius	Northern St. John's-wort	Hypericum boreale
1	1.2	3	3	3	3	0	0	0	0	2	2	0	1	0	0	0	2									
2	1.4	3	2	3	3	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0.4	3	3	3	2	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0.0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0
5	0.1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0.2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0.5	1	2	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0
8	0.1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



Brown's Tract Pond Aquatic Plant Survey 2016

Aquatic Plant Beds

Open Water

Roads

Hard Launch

County: Hamilton

No AIS Observed

Town: Inlet, Long Lake

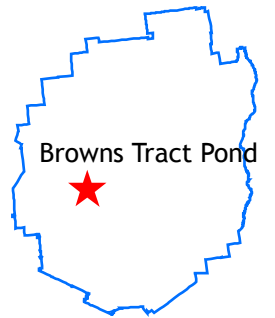
Species Richness: 13

Bed Area (acres): 15.8

Lake Area (acres): 158

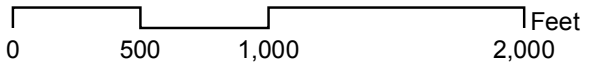
Map by:

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Bed ID	Acres	White water lily	<i>Nymphaea odorata</i>	Watershield	<i>Brasenia schreberi</i>	Large leaf pondweed	<i>Potamogeton amplifolius</i>	Grassy arrowhead	<i>Sagittaria graminea</i>	Ribbon leaf pondweed	<i>Potamogeton ephedrus</i>	Pipewort	<i>Eriocaulon</i> sp.	Spadderdock	<i>Nuphar variegata</i>	Hairgrass	<i>Eleocharis</i> sp.	Smart water weed	<i>Persicaria amphibia</i>	Burreed	<i>Sparganium</i> sp.	Quillwort	<i>Isoetes</i> sp.	Nitella algae	<i>Nitella</i> sp.	Floating leaf pondweed	<i>Potamogeton natans</i>	Slender watermilfoil	<i>Myriophyllum tenellum</i>
1	1.3	2	3	2	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	
2	0.2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
3	0.7	2	3	0	0	0	0	0	0	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4	0.0	1	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5	0.1	1	1	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
6	0.1	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7	0.1	0	0	0	1	1	1	0	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
8	0.4	0	2	2	1	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
9	0.2	0	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
10	2.6	1	0	2	0	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11	0.9	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	
12	1.7	0	3	0	2	2	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	
13	2.0	1	2	0	3	0	0	2	0	0	2	0	0	1	3	2	0	0	0	0	0	0	0	0	0	0	1	0	
14	4.9	1	3	3	2	1	1	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
15	0.5	0	2	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
16	0.2	2	4	0	1	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

0 Absent 1 Rare (< 5%) 2 Occasional (6 to 15%)
3 Present (16 to 25%) 4 Common (26 to 50%) 5 Abundant (> 50%)



Carry Falls Reservoir North Aquatic Plant Survey 2016

Aquatic Plant Beds

Open Water

Roads ● Hard Launch ● Hand Launch

County: St. Lawrence

No AIS Observed

Town: Colton, Parishville

Species Richness: 17

Bed Area (acres): 50.8

Lake Area (acres): 3072.1

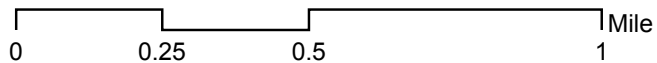
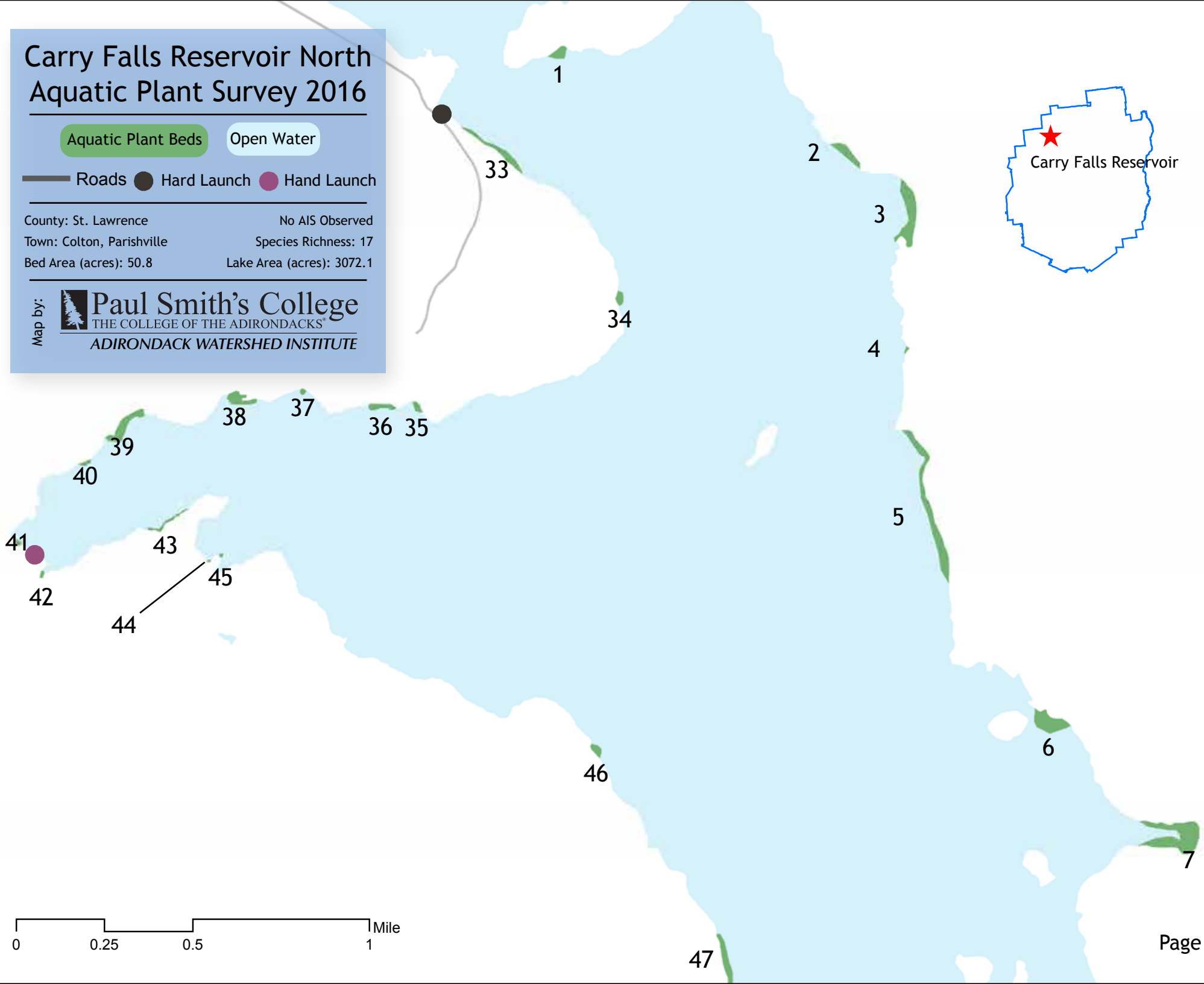
Map by:



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Eagle Lake Aquatic Plant Survey 2016

Aquatic Plant Beds

Open Water

Roads

Hand Launch

County: Hamilton

No AIS Observed

Town: Inlet, Long Lake

Species Richness: 13

Bed Area (acres): 15.8

Lake Area (acres): 158

Map by:

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Blue Mountain Lake

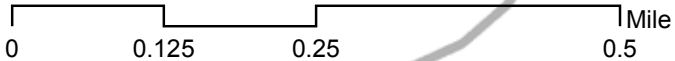
Eagle Lake

Utowana Lake

State Route 28

0 Absent 1 Rare (< 5%) 2 Occasional (6 to 15%)
3 Present (16 to 25%) 4 Common (26 to 50%) 5 Abundant (> 50%)

Bed ID	Acres	Pipewort	<i>Eriocaulon</i> sp.	Burreed	Sparganium sp.	Grassy arrowhead	<i>Sagittaria graminea</i>	Ribbon leaf pondweed	<i>Potamogeton ephedrus</i>	Hair grass	<i>Eleocharis</i> sp.	White water lily	<i>Nymphaea odorata</i>	Cullwort	Isaetes sp.	Clasping leaf pondweed	<i>Potamogeton perfoliatus</i>	Floating leaf pondweed	<i>Potamogeton natans</i>	Watershield	<i>Brasenia schreberi</i>	Spatterdock	<i>Nuphar variegata</i>	Water lobelia	<i>Lobelia dortmanna</i>	Purple bladderwort	<i>Utricularia purpurea</i>	Robbin's pondweed	<i>Potamogeton Robbinsii</i>	Swollen bladderwort	<i>Utricularia inflata</i>	White stemmed pondweed	<i>Potamogeton praelongus</i>	Common bladderwort	<i>Utricularia vulgaris</i>	Eelgrass	<i>Vallisneria spiralis</i>	Lavender bladderwort	<i>Utricularia resupinata</i>				
1	0.5	3	1	1	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
2	0.5	3	2	1	0	1	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
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6	4.1	4	0	1	2	0	0	0	0	0	0	0	0	2	0	0	1	0	0	0	0	2	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7	0.2	4	2	2	2	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
8	0.1	4	1	1	3	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
9	0.7	3	2	1	2	1	1	2	2	0	0	1	1	2	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
10	13.7	4	3	1	2	0	4	2	2	1	2	2	1	2	3	1	2	0	0	0	0	3	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11	7.0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
12	5.7	3	0	0	0	0	0	0	0	4	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1



Eighth Lake Aquatic Plant Survey 2016

Aquatic Plant Beds

Open Water

Roads

Hard Launch

County: Hamilton

No AIS Observed

Town: Inlet

Species Richness: 13

Bed Area (acres): 47.4

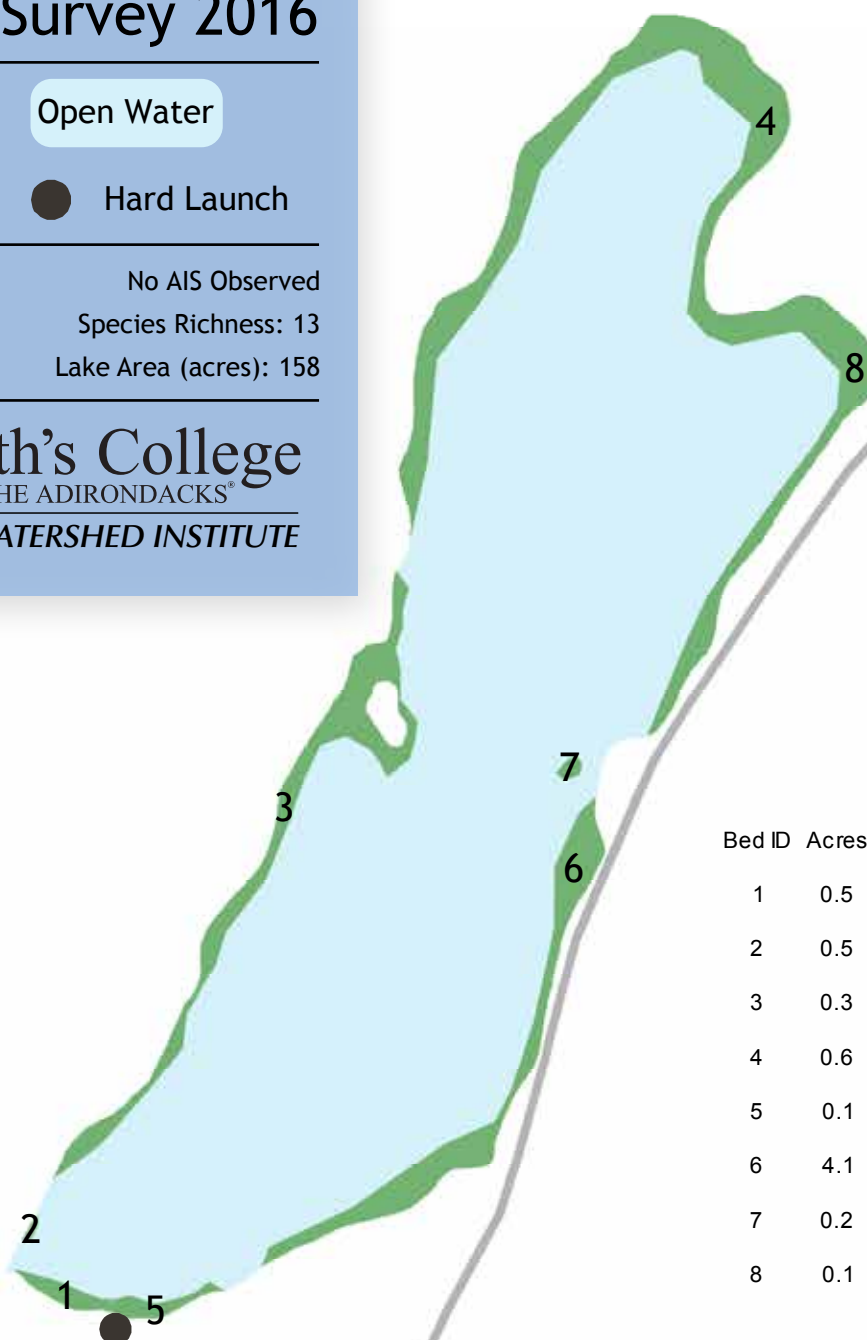
Lake Area (acres): 158

Map by:



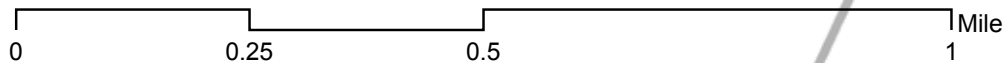
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Bed ID	Acres	Pipewort	<i>Eriocaulon</i> sp.	Bur reed	<i>Sparganium</i> sp.	Grassy arrowhead	<i>Sagittaria graminea</i>	Ribbon leaf pondweed	<i>Potamogeton ephedrus</i>	Hair grass	<i>Eleocharis</i> sp.	White water lily	<i>Nymphaea odorata</i>	Quillwort	<i>Isoetes</i> sp.	Clasping leaf pondweed	<i>Potamogeton perfoliatus</i>	Floating leaf pondweed	<i>Potamogeton natans</i>	Spaddeedock	<i>Nuphar variegata</i>	Dortmann's cardinal flower	<i>Lobelia dortmanna</i>	Robbin's pondweed	<i>Potamogeton robinsii</i>	Eelgrass	<i>Vallisneria americana</i>
1	0.5	3	1	1	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2	0.5	3	2	1	0	1	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
3	0.3	2	1	3	2	2	1	2	0	0	0	1	2	0	0	0	0	0	0	1	0	0	0	0	2	0	
4	0.6	4	2	0	1	0	1	0	0	1	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0	
5	0.1	4	2	1	2	1	0	2	0	2	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	
6	4.1	4	0	1	2	0	0	2	0	0	2	0	1	2	0	0	0	1	2	0	0	0	1	0	0	0	
7	0.2	4	2	2	2	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	
8	0.1	4	1	1	3	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	1	0	0	0	0	

0 Absent 1 Rare (< 5%) 2 Occasional (6 to 15%)
 3 Present (16 to 25%) 4 Common (26 to 50%) 5 Abundant (> 50%)



Forked Lake West Aquatic Plant Survey 2016

Aquatic Plant Beds

Invaded Beds

Open Water

Roads

Hand Launch

County: Hamilton

AIS Observed: *Variable leaf milfoil*
Myriophyllum heterophyllum

Town: Arietta, Long Lake

Species Richness: 29

Bed Area (acres): 177.2

Lake Area (acres): 1284.5

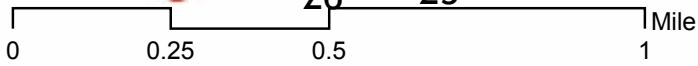
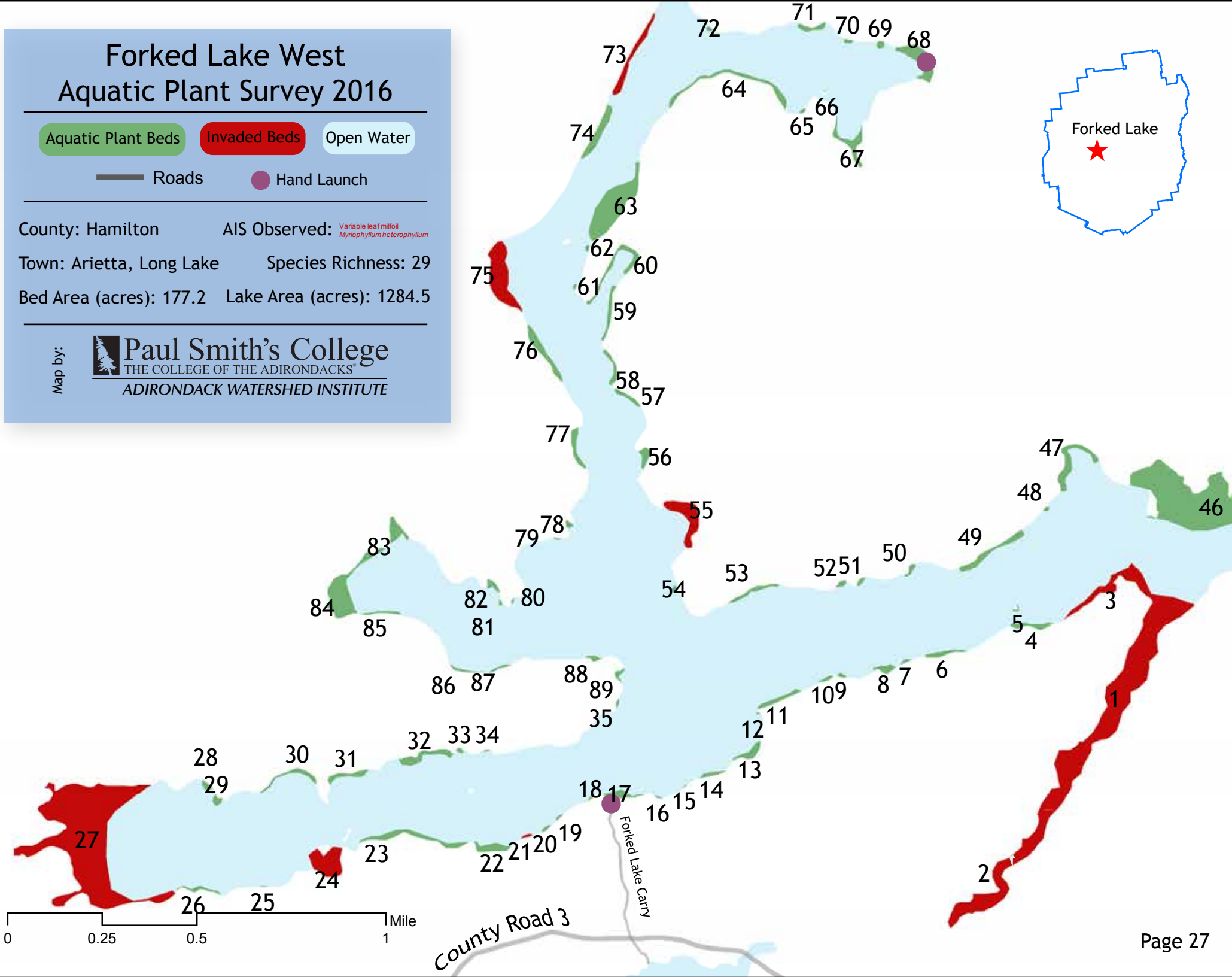
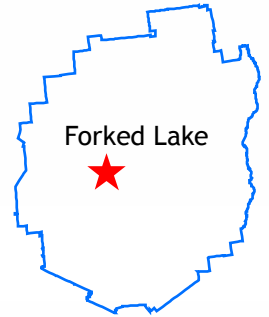
Map by:



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Fourth Lake West Aquatic Plant Survey 2016

Aquatic Plant Beds

Open Water

Invaded Beds

● Hand Launch

County: Hamilton, Herkimer AIS Observed: Variable leaf milfoil
Myriophyllum heterophyllum

Town: Inlet, Webb

Species Richness: 30

Bed Area (acres): 105.4

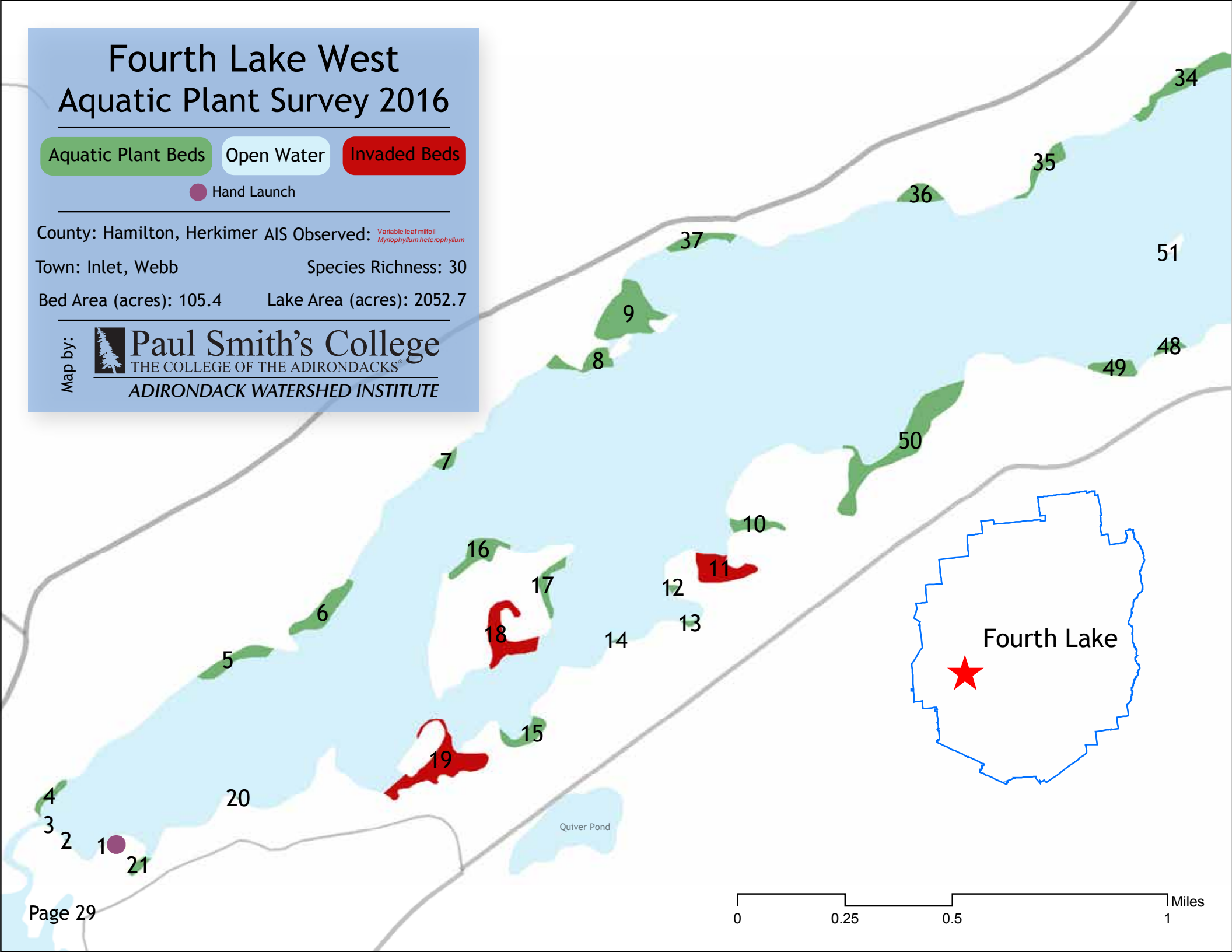
Lake Area (acres): 2052.7

Map by:



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Fourth Lake East Aquatic Plant Survey 2016

Aquatic Plant Beds

Open Water

Invaded Beds

● Hard Launch

County: Hamilton, Herkimer AIS Observed: Variable leaf milfoil
Myriophyllum heterophyllum

Town: Inlet, Webb

Species Richness: 30

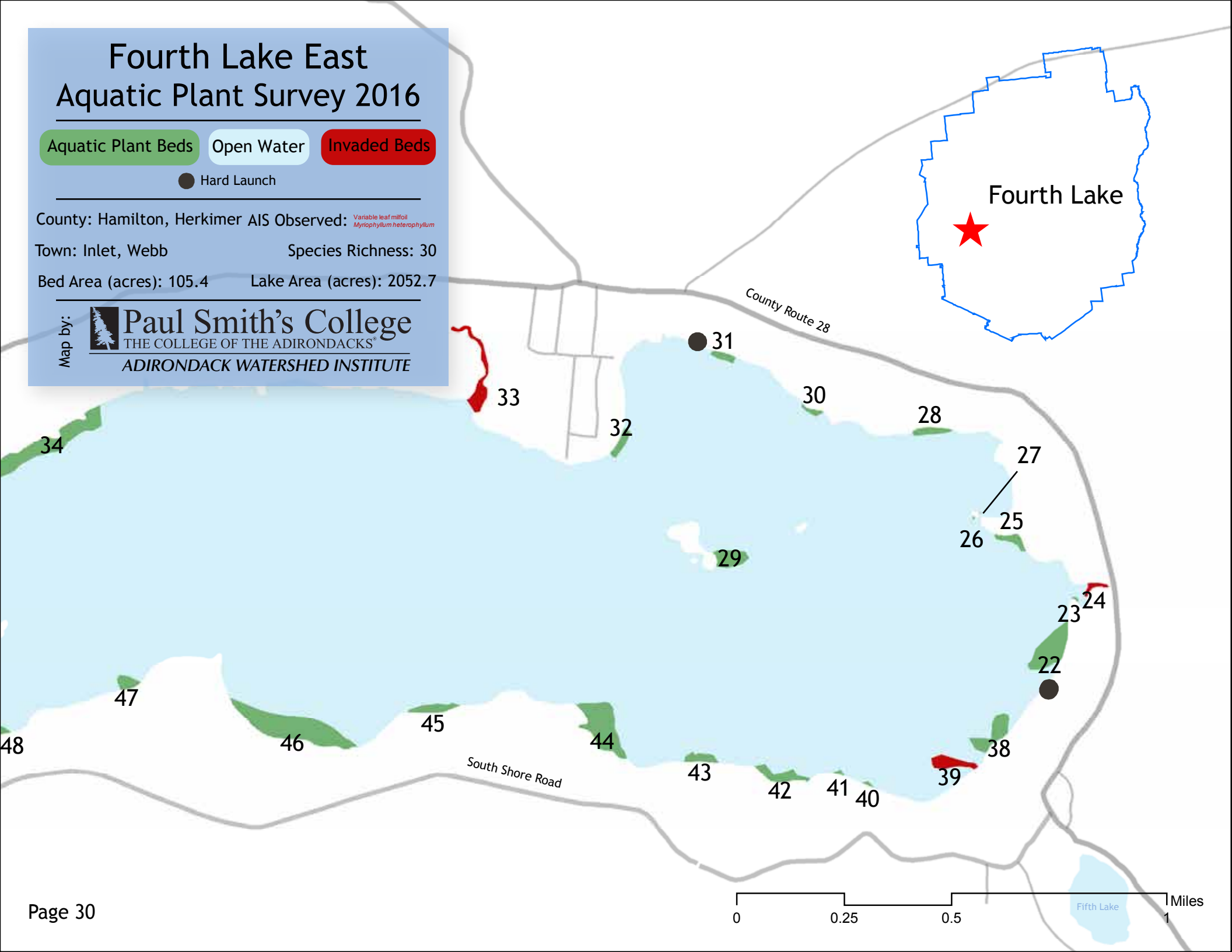
Bed Area (acres): 105.4

Lake Area (acres): 2052.7

Map by:



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Horseshoe lake Aquatic Plant Survey 2016

Aquatic Plant Beds

Invaded Beds

Open Water

Roads

Hand Launch

County: St. Lawrence

AIS Observed: Variable leaf milfoil
Myriophyllum heterophyllum

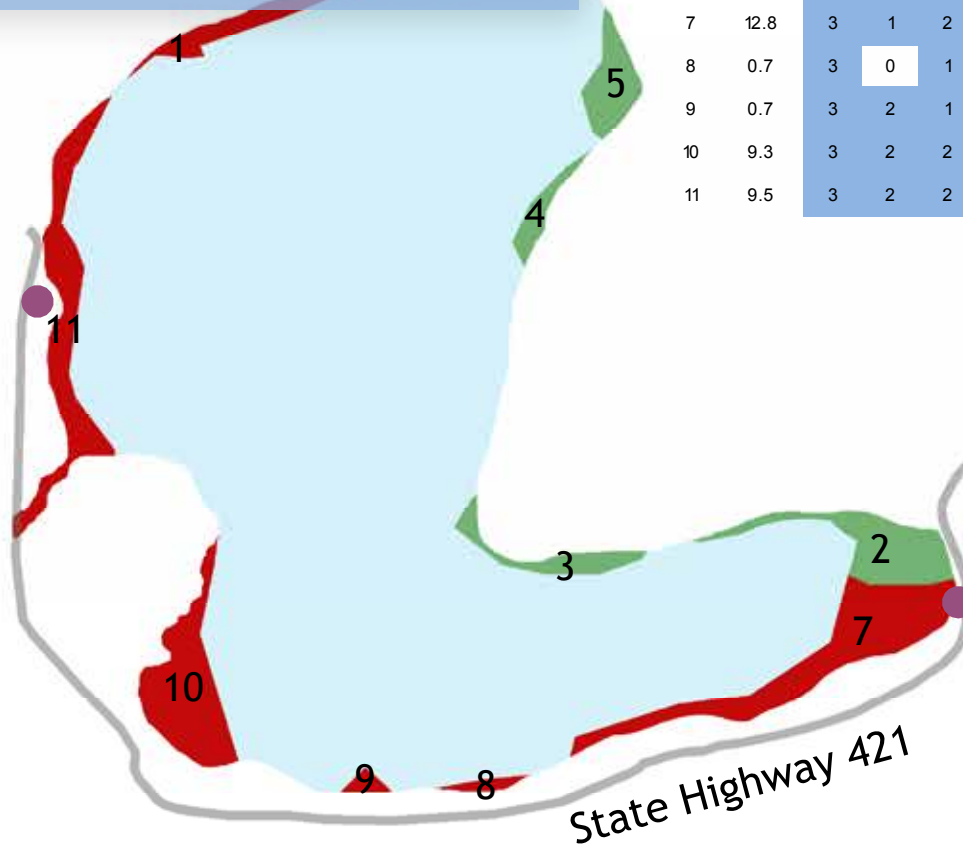
Town: Piercefield

Species Richness: 19

Bed Area (acres): 54.3

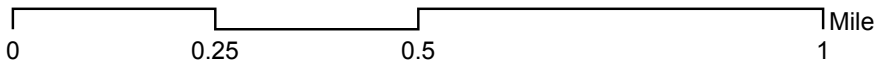
Lake Area (acres): 397.5

Map by:



Bed ID	Acres	Pipewort	<i>Ericaulon</i> sp.	Large leaf pondweed	Potamogeton amplifolius	Spatterdock	<i>Nuphar variegata</i>	<i>Variable leaf milfoil</i>	<i>Myriophyllum heterophyllum</i>	Grassy arrowhead	<i>Sagittaria graminea</i>	Watershield	<i>Brasenia schreberi</i>	Water lobelia	<i>Lobelia dortmanna</i>	Small pondweed	Potamogeton pusillus	Swollen bladderwort	<i>Utricularia inflata</i>	Nitella algae	Nitella sp.	Bur reed	<i>Sparganium</i> sp.	Ribbon leaf pondweed	Potamogeton ephedrus	Quillwort	<i>Isotetes</i> sp.	Purple bladderwort	<i>Utricularia purpurea</i>	Floating leaf pondweed	<i>Potamogeton natans</i>	White waterlily	<i>Nymphaea odorata</i>	Little floating heart	<i>Nymphoides cordata</i>	Slender water milfoil	<i>Myriophyllum tenellum</i>	Lavender bladderwort	<i>Utricularia resupinata</i>				
1	0.9	2	2	0	3	0	0	0	2	0	0	2	0	0	1	0	2	0	0	2	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
2	7.0	4	3	4	0	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	3	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
3	2.9	4	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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5	4.0	3	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
6	5.0	3	2	1	3	2	1	0	0	2	1	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	12.8	3	1	2	3	3	0	1	2	2	1	0	0	0	2	2	1	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0.7	3	0	1	3	3	1	2	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	0.7	3	2	1	4	3	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	
10	9.3	3	2	2	4	3	3	2	2	4	0	0	2	2	4	0	0	2	2	0	0	2	2	0	0	2	0	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0
11	9.5	3	2	2	4	2	3	2	2	3	1	1	2	1	2	1	1	2	1	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

0 Absent 1 Rare (< 5%) 2 Occasional (6 to 15%)
 3 Present (16 to 25%) 4 Common (26 to 50%) 5 Abundant (> 50%)



Joe Indian Pond Aquatic Plant Survey 2016

Aquatic Plant Beds

Open Water

Roads Soft Launch Hand Launch

County: St Lawrence

No AIS Observed

Town: Parishville

Species Richness: 17

Bed Area (acres): 86.5

Lake Area (acres): 357.1

Map by:

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ADIRONDACK WATERSHED INSTITUTE

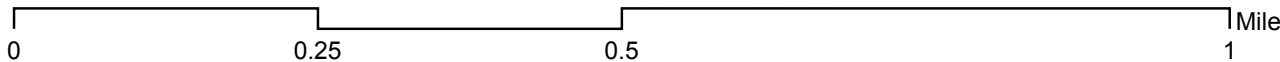
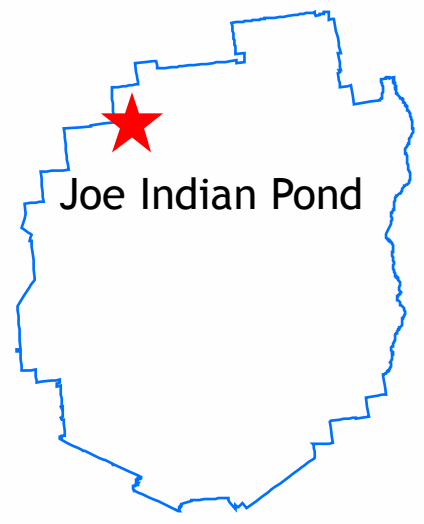
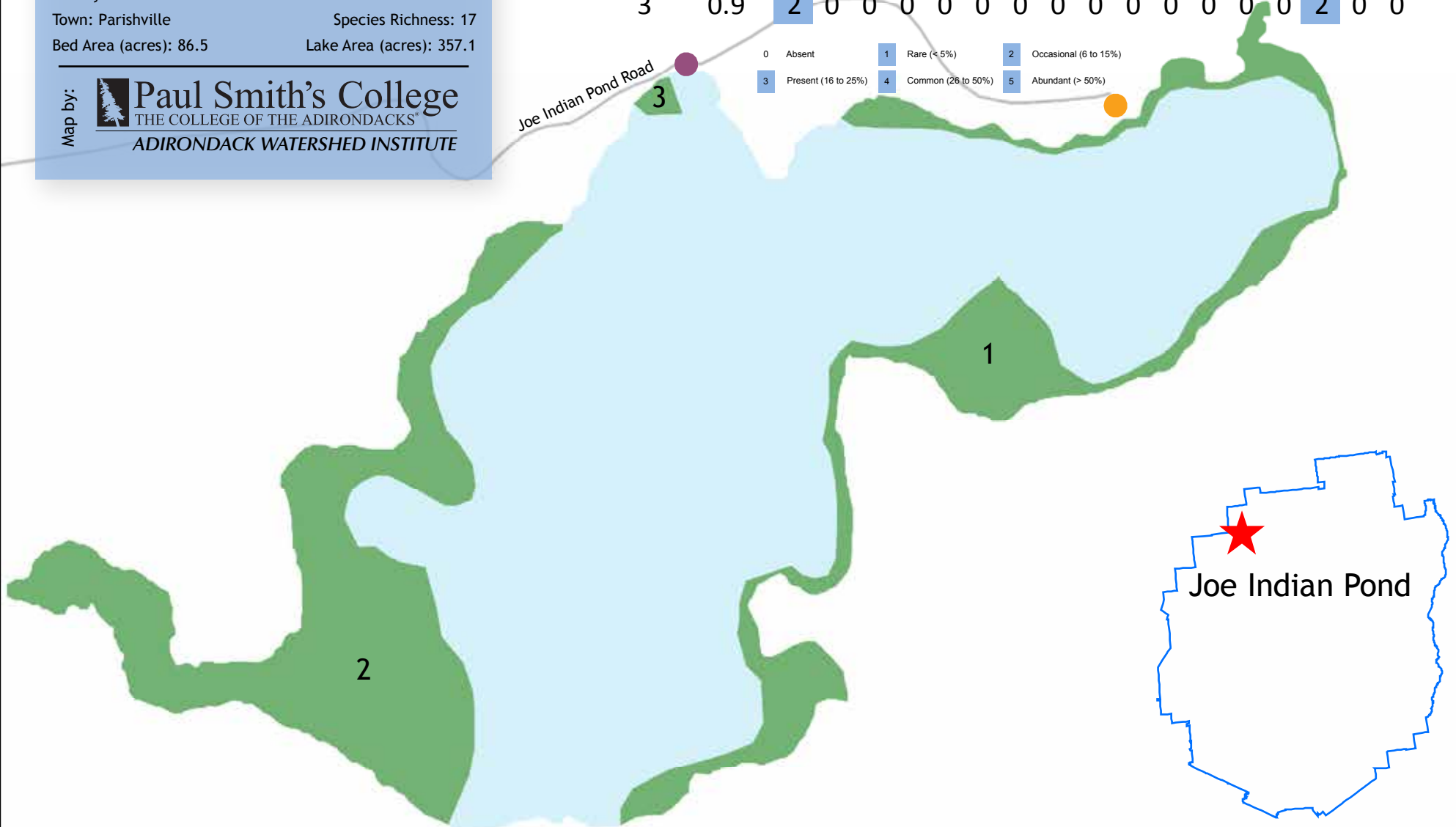
Bed ID Acres

1 37.8
2 47.8
3 0.9

White water lily	<i>Nymphaea odorata</i>	Bur reed	<i>Sparganium</i> sp.	Watershield	<i>Brasenia schreberi</i>	Spatterdock	<i>Nuphar variegata</i>	Common bladderwort	<i>Utricularia vulgaris</i>	Grass leaved pondweed	<i>Potamogeton gramineus</i>	Ribbon leaf pondweed	<i>Potamogeton ephydrus</i>	Hair grass	<i>Eleocharis</i> sp.	Grassy arrowhead	<i>Sagittaria graminea</i>	Water lobelia	<i>Labella dortmanna</i>	Purple bladderwort	<i>Utricularia purpurea</i>	Little floating heart	<i>Nymphoides cordata</i>	Water nymph	<i>Najas</i> sp.	Robbin's pondweed	<i>Potamogeton robinisii</i>	Floating leaf pondweed	<i>Potamogeton natans</i>	Eel grass	<i>Vallisneria americana</i>	Interrupted bladderwort	<i>Utricularia intermedia</i>
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0 Absent 1 Rare (<5%) 2 Occasional (6 to 15%)
3 Present (16 to 25%) 4 Common (26 to 50%) 5 Abundant (> 50%)

Joe Indian Pond Road



Lake Eaton & Clear Pond Aquatic Plant Survey 2016

Aquatic Plant Beds

Open Water

Roads Soft Launch Hand Launch

County: Hamilton

No AIS Observed

Town: Long Lake

Species Richness: 17

Bed Area (acres): 86.5

Lake Area (acres): 573.8

Map by:

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Bed ID	Acres	Pipewort	Eriocaulon sp.	White water lily	Nymphaea odorata	Grassy arrowhead	Sagittaria graminea	Water lobelia	Lobelia dortmanna	Floating leaf pondweed	Potamogeton natans	Ribbon leaf pondweed	Potamogeton ephedrus	Spadderdock	Nuphar variegata	Hair grass	Eleocharis sp.	Quillwort	Isetes sp.	Slender watermilfoil	Myriophyllum tenellum	Bur reed	Sparganium sp.	Purple bladderwort	Utricularia purpurea	Lavender bladderwort	Utricularia resupinata	Watershield	Brasenia schreberi	Common bladderwort	Utricularia vulgaris	Pickering weed	Pontederia cordata	Lesser bladderwort	Utricularia minor	
1	18.1	5	0	0	2	0	0	0	0	0	0	0	0	2	2	0	2	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	9.8	4	2	2	0	2	2	2	3	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	
3	3.3	4	0	1	2	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4	4.3	4	1	1	3	0	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	
5	4.7	5	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	
6	2.0	3	0	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7	3.5	4	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
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11	0.3	0	1	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
12	0.8	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
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15	0.7	0	0	3	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	0.1	4	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	13.7	1	3	0	0	4	1	1	0	0	0	0	0	0	0	0	0	0	1	0	3	1	0	4	0	0	0	0	0	0	0	0	0	0	0	0

0 Absent 1 Rare (< 5%) 2 Occasional (6 to 15%)
3 Present (16 to 25%) 4 Common (26 to 50%) 5 Abundant (> 50%)



Lake Luzerne Aquatic Plant Survey 2016

Invaded Beds

Open Water

Roads ● Hard Launch ● Hand Launch

County: Warren

AIS Observed:

Curly Leaf Pondweed
Potamogeton crispus
Variable leaf milfoil
Myriophyllum heterophyllum

Town: Lake Luzerne

Species Richness: 29

Bed Area (acres): 33.8

Lake Area (acres): 103.7

Map by:

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Lake Avenue

Page 35

0 0.125 0.25 0.5 Mile

Bed ID	1	2	3	4	5	6	7
Acres	12.4	0.0	0.9	0.1	4.0	0.3	16.2
White waterlily	2	2	3	0	0	3	2
<i>Nymphaea odorata</i>	2	2	3	0	0	3	2
Eurasian watermilfoil	0	0	1	2	5	4	4
<i>Myriophyllum spicatum</i>	0	0	1	2	5	4	4
Watershield	1	1	2	0	2	0	0
<i>Brasenia schreberi</i>	1	1	2	0	2	0	0
Large leaf pondweed	0	0	1	1	2	0	4
<i>Potamogeton amplifolius</i>	0	0	1	1	2	0	4
Curly leaf pondweed	3	0	2	0	5	3	0
<i>Potamogeton crispus</i>	3	0	2	0	5	3	0
Hairgrass	2	0	2	0	1	0	0
<i>Eleocharis</i> sp.	2	0	2	0	1	0	0
Spatterdock	1	0	0	0	3	0	1
<i>Nuphar variegata</i>	1	0	0	0	3	0	1
Robbin's pondweed	2	0	0	0	2	0	3
<i>Potamogeton robbinsii</i>	2	0	0	0	2	0	3
Western waterweed	0	0	1	0	1	0	1
<i>Elodea nuttallii</i>	0	0	1	0	1	0	1
Grassy arrowhead	2	0	1	0	0	0	0
<i>Sagittaria graminea</i>	2	0	1	0	0	0	0
Quillwort	2	0	2	0	0	0	0
<i>Isoetes</i> sp.	2	0	2	0	0	0	0
Small pondweed	2	0	0	0	0	0	1
<i>Potamogeton pusillus</i>	2	0	0	0	0	0	1
Little floating heart	2	0	1	0	0	0	0
<i>Nymphoides cordata</i>	2	0	1	0	0	0	0
White stemmed pondweed	2	0	0	0	0	0	3
<i>Potamogeton praelongus</i>	2	0	0	0	0	0	3
Nitella algae	2	0	2	0	0	0	0
<i>Nitella</i> sp.	2	0	2	0	0	0	0
Clasping leaf pondweed	3	0	0	0	0	0	2
<i>Potamogeton perfoliatus</i>	3	0	0	0	0	0	2
Flatstemmed pondweed	1	0	1	0	0	0	0
<i>Potamogeton zosteriformis</i>	1	0	1	0	0	0	0
Pipewort	2	0	0	0	0	0	0
<i>Eriocaulon</i> sp.	2	0	0	0	0	0	0
Purple bladderwort	0	0	1	0	0	0	0
<i>Utricularia purpurea</i>	0	0	1	0	0	0	0
Common bladderwort	0	0	0	0	0	0	1
<i>Utricularia vulgaris</i>	0	0	0	0	0	0	1
Slender watermilfoil	0	0	0	0	0	0	1
<i>Myriophyllum tenellum</i>	0	0	0	0	0	0	1
Eelgrass	0	0	0	0	1	0	0
<i>Vallisneria americana</i>	0	0	0	0	1	0	0
Interrupted bladderwort	2	0	0	0	0	0	0
<i>Utricularia intermedia</i>	2	0	0	0	0	0	0
Lesser bladderwort	2	0	0	0	0	0	0
<i>Utricularia minor</i>	2	0	0	0	0	0	0
Canadian waterweed	0	0	0	0	2	0	0
<i>Elodea canadensis</i>	0	0	0	0	2	0	0
Vasey's pondweed	2	0	0	0	0	0	0
<i>Potamogeton vaseyi</i>	2	0	0	0	0	0	0
Alternate leaf milfoil	0	0	0	0	1	0	0
<i>Myriophyllum alterniflorum</i>	0	0	0	0	1	0	0
Northern watermilfoil	0	0	0	0	1	0	0
<i>Myriophyllum sibiricum</i>	0	0	0	0	1	0	0
Snailseed pondweed	0	0	0	0	1	0	0
<i>Potamogeton bicupulatus</i>	0	0	0	0	1	0	0
0 Absent	1 Rare (< 5%)	2 Occasional (6 to 15%)					
3 Present (16 to 25%)	4 Common (26 to 50%)	5 Abundant (> 50%)					

Lake Rondaxe Aquatic Plant Survey 2016

Aquatic Plant Beds

Open Water

Roads Hard Launch Hand Launch

County: Herkimer

No AIS Observed

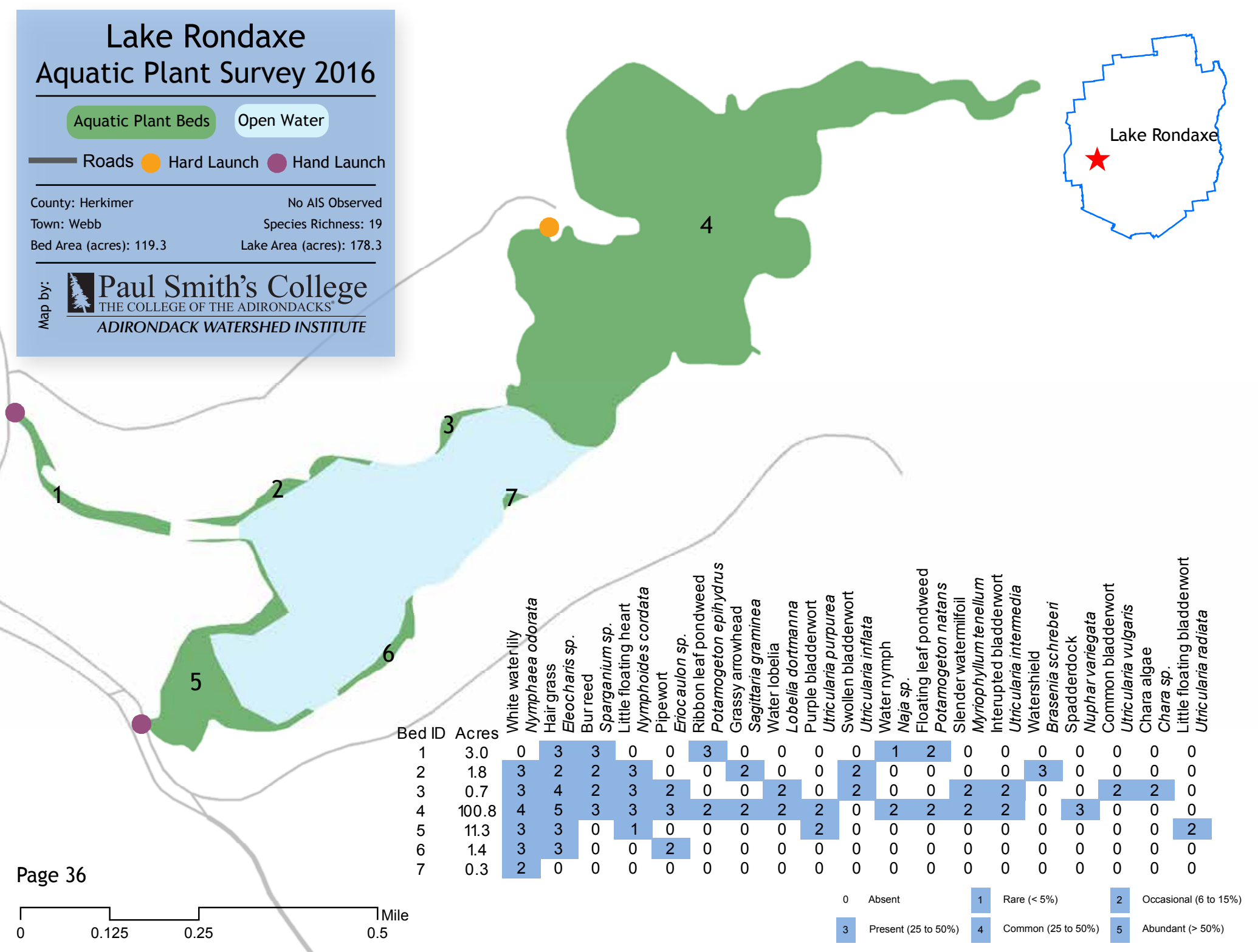
Town: Webb

Species Richness: 19

Bed Area (acres): 119.3

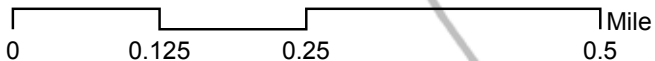
Lake Area (acres): 178.3

Map by: **Paul Smith's College**
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Bed ID	Acres	White water lily	<i>Nymphaea odorata</i>	Hair grass	<i>Eleocharis sp.</i>	Bur reed	<i>Sparganium sp.</i>	Little floating heart	<i>Nymphoides cordata</i>	Pipewort	<i>Eriocaulon sp.</i>	Ribbon leaf pondweed	<i>Potamogeton epihydrus</i>	Grassy arrowhead	<i>Sagittaria graminea</i>	Water lobelia	<i>Lobelia dortmanna</i>	Purple bladderwort	<i>Utricularia purpurea</i>	Swollen bladderwort	<i>Utricularia inflata</i>	Water nymph	<i>Naja sp.</i>	Floating leaf pondweed	<i>Potamogeton natans</i>	Slender watermilfoil	<i>Myriophyllum tenellum</i>	Interrupted bladderwort	<i>Utricularia intermedia</i>	Watershield	<i>Brasenia schreberi</i>	Spatterdock	<i>Nuphar variegata</i>	Common bladderwort	<i>Utricularia vulgaris</i>	Chara algae	<i>Chara sp.</i>	Little floating bladderwort	<i>Utricularia radiata</i>	
1	3.0	0	3	3	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	1.8	3	2	2	3	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0
3	0.7	3	4	2	3	2	0	0	2	0	0	0	0	0	2	0	0	0	0	2	0	0	2	2	0	0	2	2	0	0	0	2	2	0	0	0	0	0	0	0
4	100.8	4	5	3	3	3	2	2	3	2	2	2	2	2	2	2	2	2	2	0	2	2	2	2	2	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0
5	11.3	3	3	0	1	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
6	1.4	3	3	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0.3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

0 Absent 1 Rare (< 5%) 2 Occasional (6 to 15%)
 3 Present (25 to 50%) 4 Common (25 to 50%) 5 Abundant (> 50%)



Little Clear Pond Aquatic Plant Survey 2016

Aquatic Plant Beds

Open Water

Roads

Soft Launch

County: St Lawrence

No AIS Observed

Town: Parishville

Species Richness: 12

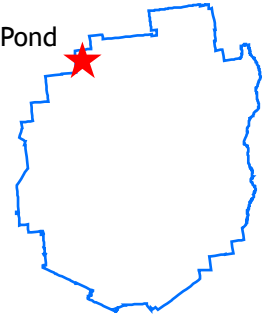
Bed Area (acres): 21.6

Lake Area (acres): 35.7

Map by:

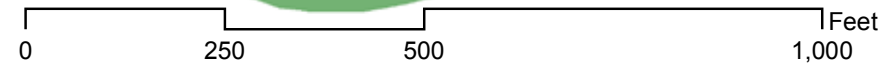
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Little Clear Pond



Bed ID	1	2
Acres	21.4	0.2
Watershed	2	2
<i>brasenia schreberi</i>	2	2
Burreed	2	0
<i>Sparganium</i> sp.	2	0
Pipewort	2	0
<i>Eriocaulon</i> sp.	2	0
White water Lily	2	0
<i>Nymphaea odorata</i>	2	0
Hair grass	2	0
<i>Eleocharis</i> sp.	2	0
Grassy arrowhead	2	0
<i>Sagittaria graminea</i>	2	0
Spatterdock	2	0
<i>Nuphar variegata</i>	2	0
Purple bladderwort	3	0
<i>Utricularia purpurea</i>	3	0
Large leaf pondweed	1	0
<i>Potamogeton amplifolius</i>	2	0
Nitella algae	2	0
<i>Nitella</i> sp.	2	0
Robbin's pondweed	2	0
<i>Potamogeton robbinsii</i>	2	0
Pickerel weed	2	0
<i>Pontederia cordata</i>	2	0

0 Absent	1 Rare (< 5%)	2 Occasional (6 to 15%)
3 Present (16 to 25%)	4 Common (26 to 50%)	5 Abundant (> 50%)



Little Wolf Pond Aquatic Plant Survey 2016

Aquatic Plant Beds

Open Water

Roads

Soft Launch

County: Franklin

No AIS Observed

Town: Tupper Lake

Species Richness: 21

Bed Area (acres): 35.7

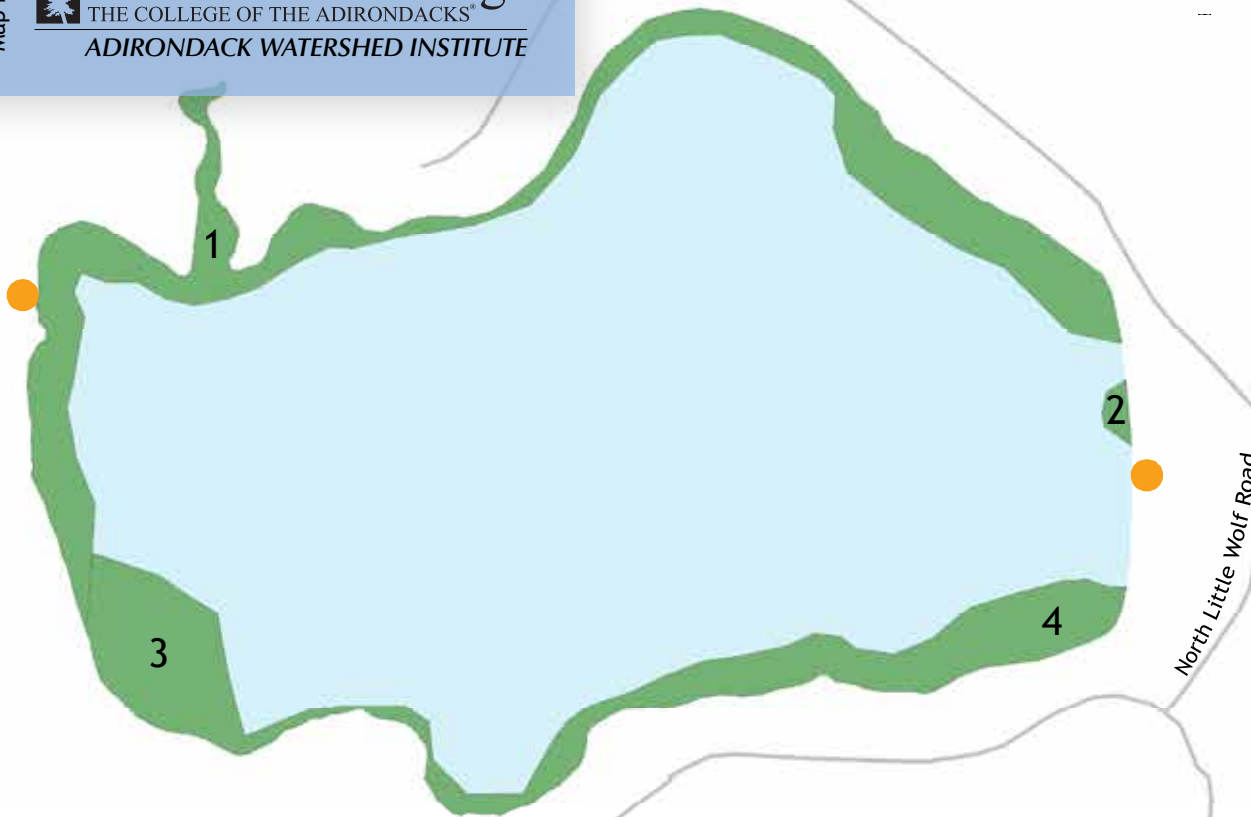
Lake Area (acres): 163.4

Map by:

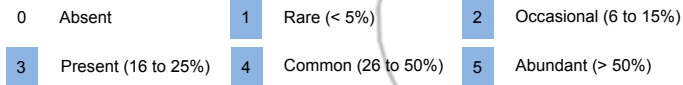
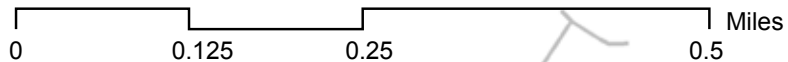
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Little Wolf Pond



Bed ID	1	2	3	4
Acres	17.1	0.3	14.4	34.7
Pipewort	4	3	3	4
<i>Eriocaulon</i> sp.	2	2	2	2
Grassy arrowhead	2	1	3	3
<i>Sagitaria graminea</i>	3	2	4	3
Water nymph	2	0	2	2
<i>Najas</i> sp.	2	0	3	2
Clasping leaf pondweed	3	0	1	3
<i>Potamogeton perfoliatus</i>	2	0	1	1
Burr reed	2	2	1	2
<i>Sparganium</i> sp.	2	0	2	2
Ribbon leaf pondweed	2	0	2	2
<i>Potamogeton ephedrus</i>	1	0	2	2
White water lily	2	0	3	2
<i>Nymphaea odorata</i>	2	0	3	2
Spatterdock	3	0	1	3
<i>Nuphar variegata</i>	2	0	1	1
Slender watermilfoil	2	0	1	1
<i>Myriophyllum tenellum</i>	2	0	1	1
Chara algae	0	2	1	2
<i>Chara</i> sp.	0	2	1	2
Lavender bladderwort	2	0	2	2
<i>Utricularia resupinata</i>	2	0	2	2
Canadian waterweed	4	0	0	4
<i>Elodea canadensis</i>	4	0	0	4
Water lobelia	3	0	0	3
<i>Lobelia dortmanna</i>	3	0	0	3
Purple bladderwort	3	0	0	3
<i>Utricularia purpurea</i>	3	0	0	3
Quillwort	0	0	2	2
<i>Isoetes</i> sp.	0	0	2	2
Small pondweed	3	0	0	3
<i>Potamogeton pusillus</i>	3	0	0	3
Swollen bladderwort	2	0	0	2
<i>Utricularia inflata</i>	2	0	0	2
Nitella algae	2	0	0	2
<i>Nitella</i> sp.	2	0	0	2
Common bladderwort	2	0	0	2
<i>Utricularia vulgaris</i>	2	0	0	2
Pickerel weed	2	0	0	2
<i>Pontederia cordata</i>	2	0	0	2
Farwell's watermilfoil	2	0	0	2
<i>Myriophyllum farwellii</i>	0	0	0	3
White stemmed pondweed	0	0	0	3
<i>Potamogeton praelongus</i>	0	0	0	2
Western waterweed	0	0	0	2
<i>Elodea nuttallii</i>	0	0	0	2



Long Lake (Hamilton) South Aquatic Plant Survey 2016

Aquatic Plant Beds Invaded Beds Open Water

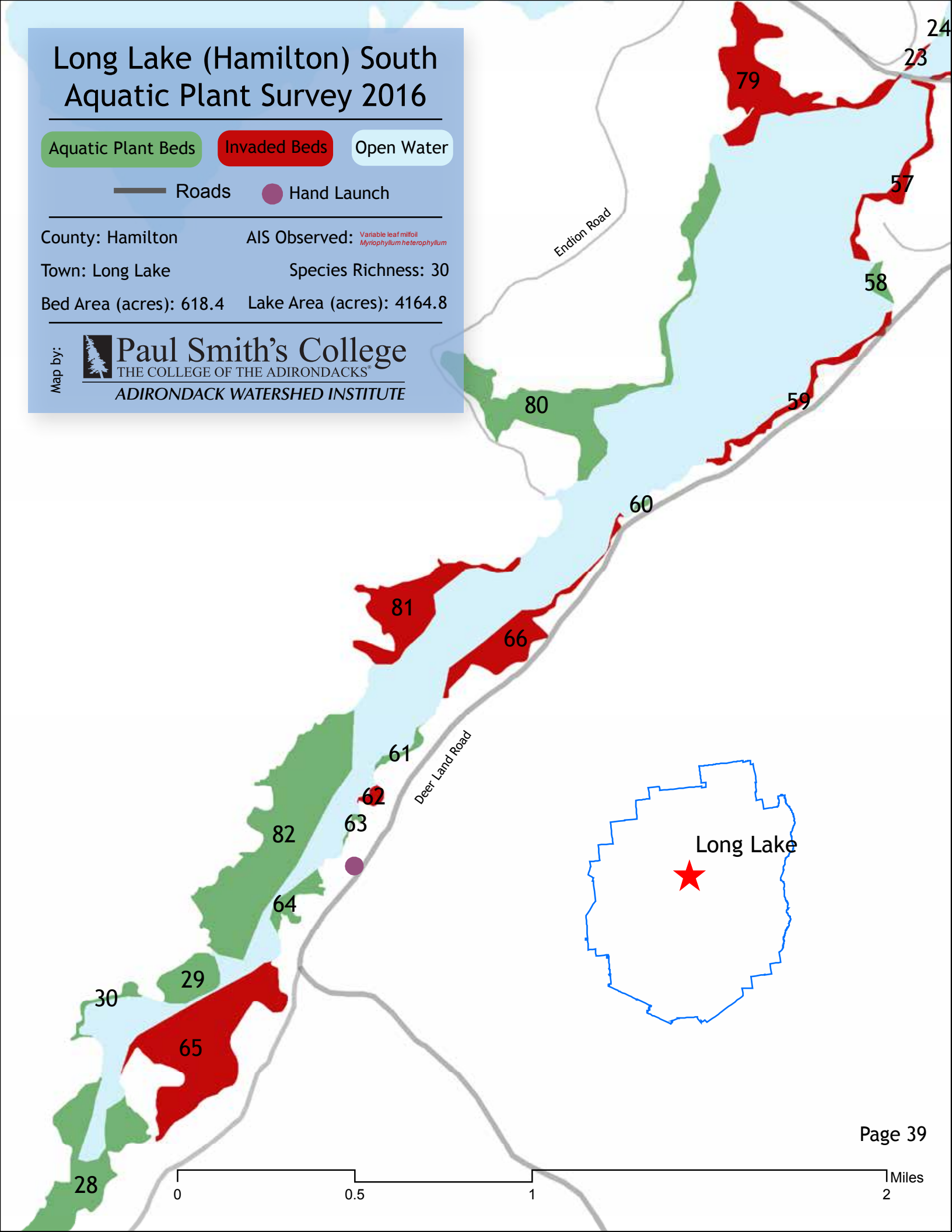
— Roads ● Hand Launch

County: Hamilton AIS Observed: Variable leaf milfoil
Myriophyllum heterophyllum

Town: Long Lake Species Richness: 30

Bed Area (acres): 618.4 Lake Area (acres): 4164.8

Map by:  **Paul Smith's College**
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Long Lake (Hamilton) Central Aquatic Plant Survey 2016

Aquatic Plant Beds

Invaded Beds

Open Water

— Roads

● Hand Launch

County: Hamilton

AIS Observed: *Variable leaf milfoil*
Myriophyllum heterophyllum

Town: Long Lake

Species Richness: 30

Bed Area (acres): 618.4

Lake Area (acres): 4164.8

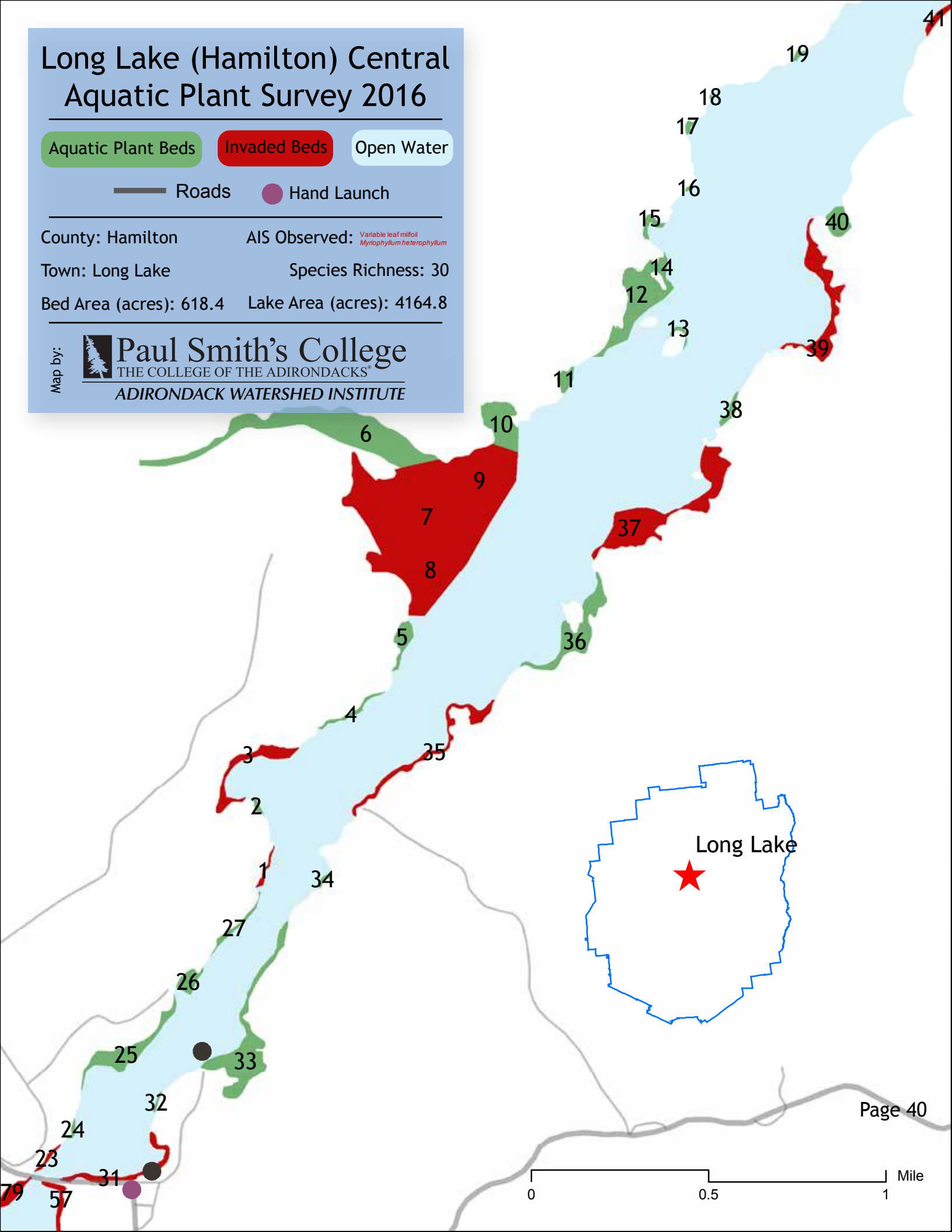
Map by:



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Long Lake (Oneida) Aquatic Plant Survey 2016

Aquatic Plant Beds

Open Water

Roads

Hand Launch

County: Oneida

No AIS Observed

Town: Forestport

Species Richness: 16

Bed Area (acres): 89.5

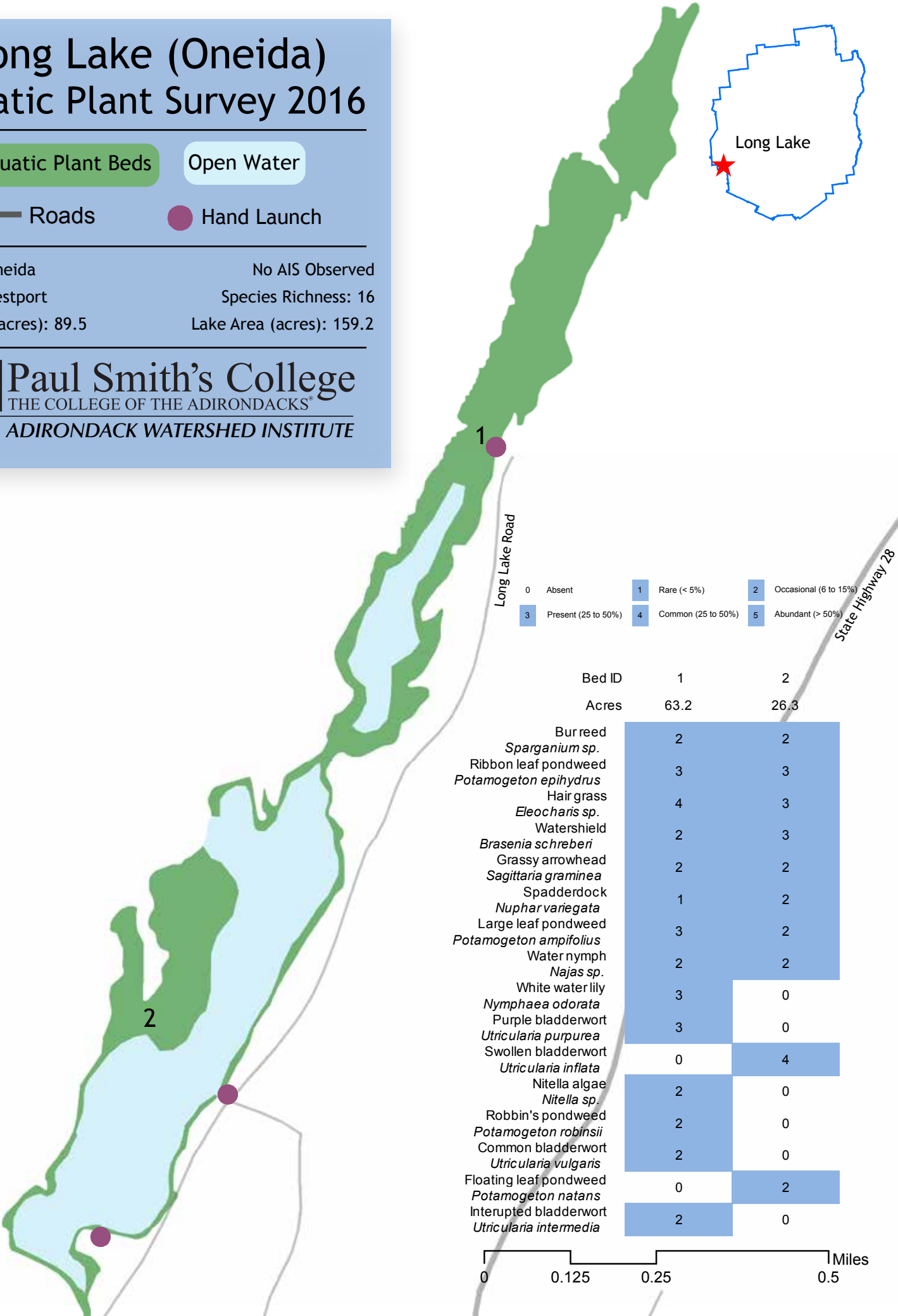
Lake Area (acres): 159.2

Map by:



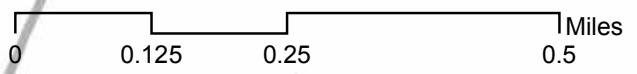
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Long Lake



0	Absent	1	Rare (< 5%)	2	Occasional (6 to 15%)
3	Present (25 to 50%)	4	Common (25 to 50%)	5	Abundant (> 50%)

	Bed ID 1	Bed ID 2
Acres	63.2	26.3
Bur reed <i>Sparganium</i> sp.	2	2
Ribbon leaf pondweed <i>Potamogeton epiphyrus</i>	3	3
Hair grass <i>Eleocharis</i> sp.	4	3
Watershield <i>Brasenia schreberi</i>	2	3
Grassy arrowhead <i>Sagittaria graminea</i>	2	2
Spatterdock <i>Nuphar variegata</i>	1	2
Large leaf pondweed <i>Potamogeton amplifolius</i>	3	2
Water nymph <i>Najas</i> sp.	2	2
White water lily <i>Nymphaea odorata</i>	3	0
Purple bladderwort <i>Utricularia purpurea</i>	3	0
Swollen bladderwort <i>Utricularia inflata</i>	0	4
Nitella algae <i>Nitella</i> sp.	2	0
Robbin's pondweed <i>Potamogeton robinsii</i>	2	0
Common bladderwort <i>Utricularia vulgaris</i>	2	0
Floating leaf pondweed <i>Potamogeton natans</i>	0	2
Interrupted bladderwort <i>Utricularia intermedia</i>	2	0



Nick's Lake Aquatic Plant Survey 2016

Aquatic Plant Beds

Open Water

Roads Hand Launch Hard Launch

County: Herkimer

Town: Webb

Lake Area (acres): 46.8

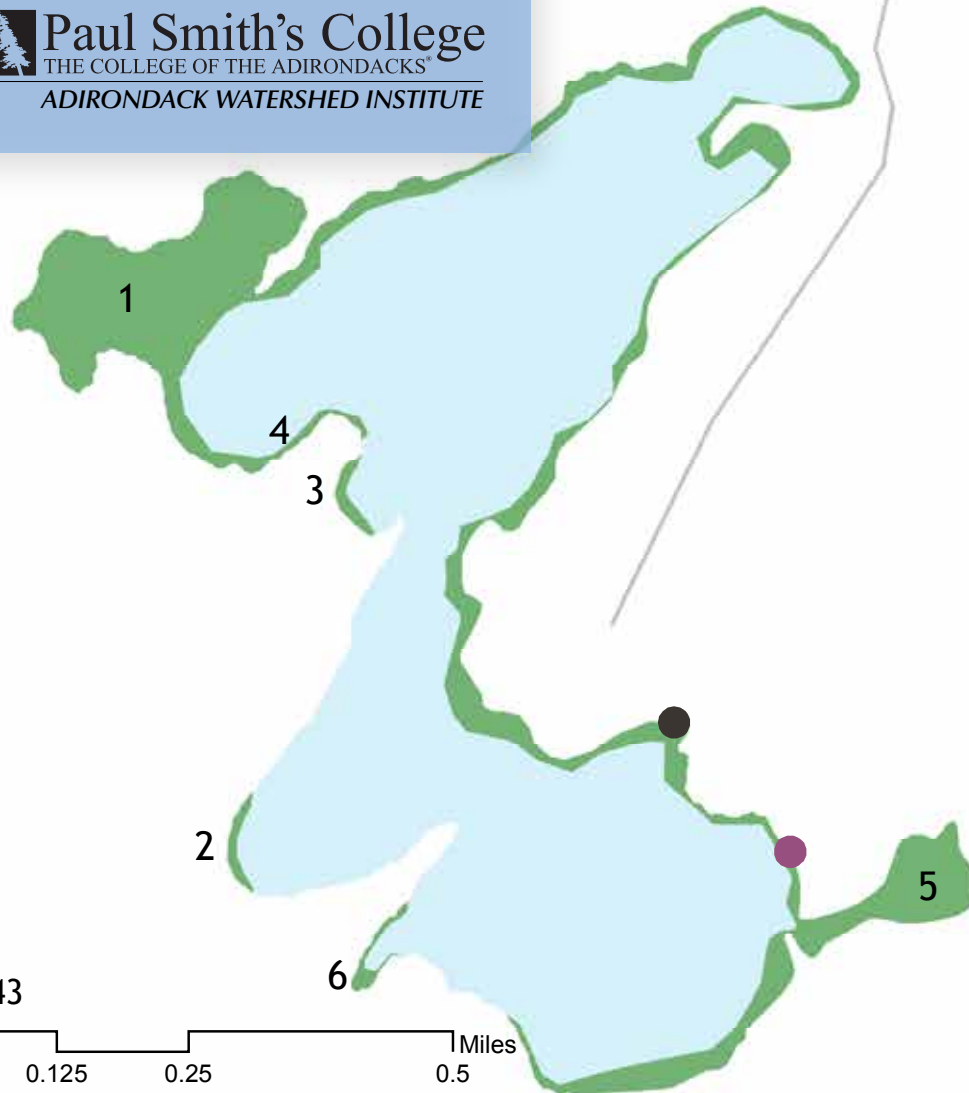
Lake Area (acres): 209

No AIS Observed

Species Richness: 25

Map by:

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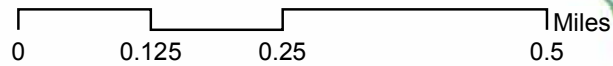
Bisby Road

Nick's Lake Road

Nicks Lake

Bed ID	1	2	3	4	5	6
Acres	33.6	0.5	0.6	0.5	11.2	0.5
Watershed	2	2	2	4	2	3
<i>Brassia schreberi</i>	2	2	2	4	2	3
Pipewort	3	4	0	5	4	4
<i>Eriocaulon</i> sp.	3	3	4	0	3	2
White water lily	3	3	4	0	3	2
<i>Nymphaea odorata</i>	3	3	4	0	3	2
Hair grass	0	3	4	2	4	4
<i>Eleocharis</i> sp.	0	3	4	2	4	4
Small pondweed	2	0	3	3	3	3
<i>Potamogeton pussilus</i>	2	0	3	3	3	3
Ribbon leaf pondweed	3	0	2	0	3	3
<i>Potamogeton ephidrus</i>	3	0	2	0	3	3
Little floating bladderwort	0	0	2	3	4	2
<i>Utricularia radiata</i>	0	0	2	3	4	2
Grassy arrowhead	2	2	2	0	0	0
<i>Sagittaria graminea</i>	2	2	2	0	0	0
Spadderdock	2	2	2	0	0	0
<i>Nuphar variegata</i>	2	0	0	2	3	0
Dortmann's cardinal flower	2	0	0	2	3	0
<i>Lobelia dortmanna</i>	2	0	2	2	0	0
Bur reed	2	0	0	0	0	2
<i>Sparganium</i> sp.	2	0	0	0	0	2
Swollen bladderwort	2	0	0	0	0	2
<i>Utricularia inflata</i>	2	0	0	0	0	2
Nitella algae	2	0	0	0	0	2
<i>Nitella</i> sp.	2	0	0	0	0	2
Slender watermilfoil	1	0	0	0	1	0
<i>Myriophyllum tenellum</i>	1	0	0	0	1	0
Eel grass	0	2	0	0	2	0
<i>Vallisneria americana</i>	0	2	0	0	2	0
Lavender bladderwort	2	0	0	0	0	1
<i>Utricularia resupinata</i>	2	0	0	0	0	1
Purple bladderwort	0	0	0	0	2	0
<i>Utricularia purpurea</i>	0	0	0	0	2	0
Quillwort	0	0	0	0	0	2
<i>Isoetes</i> sp.	0	0	0	0	0	2
Robin's pondweed	0	0	0	0	0	2
<i>Potamogeton robinii</i>	0	0	0	0	0	2
Common bladderwort	0	0	0	0	2	0
<i>Utricularia vulgaris</i>	0	0	0	0	2	0
Floating leaf pondweed	0	0	0	0	3	0
<i>Potamogeton natans</i>	0	0	0	0	3	0
Pickelweed	2	0	0	0	0	0
<i>Pontederia cordata</i>	2	0	0	0	0	0
Lesser bladderwort	0	0	0	0	1	0
<i>Utricularia minor</i>	0	0	0	0	1	0
Waterthread pondweed	1	0	0	0	0	0
<i>Potamogeton diversifolius</i>	1	0	0	0	0	0
Low watermilfoil	0	0	0	0	0	2
<i>Myriophyllum humile</i>	0	0	0	0	0	2

0 Absent 1 Rare (< 5%) 2 Occasional (6 to 15%)
3 Present (16 to 25%) 4 Common (26 to 50%) 5 Abundant (> 50%)



Payne Lake Aquatic Plant Survey 2016

Aquatic Plant Beds

Open Water

Roads

Soft Launch

County: Lewis

Town: Watson

Lake Area (acres): 2.5

Lake Area (acres): 17.7

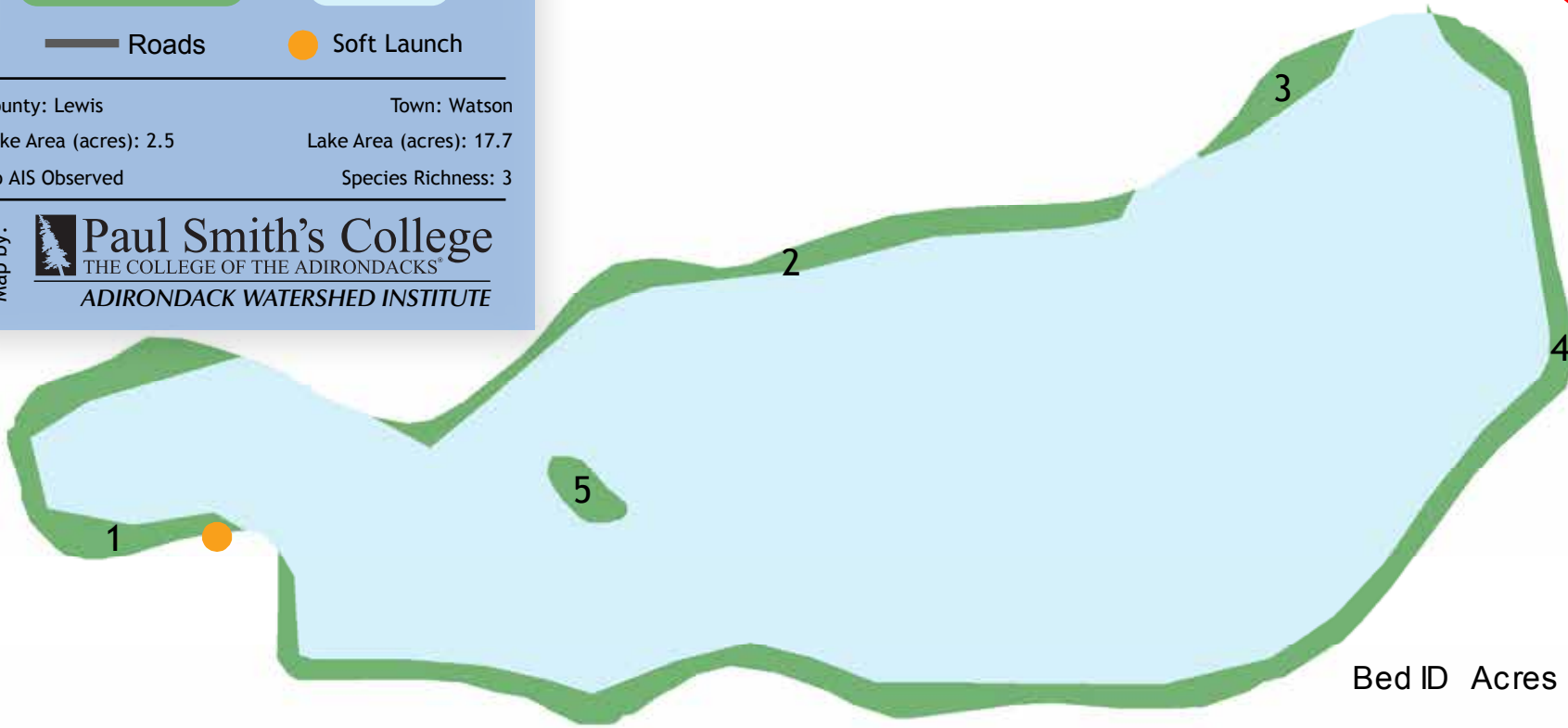
No AIS Observed

Species Richness: 3

Map by:

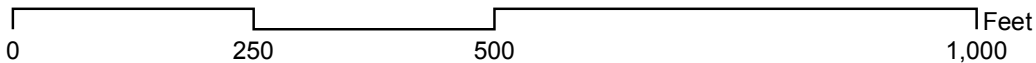


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Bed ID Acres

Bed ID	Acres	3	Hair grass	Eleocharis sp.	White water lily	Nuphar variegata	Oullwort	Isoetes sp.
1	0.4	3	3	3	3	3		
2	0.5	3	3	3	2			
3	0.2	3	3	3	2			
4	1.3	3	4	3	2			
5	0.1	1	4	0	0			



0	Absent	1	Rare (< 5%)	2	Occasional (6 to 15%)
3	Present (16 to 25%)	4	Common (26 to 50%)	5	Abundant (> 50%)

Quiver Pond Aquatic Plant Survey 2016

Aquatic Plant Beds

Open Water

Roads

Hand Launch

County: Herkimer

Town: Webb

Lake Area (acres): 9.8

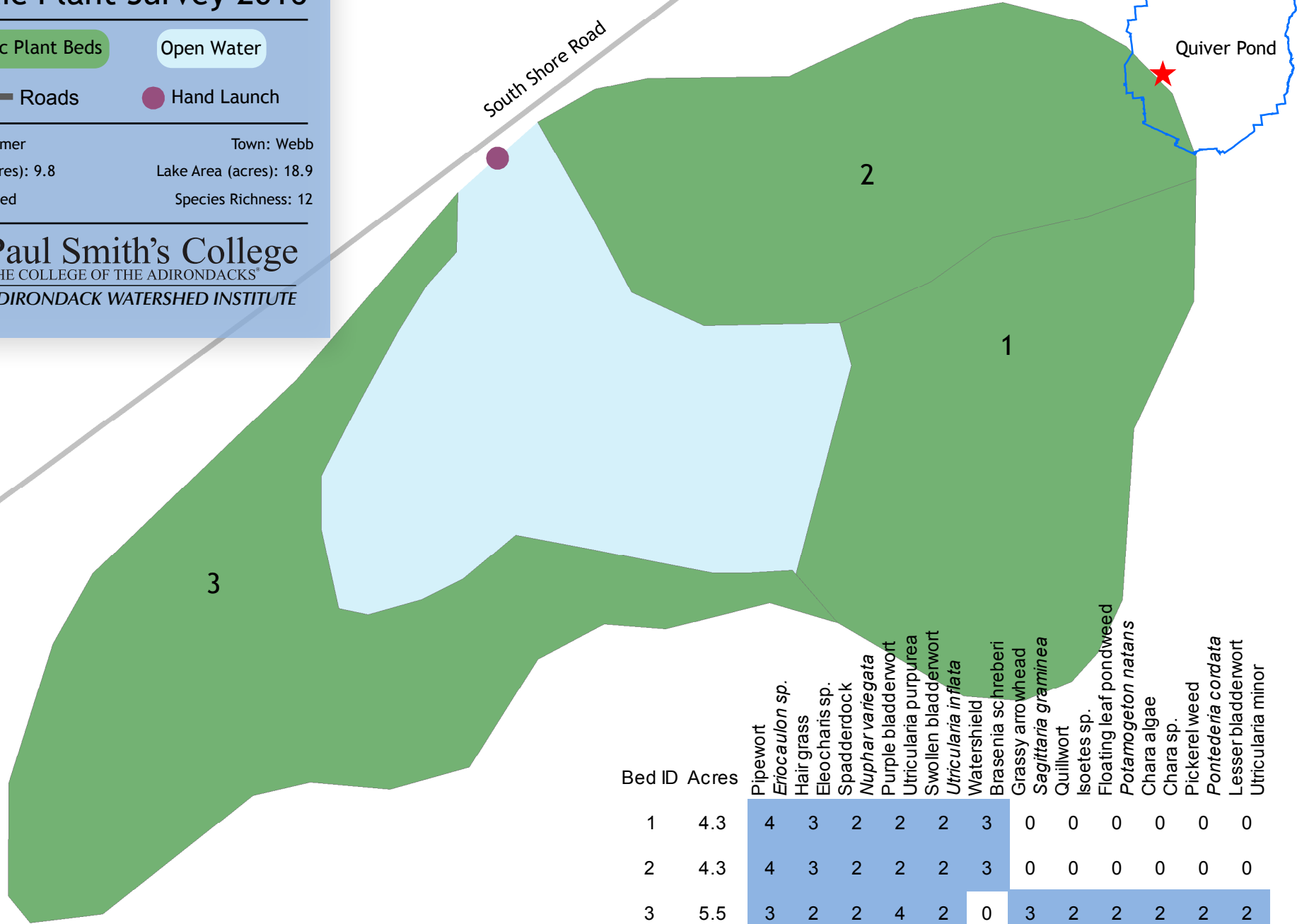
Lake Area (acres): 18.9

No AIS Observed

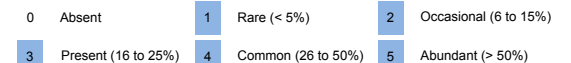
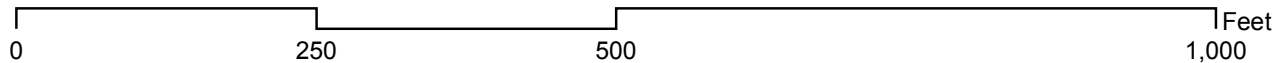
Species Richness: 12

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Bed ID	Acres	Pipewort	<i>Eriocaulon</i> sp.	Hair grass	Eleocharis sp.	Spatterdock	<i>Nuphar variegata</i>	Purple bladderwort	<i>Utricularia purpurea</i>	Swollen bladderwort	<i>Utricularia inflata</i>	Watershield	<i>Brasenia schreberi</i>	Grassy arrowhead	<i>Sagittaria graminea</i>	Quillwort	Isoetes sp.	Floating leaf pondweed	<i>Potamogeton natans</i>	Chara algae	Chara sp.	Pickrel weed	<i>Pontederia cordata</i>	Lesser bladderwort	<i>Utricularia minor</i>
1	4.3	4	3	2	2	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2	4.3	4	3	2	2	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
3	5.5	3	2	2	4	2	0	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	



Rainbow Falls Reservoir Aquatic Plant Survey 2016

Aquatic Plant Beds Invaded Beds Open Water

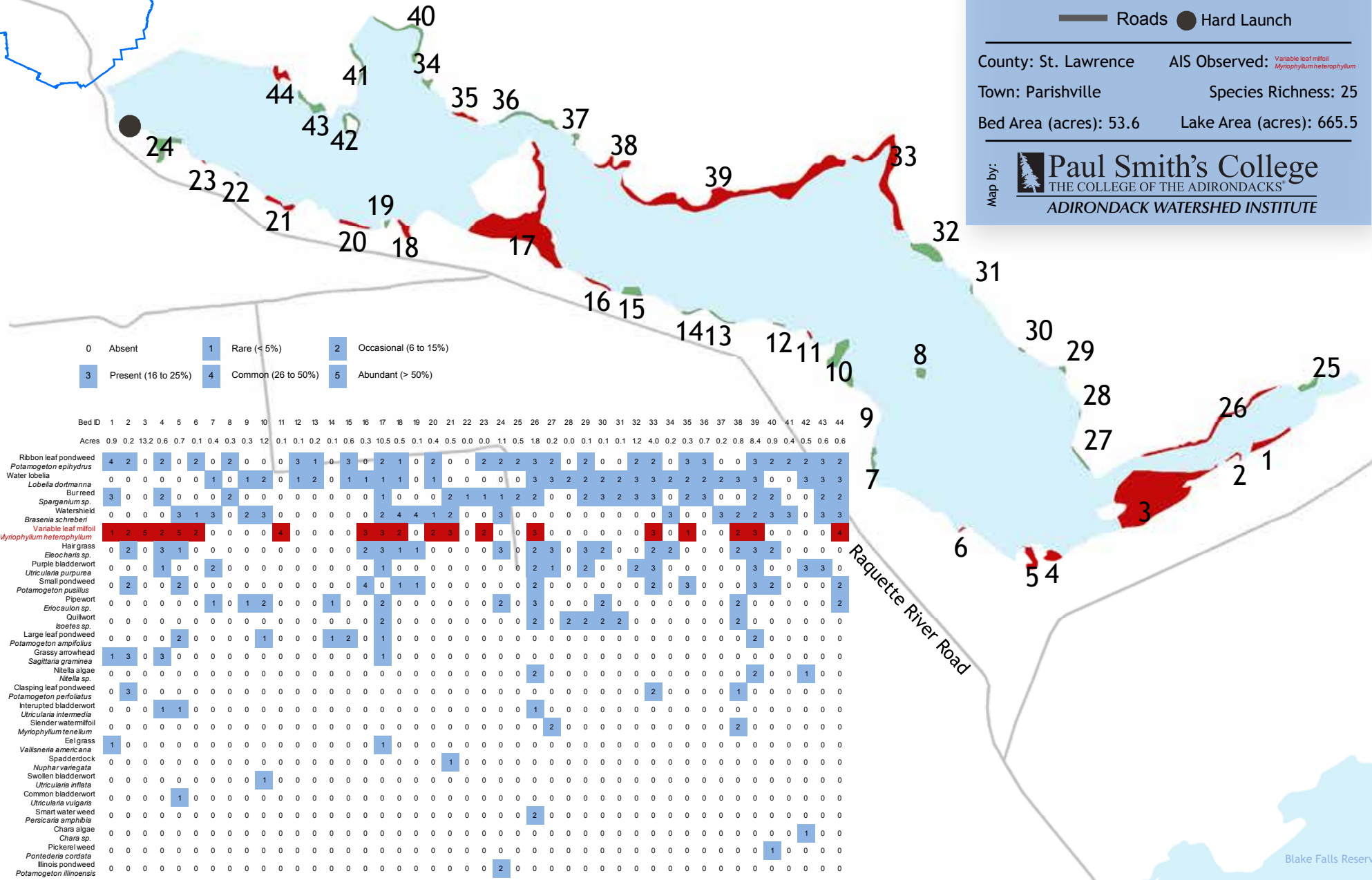
Roads Hard Launch

County: St. Lawrence AIS Observed: *Variable leaf milfoil* *Myriophyllum heterophyllum*

Town: Parishville Species Richness: 25

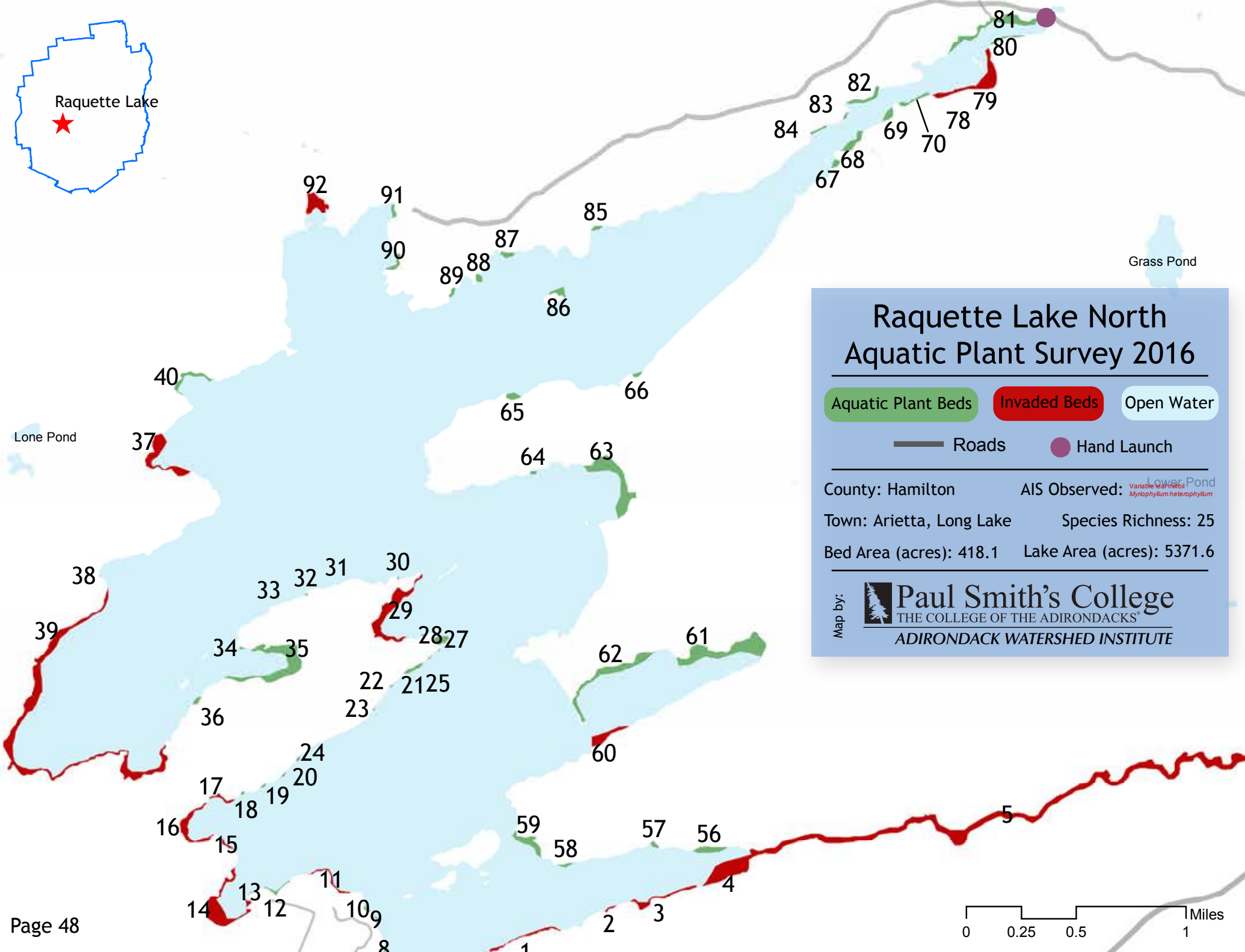
Bed Area (acres): 53.6 Lake Area (acres): 665.5

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0 Absent 1 Rare (< 5%) 2 Occasional (6 to 15%)
3 Present (16 to 25%) 4 Common (26 to 50%) 5 Abundant (> 50%)

Bed ID	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44				
Acres	0.9	0.2	13.2	0.6	0.7	0.1	0.4	0.3	0.3	1.2	0.1	0.1	0.2	0.1	0.6	0.3	10.5	0.5	0.1	0.4	0.5	0.0	0.0	1.1	0.5	1.8	0.2	0.0	0.1	0.1	0.1	1.2	4.0	0.2	0.3	0.7	0.2	0.8	8.4	0.9	0.4	0.5	0.6	0.6				
Ribbon leaf pondweed	4	2	0	2	0	2	0	2	0	0	0	3	1	0	3	0	2	1	0	2	0	0	2	2	2	3	2	0	2	0	0	2	2	0	3	3	0	0	3	2	2	2	3	2				
Potamogeton ephedrus	0	0	0	0	0	0	1	0	1	2	0	1	2	0	1	1	1	1	0	1	0	0	0	0	0	3	3	2	2	2	2	3	3	2	2	2	2	3	3	0	0	3	3	3				
Water lobelia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Lobelia dortmanna	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Burreed	3	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	1	0	0	0	0	0	2	1	1	1	2	2	0	2	3	0	2	3	0	0	2	3	0	0	2	2	0	2	2			
Sparganium sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Watershield	0	0	0	0	3	1	3	0	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Brasenia schreberi	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Variable leaf milfoil	1	2	5	2	5	2	0	0	0	0	4	0	0	0	0	0	3	3	2	0	2	3	0	2	0	0	3	0	0	0	0	0	0	3	0	1	0	0	2	3	0	0	0	0	0	4		
Myriophyllum heterophyllum	0	2	0	3	1	0	0	0	0	0	0	0	0	0	0	2	3	1	1	0	0	0	0	0	3	0	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Hair grass	0	2	0	3	1	0	0	0	0	0	0	0	0	0	0	2	3	1	1	0	0	0	0	0	3	0	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Eleocharis sp.	0	0	0	1	0	0	2	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	2	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Purple bladderwort	0	0	0	1	0	0	2	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	2	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Utricularia purpurea	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	4	0	1	1	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Potamogeton pusillus	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Pipewort	0	0	0	0	0	0	1	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Eriocaulon sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Quillwort	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Isetes sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Large leaf pondweed	0	0	0	0	2	0	0	0	0	1	0	0	0	0	1	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Potamogeton amplifolius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Grassy arrowhead	1	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Sagittaria graminea	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Nitella algae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Nitella sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Clasping leaf pondweed	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Potamogeton perfoliatus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Interrupted bladderwort	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Utricularia intermedia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Slender watermilfoil	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Myriophyllum tenellum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Elg grass	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Vallisneria spiralis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Spaddeerock	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nuphar variegata	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Swollen bladderwort	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Utricularia inflata	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Common bladderwort	0																																															



Raquette Lake North Aquatic Plant Survey 2016

Aquatic Plant Beds

Invaded Beds

Open Water

Roads

● Hand Launch

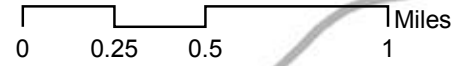
County: Hamilton AIS Observed: Lower Pond
Variable leaf mites
Myriophyllum heterophyllum

Town: Arietta, Long Lake Species Richness: 25

Bed Area (acres): 418.1 Lake Area (acres): 5371.6

Map by:

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Rock Pond Aquatic Plant Survey 2016

Aquatic Plant Beds

Open Water

Roads

Hand Launch

County: Lewis

Town: Lewis

Bed Area (acres): 4.6

Lake Area (acres): 18.9

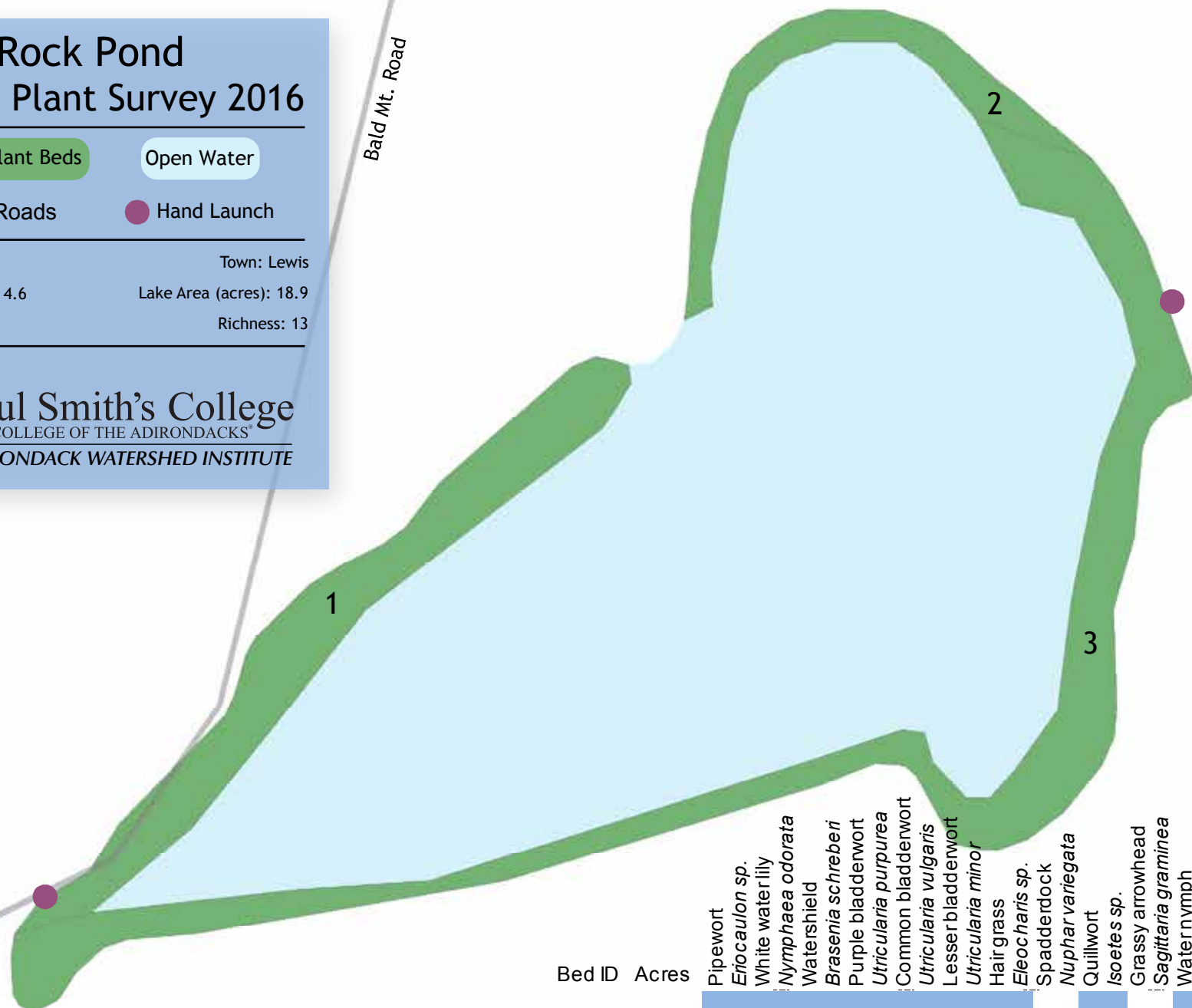
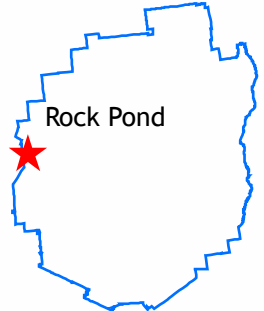
No AIS observed

Richness: 13

Map by:

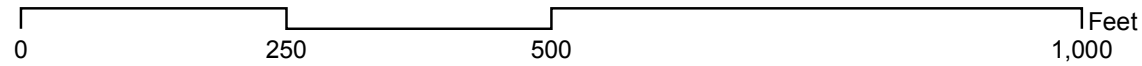
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Bald Mt. Road



Bed ID	Acres	Pipewort	<i>Eriocaulon</i> sp.	White water lily	<i>Nymphaea odorata</i>	Watershield	<i>Brasenia schreberi</i>	Purple bladderwort	<i>Utricularia purpurea</i>	Common bladderwort	<i>Utricularia vulgaris</i>	Lesser bladderwort	<i>Utricularia minor</i>	Hair grass	<i>Eleocharis</i> sp.	Spatterdock	<i>Nuphar variegata</i>	Quillwort	<i>Isoetes</i> sp.	Grassy arrowhead	<i>Sagittaria graminea</i>	Water nymph	<i>Najas</i> sp.	Interrupted bladderwort	<i>Utricularia intermedia</i>	Northern watermilfoil	<i>Myriophyllum sibiricum</i>
1	1.5	3	3	2	3	2	1	4	0	3	0	2	0	2	0	0	0	0	0	0	0	2	0	0	2	0	
2	0.6	3	3	2	3	2	2	0	2	2	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0
3	2.5	4	4	2	2	2	1	3	2	0	3	0	3	0	2	0	2	0	0	3	0	0	2	0	0	0	0

0 Absent 1 Rare (< 5%) 2 Occasional (6 to 15%)
 3 Present (16 to 25%) 4 Common (26 to 50%) 5 Abundant (> 50%)



Second Lake Aquatic Plant Survey 2016

Aquatic Plant Beds

Open Water

Roads

Invaded Beds

County: Herkimer

AIS Observed: *Variable leaf milfoil*
Myriophyllum heterophyllum

Town: Webb

Species Richness: 17

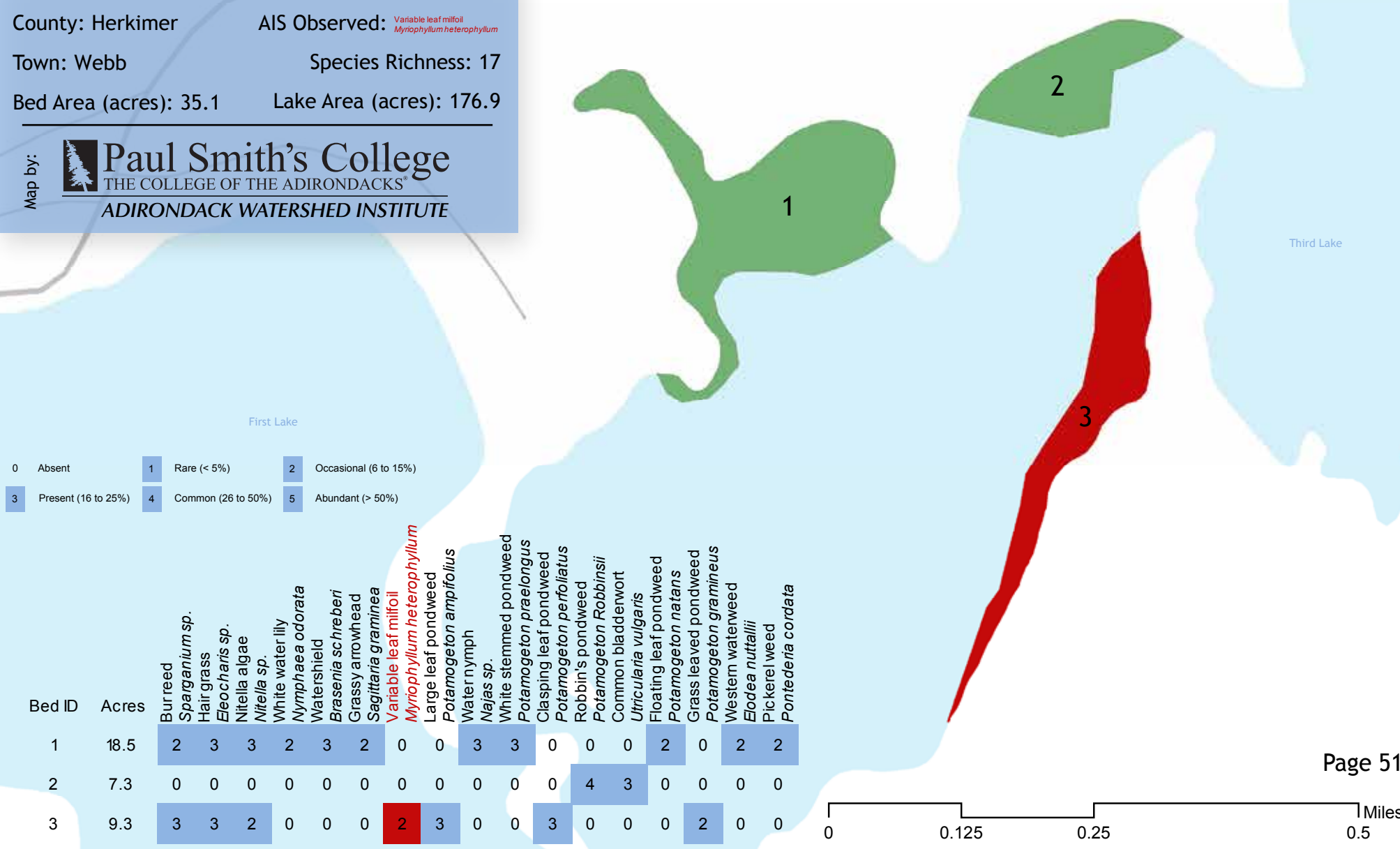
Bed Area (acres): 35.1

Lake Area (acres): 176.9

Map by:

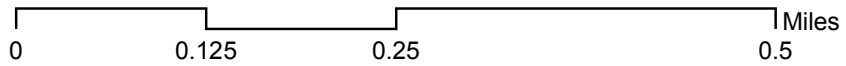


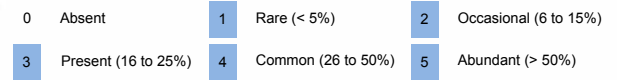
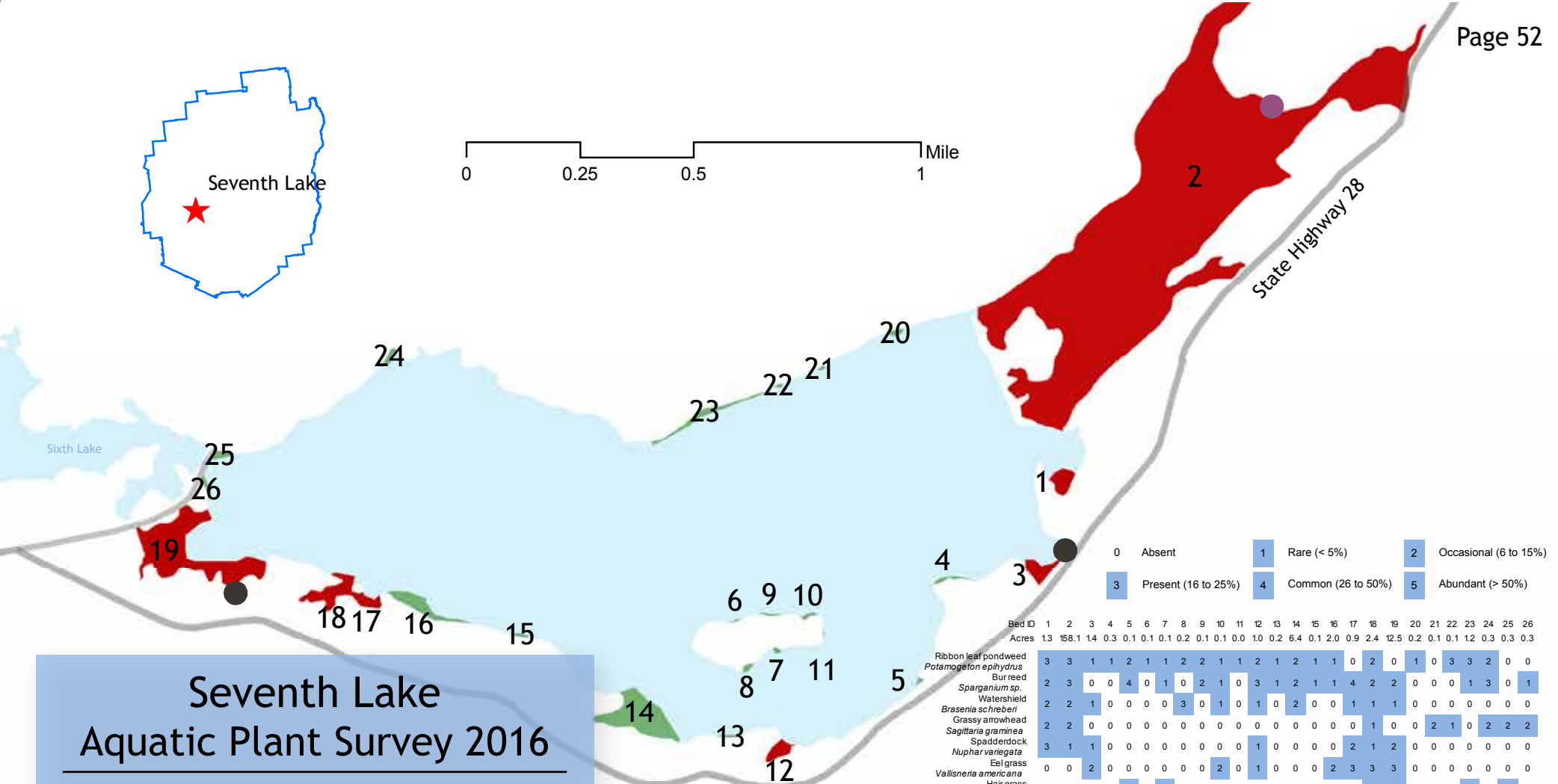
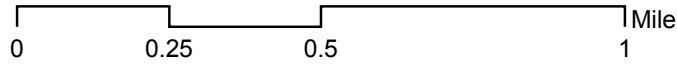
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0	Absent	1	Rare (< 5%)	2	Occasional (6 to 15%)
3	Present (16 to 25%)	4	Common (26 to 50%)	5	Abundant (> 50%)

Bed ID	Acres	Burreed	<i>Sparganium</i> sp.	Hair grass	<i>Eleocharis</i> sp.	Nitella algae	<i>Nitella</i> sp.	White water lily	<i>Nymphaea odorata</i>	Watershield	<i>Brasenia schreberi</i>	Grassy arrowhead	<i>Sagittaria graminea</i>	<i>Variable leaf milfoil</i>	<i>Myriophyllum heterophyllum</i>	Large leaf pondweed	<i>Potamogeton amplifolius</i>	Water nymph	<i>Najas</i> sp.	White stemmed pondweed	<i>Potamogeton praelongus</i>	Clasping leaf pondweed	<i>Potamogeton perfoliatus</i>	Robbin's pondweed	<i>Potamogeton Robbinsii</i>	Common bladderwort	<i>Utricularia vulgaris</i>	Floating leaf pondweed	<i>Potamogeton natans</i>	Grass leaved pondweed	<i>Potamogeton gramineus</i>	Western waterweed	<i>Elodea nuttallii</i>	Pickrelweed	<i>Pontederia cordata</i>	
1	18.5	2	3	3	2	3	2	3	2	3	2	3	2	0	0	3	3	0	0	0	0	0	0	0	0	0	2	0	2	2	0	0	0	0	0	
2	7.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	3	0	0	0	0	0	0	0	0	0	0	0	0
3	9.3	3	3	2	0	0	0	0	0	0	0	0	0	2	3	0	0	0	0	0	0	3	0	0	0	0	2	0	0	0	0	0	0	0	0	0





Bed ID	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
Acres	1.3	158.1	1.4	0.3	0.1	0.1	0.1	0.2	0.1	0.1	0.0	10	0.2	6.4	0.1	2.0	0.9	2.4	12.5	0.2	0.1	1.2	0.3	0.3	0.3	
Ribbon leaf pondweed	3	3	1	1	2	1	2	2	1	2	1	2	1	2	1	1	0	2	0	1	0	3	3	2	0	0
Potamogeton ephedrus	2	3	0	0	4	0	1	0	2	1	0	3	1	2	1	1	4	2	2	0	0	0	1	3	0	1
Bur reed	2	2	1	0	0	0	0	3	0	1	0	1	0	2	0	0	1	1	1	0	0	0	0	0	0	0
Watershield	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Brasenia schreberi	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2	1	0	2	2
Grassy arrowhead	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sagittaria graminea	3	1	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	2	1	2	0	0	0	0	0	0
Spaddeerdock	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nuphar variegata	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Eelgrass	0	0	2	0	0	0	0	0	0	2	0	1	0	0	0	2	3	3	3	0	0	0	0	0	0	0
Vallisneria americana	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hair grass	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	3	1	0	0	0	1	0	2
Eleocharis sp.	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	3	2	0	0	0	0	0	0
Variable leaf milfoil	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0
Myriophyllum heterophyllum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Robbin's pondweed	0	4	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0
Potamogeton robinsii	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grass leaved pondweed	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	1	3	0	0	0	0	1	0	0
Potamogeton gramineus	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Pipewort	4	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
Eriocaulon sp.	0	1	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	3	0	0
White water lily	0	4	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nymphaea odorata	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Water nymph	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Najas sp.	0	4	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0
Eurasian watermilfoil	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Myriophyllum spicatum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Purple bladderwort	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2
Utricularia purpurea	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Quillwort	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0
Isoetes sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Large leaf pondweed	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Potamogeton ampifolius	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0
Nitella algae	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nitella sp.	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Water lobelia	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lobelia dortmanna	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Potamogeton pusillus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Clasping leaf pondweed	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Potamogeton perfoliatus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Common bladderwort	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Utricularia vulgaris	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Floating leaf pondweed	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Potamogeton natans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Interrupted bladderwort	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Utricularia intermedia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Western waterweed	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Elodea nuttallii	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Seventh Lake Aquatic Plant Survey 2016

Aquatic Plant Beds

Invaded Beds

Open Water

Roads
 Hard Launch
 Hand Launch

County: Herkimer AIS Observed: Variable leaf milfoil
Myriophyllum heterophyllum
Eurasian watermilfoil
Myriophyllum spicatum

Town: Inlet Species Richness: 25

Bed Area (acres): 189.7 Lake Area (acres): 834.4

Map by:

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Star Lake Aquatic Plant Survey 2016

Aquatic Plant Beds

Open Water

Roads

Hand Launch

County: St Lawrence

Town: Fine

Bed Area (acres): 33.7

Lake Area (acres): 215.7

No AIS Observed

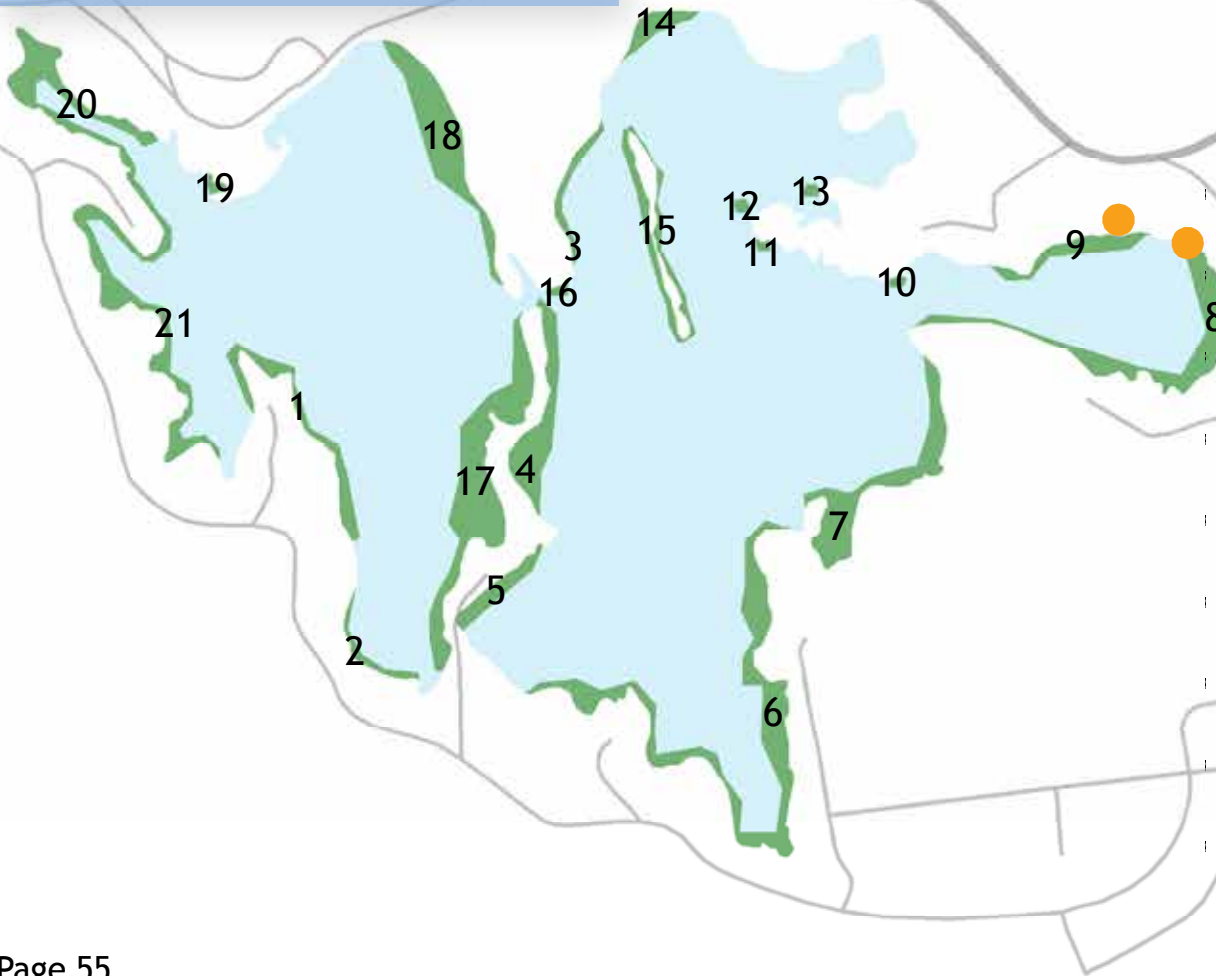
Richness: 25

Map by:

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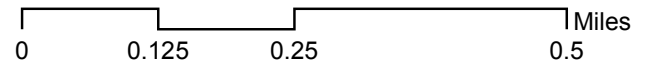


State Highway 3



0 Absent 1 Rare (< 5%) 2 Occasional (6 to 15%)
3 Present (16 to 25%) 4 Common (26 to 50%) 5 Abundant (> 50%)

Bed ID	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Acres	2.5	1.5	0.4	0.6	2	0.8	5.4	2.9	3.3	1	0.1	0.1	0.1	0.1	0.7	1.4	0.1	4.8	3.1	0.1	2.7
Water lobelia	0	3	2	2	2	0	2	2	0	0	2	2	2	2	2	3	3	4	4	3	2
Lobelia dortmanna	2	2	2	0	0	0	2	1	2	0	0	0	1	0	1	1	0	2	2	0	0
Bur reed	3	3	3	2	3	3	3	3	3	0	0	0	0	0	0	0	0	0	0	3	3
Sparganium sp.	2	2	2	0	0	2	0	0	2	3	1	0	1	0	0	0	0	2	0	2	2
Pipewort	0	0	0	3	3	2	3	0	3	3	0	0	0	0	2	0	0	3	0	4	3
Erigeron sp.	0	0	0	0	0	0	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0
Grassy arrowhead	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
sagittaria graminea	0	0	0	3	3	2	3	0	3	3	0	0	0	0	2	0	0	3	0	4	3
Quillwort	0	0	0	0	0	0	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0
Isetes sp.	0	0	0	0	0	0	2	0	0	0	0	0	0	2	0	2	0	3	3	3	3
Lavender bladderwort	2	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0
Utricularia resupinata	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hair grass	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Eleocharis sp.	3	0	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0
Large leaf pondweed	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Potamogeton amplifolius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
White waterlily	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Nymphaea odorata	1	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0
Spaddeedock	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nuphar variegata	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small pondweed	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Potamogeton pusillus	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Slender watermilfoil	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Myriophyllum tenellum	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Western waterweed	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Elodea nuttallii	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Waterthread pondweed	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Potamogeton diversifolius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Alternate leaf milfoil	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0
Myriophyllum alterniflorum	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Watershield	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Brasenia schreberi	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Water nymph	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Najas sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nitella algae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nitella sp.	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Robbin's pondweed	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Potamogeton robbinsii	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0
Interrupted bladderwort	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Utricularia intermedia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chara algae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chara sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grass leaved pondweed	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Potamogeton gramineus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lesser bladderwort	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
Utricularia minor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Canadian waterweed	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0
Elodea canadensis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Snaiiseed pondweed	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Potamogeton bicupulatus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3



Stark Falls Reservoir Aquatic Plant Survey 2016

Aquatic Plant Beds

Open Water

Invaded Beds

● Hand Launch

● Soft Launch

County: St. Lawrence

AIS Observed: *Variable leaf milfoil*
Myriophyllum heterophyllum

Town: Colton

Species Richness: 21

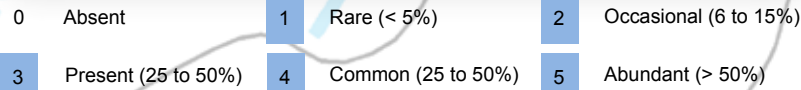
Bed Area (acres): 71.3

Lake Area (acres): 644.1

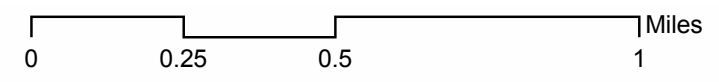
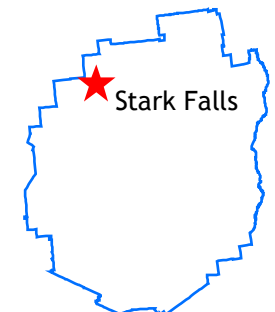
Map by:



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ADIRONDACK WATERSHED INSTITUTE



Bed ID	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Acres	0.5	0.6	0.1	2.2	0.7	0.6	32.1	0.1	24.0	0.3	0.1	5.2	0.2	0.1	0.4	4.0
Ribbon leaf pondweed	2	2	2	2	2	2	3	0	3	3	3	3	3	3	2	3
<i>Potamogeton ephedrus</i>	2	2	2	2	2	1	0	2	1	2	2	2	3	0	0	1
Burreed	1	2	0	0	0	1	2	0	0	3	0	2	5	2	0	2
<i>Sparganium</i> sp.	0	0	0	3	2	0	1	0	4	2	2	2	0	0	0	4
Hair grass	0	0	0	1	0	1	2	0	2	2	0	2	0	0	0	2
<i>Eleocharis</i> sp.	1	2	0	1	0	2	2	0	0	2	0	2	0	0	0	0
Variable leaf milfoil	0	0	0	3	3	3	3	0	0	0	0	0	0	0	0	0
<i>Myriophyllum heterophyllum</i>	0	0	0	1	0	1	2	0	2	2	0	2	0	0	0	2
Grassy arrowhead	1	2	0	1	0	2	2	0	0	2	0	2	0	0	0	0
<i>Sagittaria graminea</i>	1	3	0	3	3	3	3	0	0	0	0	0	0	0	0	0
Quillwort	1	1	0	1	0	0	0	0	0	0	0	3	0	0	0	0
<i>Isoetes</i> sp.	0	0	0	0	0	0	0	0	1	1	0	1	2	0	0	0
Water lobelia	0	0	0	0	0	0	2	0	1	0	0	0	2	0	0	1
<i>Lobelia dortmanna</i>	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0
Pipewort	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Eriocaulon</i> sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Watershield	0	0	0	0	0	0	0	0	1	1	0	1	2	0	0	0
<i>Brasenia schreberi</i>	0	0	0	0	0	0	2	0	1	0	0	0	2	0	0	1
Spaddeedock	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
<i>Nuphar variegata</i>	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0
Purple bladderwort	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
<i>Utricularia purpurea</i>	0	0	0	0	0	0	2	0	0	0	0	0	3	0	0	0
Small pondweed	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
<i>Potamogeton pusillus</i>	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
White water lily	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
<i>Nymphaea odorata</i>	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
Large leaf pondweed	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
<i>Potamogeton amplifolius</i>	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
Swollen bladderwort	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0
<i>Utricularia inflata</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Water nymph	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Najas</i> sp.	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0
Nitella algae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Nitella</i> sp.	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
Common bladderwort	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Utricularia vulgaris</i>	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0
Slender watermilfoil	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Myriophyllum tenellum</i>	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0
Grass leaved pondweed	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0
<i>Potamogeton gramineus</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Northern watermilfoil	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
<i>Myriophyllum sibiricum</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



Utowana Lake Aquatic Plant Survey 2016

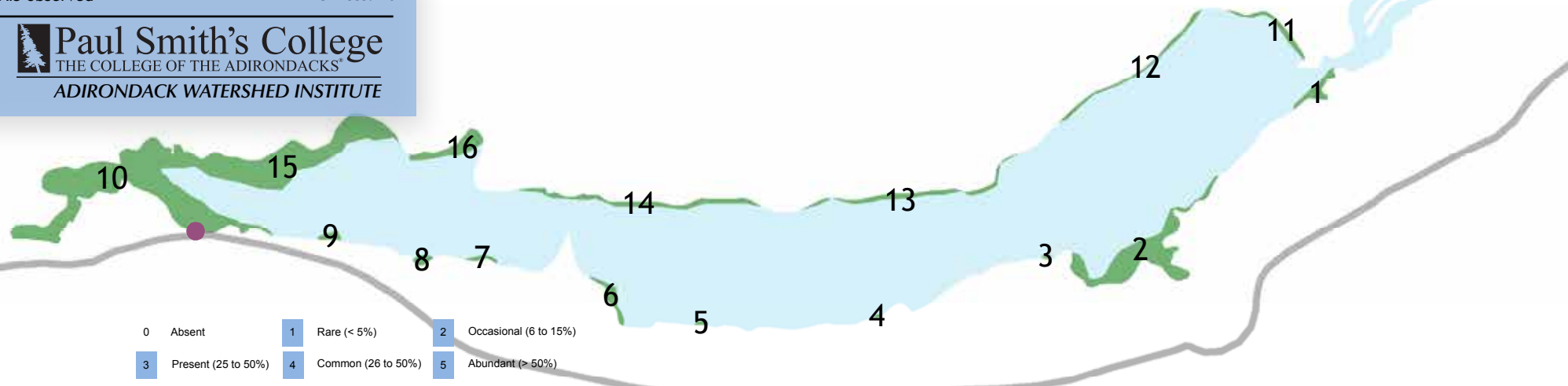
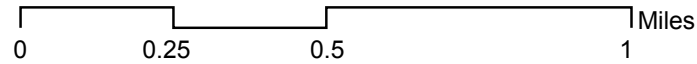
Aquatic Plant Beds Open Water Hand Launch

County: Hamilton Town: Indian Lake

Bed Area (acres): 46.9 Lake Area (acres): 312.8

No AIS observed Richness: 20

Map by: **Paul Smith's College**
THE COLLEGE OF THE ADIRONDACKS®
ADIRONDACK WATERSHED INSTITUTE



0 Absent 1 Rare (< 5%) 2 Occasional (6 to 15%)
3 Present (25 to 50%) 4 Common (26 to 50%) 5 Abundant (> 50%)

Bed ID	Acres	Burreed	Sparganium sp.	Pipewort	Eriocaulon sp.	Ribbon leaf pondweed	Potamogeton ephedrus	Grassy arrowhead	Sagittaria graminea	Spaddeedock	Nuphar variegata	Common bladderwort	Utricularia vulgaris	White waterlily	Nymphaea odorata	Clasping leaf pondweed	Potamogeton perfoliatus	Hair grass	Eleocharis sp.	Watershield	Brasenia schreberi	Quillwort	Isetes sp.	Robbin's pondweed	Potamogeton robbinsii	Large leaf pondweed	Potamogeton amplifolius	Swollen bladderwort	Utricularia inflata	Floating leaf pondweed	Potamogeton natans	Water lobelia	Lobelia dortmanna	Purple bladderwort	Utricularia purpurea	White stemmed pondweed	Potamogeton praelongus	Nitella algaee	Nitella sp.	Slender watermilfoil	Myriophyllum tenellum		
1	0.9	3	4	2	1	3	2	4	2	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
2	6.8	2	2	1	2	2	1	1	1	2	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
3	0.1	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4	0.0	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5	0.1	1	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
6	0.8	2	1	1	1	1	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7	0.2	1	1	0	0	1	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
8	0.3	2	2	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
9	0.3	0	0	1	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	17.2	2	3	0	2	3	3	1	0	3	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11	0.9	1	4	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
12	1.2	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
13	1.8	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	2.4	3	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	12.0	1	3	1	1	1	1	3	0	2	1	0	1	3	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	1.8	0	3	1	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0