

2006 Annual Report

Prepared by

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and

Steven Flint, Invasive Species Field Coordinator Adirondack Chapter of The Nature Conservancy The Adirondack Park Invasive Plant Program values the contributions of more than 30 cooperating organizations and nearly 300 volunteers who participate in the program and share their ideas, time, and resources to protect the Adirondacks from invasive plants.

We also extend a special thanks to Susan O'Connor and the public affairs team at the New York State Department of Transportation as well as to Mike Brennan and Cara McCann at the Adirondack Park Agency Visitor Interpretive Center for graciously sharing their graphic design expertise and creativity.

Thank you.

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Mission

The Adirondack Park Invasive Plant Program (APIPP) is a partnership program whose mission is to protect the Adirondack Park from the negative impacts of non-native invasive plants. Initiated in 1998, and currently housed by the Adirondack Chapter of The Nature Conservancy, the program coordinates two regional projects that integrate education, monitoring, and management strategies: the Aquatic Invasive Plant Project and the Terrestrial Invasive Plant Project.

Goals

- Prevent new introductions of invasive species.
- Coordinate a park-wide early detection rapid response program to detect and eradicate new infestations.
- Manage existing priority infestations to mitigate impacts.

Distribution Summary

Aquatic

• At least fifty-one waterways have aquatic invasive plants in the Adirondack Park (Map 1). In five seasons, more than 232 APIPP Invasive Plant Monitors surveyed 182 distinct waters (Map 2). With your assistance, APIPP is successfully establishing baseline information about the distribution of aquatic invasive plants in the Adirondack Park. Thank you for your substantial contribution to invasive species prevention and detection!

Terrestrial

• Five-hundred-eighty-seven sites of APIPP's target terrestrial invasive plants are documented in the Park. This number includes sites that have an isolated occurrence of an invasive plant and also sites with multiple occurrences, for example, *multiple* yellow iris infestations occur within the Siamese Ponds Wilderness Area site. Although great progress has been made since the late 90s, many lands remain unsurveyed.

The following activities were accomplished in 2006 by the Aquatic Invasive Plant Project and the Terrestrial Invasive Plant Project with the assistance of partner organizations, resident groups, and volunteers:

2006 Training sessions

Aquatic

• Provided training sessions in invasive and native aquatic plant identification and monitoring techniques. Representatives who assisted the sessions included Larry Eichler, Darrin Fresh Water Institute (DFWI); Scott Kishbaugh, New York State Department of Environmental Conservation (NYS DEC); Lenny Croote and Elizabeth Mangle, Hamilton County Soil and Water Conservation District (HC SWCD); Paul Dunleavy, Edna Molyneux, and members of the East Caroga Lake Protective Association; and, Theresa Taylor and Town of Long Lake. Thank you for making these sessions a success!

- Trained 61 participants in 2006 (Figure 1): 17 participants in Bolting Landing, 21 in Caroga Lake, and 23 in Long Lake.
- Distributed training manuals and secondary education resources for volunteer use.

Terrestrial

• Trained DEC's Student Conservation Association team members and four APIPP terrestrial invasive plant stewards.

Invasive Plant Threats

Aquatic

• Aquatic Project volunteers surveyed for Eurasian watermilfoil, water chestnut, curlyleaf pondweed, and fanwort. The Project continues to elevate awareness about other plant threats listed below. There are native look-alikes, and web links are cited for species information and identification tips. In the Adirondack Park, yellow floating heart is present in Lake Champlain, and European frog-bit is present in Lake Champlain and in the Grasse River near Lampson Falls. The other species listed below have not yet been detected in the Park.

European frog-bit (Hydrocharis morsus-ranae)
http://plants.ifas.ufl.edu/hydmor.html
Yellow floating heart (Nymphoides peltata)
http://plants.ifas.ufl.edu/nympel.html
Brittle or slender naiad (Najas minor)
http://www.weedscience.ncsu.edu/aquaticweeds/facts/apfs006-99.pdf
Starry stonewort (Nitellopsis obtusa)
http://www.co.cayuga.ny.us/wqma/weedswatchout/plants/starrystonewort.htm
Parrotfeather (Myriophyllum aquaticum)
http://plants.ifas.ufl.edu/myaqpic.html
Hydrilla (Hydrilla verticillata)
http://aquat1.ifas.ufl.edu/hyvepic.html
Brazilian elodea (<i>Egeria densa</i>)
http://aquat1.ifas.ufl.edu/egdepic.html
For a good comparison of hydrilla, Brazilian elodea, and look alikes

http://www.des.state.nh.us/wmb/exoticspecies/HydrillaLook-alikes.pdf

Terrestrial

• The Terrestrial Project's target plants include Japanese knotweed, purple loosestrife, common reed grass, and garlic mustard. The Project continues to elevate awareness about other plant threats listed below.

Yellow iris (*Iris pseudacorus*) Giant hogweed (*Heracleum mantegazzianum*) Wild chervil (*Anthriscus sylvestris*) Swallow-worts (*Cynanchum spp.*) Oriental bittersweet (*Celastrus orbiculatus*) Japanese stiltgrass (*Microstegium vimineum*), not yet detected in the Park Mile-a-minute vine (*Polygonum perfoliatum*), not yet detected in the Park

Potential Plant Threats – "Watched Species"

Aquatic

• The plants listed below are native to the U.S. and may be native to some areas of New York. They are listed as non-native invasive species in New England, are reported in several waters in the Park, and can grow locally aggressive.

Variable-leaf milfoil (*Myriophyllum heterophyllum*)

http://www.umext.maine.edu/onlinepubs/htmpubs/2530.htm

Southern naiad (Najas guadalupensis)

http://aquat1.ifas.ufl.edu/nagupic.html

Terrestrial

• The plant listed below is native to the U.S. but is listed as a non-native invasive species in the Adirondacks. It is reported in several riparian areas in the Park and can grow locally aggressive. In collaboration with the Au Sable River Association in 2006, seventy-six infestations were documented from Hulls Falls in Town of Keene to Stickney Bride Road in Town of Jay.

Cup plant (Silphium perfoliatum)

2006 Monitoring

Aquatic – 5th Season

- Implemented protocol for regional volunteer monitoring for aquatic invasive plants.
- Since the start of the Aquatic Project in 2001, the number of waters monitored annually has nearly doubled and volunteer participation has nearly tripled (Figure 2).
- In 2006, 128 volunteer monitors and partner staff surveyed 92 Adirondack waterways (Table 1, Figure 3).
- Accrued more than 660 volunteer monitoring hours.

Terrestrial

- Accrued more than 31,595 miles conducting Early Detection Rapid Response activities.
- Throughout the season, staff spent 575 hours driving 4,000 miles to conduct Early Detection Rapid Response in the Mohawk Valley. Documented 150 infested sites in the Mohawk Valley watershed: 80 wetland sites and 70 fringe or Right-of-Way (ROW) sites, including 21.41 acres of garlic mustard; 1.1 acres of Japanese knotweed; 4.15 acres of common reed; 1.67 acres of purple loosestrife.
- Collaborated with DEC's Invasive Species Specialist Wayne Blanchard to inventory and map the 37 DEC land-based campgrounds in the park. Worked with DEC and Steve Signell and the State University of New York College of Environmental Science and Forestry to digitize infested campground maps for incorporation into campground unit management plans.
- Surveyed and documented two acres of pale swallow-wort within or in proximity to Cold Brook Spring Forest, Town of Pitcairn and 1.25 acres of pale swallow-wort within riparian corridor of Elm Creek, Town of Herman.

2006 Management

Aquatic

• Assisted the completion and began the implementation of the Adirondack Park Aquatic Nuisance Species (ANS) Management Plan. In 2006, the plan was endorsed by every county government in the park and approved by the Adirondack Park Agency at its May meeting.

Terrestrial

- Managed 103 Department of Transportation (DOT) ROW sites and multiple sites at five Nature Conservancy Preserves.
- Qualitative observations indicated a 30-35% reduction in garlic mustard biomass at historic sites though new, dense infestations were also documented. All purple loosestrife sites between Tupper Lake and Long Lake were monitored, and qualitative observations suggest a 25% reduction. New, dense infestations were documented at the DEC Tupper Lake boat launch as well as the northern shoreline wetlands of Raquette Pond off of Route 3 in Tupper Lake.
- Monitored eight Forest Preserve units including Debar, Taylor Pond, Lake George, Sargent Ponds, Moose River Plains, Wilcox Lake, White Hill, and Black River and managed 22.6 acres of infestations within or in proximity to those units.
- Documented 11 miles of road infested with garlic mustard (22 miles of right-of-way) within Black River Wild Forest along North Lake road in Herkimer County. Manually removed more than one ton of plant material.
- Accrued more than 353 volunteer stewardship hours.

Distribution Analysis

Aquatic

- The number of "weed-free" lakes surveyed by APIPP volunteers is nearly triple that of infested lakes (Figure 4).
- Approximately half of the 51 infested waters in the Park have state boat launches:
 - o 65 DEC launches in the Park (approximately)
 - 22 waters infested
 - 4 waters with "watched species"
 - 32 waters surveyed by volunteers, no infestations observed
 - 7 waters still to be surveyed

Terrestrial

- Analysis of the jurisdictional distribution of terrestrial invasive plants:
 - DEC
 - 13 Forest Preserve units have one or more occurrences of invasive plants, and approximately 128 occurrences have been documented
 - Of 37 land-based campgrounds, 28 have invasive plants, and nine are "clean." Island campgrounds have not yet been inventoried.
 - DOT
 - 219 sites documented
 - Private lands and complex jurisdictional "gray" areas
 - 240 sites documented

Voucher specimens

Aquatic

• Collected, identified, pressed, mounted, and labeled samples of invasive plants observed in surveyed waterbodies. A voucher specimen verifies the presence of the invasive plant, serves as a comparison for additional plant samples, and aids plant research activities. A voucher specimen is needed only if invasive or suspicious plants are observed (Table 2).

Terrestrial

• The Terrestrial Invasive Plant Project does not maintain an herbarium of voucher specimens by site.

Data storage and Website development

Aquatic

- Updated the Adirondack Park Aquatic Invasive Plant Project database. The database is a permanent record of the distribution and abundance of aquatic invasive plants in the Adirondack Park as well as management activities on individual waterbodies.
- Created digitized lake maps for waterbodies surveyed in 2006.
- Updated data, maps, and text on the Adirondack Park Invasive Plant Program website, <u>http://www.adkinvasives.com</u>. The site provides Program information, invasive plant descriptions, images, and survey data and maps from the Adirondack region.

Terrestrial

- Updated the Adirondack Park Terrestrial Invasive Plant Project database.
- Updated the website with Park-wide, county, and USGS quad maps illustrating terrestrial invasive plant occurrences from 2005. 2006 data will be updated soon.

Below is a summary of APIPP's achievements in 2006 that included both the Terrestrial Invasive Plant Project and the Aquatic Invasive Plant Project.

APIPP seasonal stewardship

- APIPP offered four seasonal stewardship positions to Tessa Hopsicker, Mohawk Valley Watershed Steward (Environmental Protection Agency funded in partnership with APA); Elisa Mayes, Student Conservation Association Forest Preserve Steward (DEC funded); Derek Franklin, Forest Preserve Steward (US Forest Service funded); and to Morgan Perlette, the Nature Conservancy Resource Protection Intern (TNC funded).
- Collaborated with DEC Operation's Invasive Species Specialist Wayne Blanchard.

APIPP co-sponsored, or was invited to participate in, training sessions for the following audiences:

- Industry and private landowners of large tracts of land (*co-sponsored with DEC and the US Fish and Wildlife Service and Silvio O. Conte National Wildlife Refuge*)
- DEC Interpretive Staff
- Paul Smith's College Watershed Stewardship Program (WSP) stewards
- Volunteer Boat Inspector Program (co-sponsored with the Paul Smith's College WSP)

- DEC Operations staff (terrestrial invasive plant identification and control techniques)
- DOT maintenance and construction staff, DEC, private applicators, National Grid

2006 APIPP Education efforts

- Helped to establish Adirondack Park Invasive Species Awareness Week with the Adirondack Park Aquatic Nuisance Species Committee.
- Co-sponsored with Paul Smith's College a week long aquatic plant course and evening public lecture with renowned taxonomist, Dr. Barre Hellquist.
- Created and printed two brochures with funding from the Scenic Byways program: the *Adirondack Park Invasive Plant Program*, and *Invasive Plants of the Adirondacks*.
- Received nimlock APIPP traveling display (designed and provided by DOT) and APIPP posters (designed and provided by Adirondack Park Agency Visitor Interpretive Center).
- Created and distributed two online APIPP newsletters: <u>http://adkinvasives.com/documents/ROOTSSpringSummer06.pdf</u>; <u>http://adkinvasives.com/documents/ROOTSFallWinter06_000.pdf</u>.
- Highlighted in numerous newspapers and newsletters, and featured in the following venues: I-87 Northbound High Peaks Welcome Center; Natural History Museum of the Adirondacks; and Adirondack Park Agency Visitor Interpretive Centers.
- Collaborated with the following groups on invasive species awareness projects:
 DEC and its revision of boat launch signage
- Reached more than 1,500 individuals through presentations by principal partner agency representatives.

2006 Outreach efforts

- Contributed information to the NYS Invasive Species Task Force.
- Co-sponsored the annual meeting of The Nature Conservancy's Eastern Invasive Species Learning Network, which was held in Saratoga Springs in 2006.
- Participated in 40 community events and workshops.
- Presented at the following conferences: Local Government Day, Northeast Natural History Conference, and Weeds Across Borders (Hermosillo, Mexico).
- Received more than 100 "cold call" inquiries from the general public.
- Updated the Adirondack Park Invasive Plant list-serve, http://groups.yahoo.com/group/Adirondack_Invasives/. The list-serve provides a forum for discussion and information exchange about invasive species issues throughout the Park.

Regional Planning

- Co-chaired the Adirondack Park Aquatic Nuisance Species (ANS) Committee and assisted the completion, endorsement, and implementation of the ANS Management Plan.
- Participated on the Lake Champlain Basin Program's ANS Subcommittee to continue development of a Rapid Response Plan for ANS in the Lake Champlain basin.

- Contributed invasive plant inventory, management, and education recommendations to DEC Unit Management Plans.
- Collaborated on the formation of Partnerships for Regional Invasive Species Management (PRISMs) and exchanged information with the Long Island Invasive Species Management Area (LI-ISMA), St. Lawrence Eastern Lake Ontario Weed Management Area (SLELO-WMA), and Catskill Regional Invasive Species Partnership (CRISP).
- Assisted National Grid and the APA in creating the *Right-Of-Way Vegetation Management Plan for the Stark-Piercefield 46 kV Electric Line.*
- Assisted DEC Bureau of Recreation-Division of Operations in creating its *Invasive Species Adaptive Management Guidelines*.

2006 Research

- APIPP appreciates the research in the Park conducted by the following partner(s), which will deepen understanding of invasive species' biology, impacts and/or management. **Paul Smith's College:** Daniel Kelting for Eurasian watermilfoil post-treatment
 - monitoring on Upper Saranac Lake, supported by Upper Saranac Lake Foundation, Inc.

Please let us know if you or others are involved in invasive species research in the Adirondacks.

2006 Funding

- In 2006, APIPP was funded in part by the Environmental Protection Agency, US Forest Service, US Federal Highway Administration, and short-term funds from the Adirondack Chapter of The Nature Conservancy, Department of Environmental Conservation, Department of Transportation, and several private donors.
- APIPP helped secure funding from the US Fish and Wildlife Service to begin coimplementation of the Adirondack Park Aquatic Nuisance Species Management Plan.
- Participated in the 2006 Invasive Species Lobby Day in Albany.
- *NEW! In 2006* The DEC administered the first ever \$1million Aquatic Invasive Species Eradication Grant Program. Approximately 40% of funds went to Adirondack projects.
- *NEW! In 2006* The FY06 State Environmental Protection Fund included \$3.25 million to implement the recommendations of the Invasive Species Task Force.
- Submitted proposals to the DEC Aquatic Invasive Species Eradication Grant Program to eradicate European frogbit in the Grasse River and to the Biodiversity Research Institute to assess post-restoration needs of managed sites for three wetland invasive plants.

2007 Objectives

• Implement several grant projects including the Scenic Byways invasive species community outreach project, the Grasse River European frogbit eradication project, and phase II of the EPA Mohawk Valley invasive plant project.

- Promote the development of Partnerships for Regional Invasive Species Management (PRISMs), and, as needed, provide information to the Invasive Species Task Force.
- Plan for adapting and reissuing APIPP's Memorandum of Understanding in April 2008.
- Co-chair the Adirondack ANS Committee and assist the implementation of its annual priorities selected from the ANS Management Plan. *<The ANS Committee has a separate annual report and annual workplan, available on our website <u>www.adkinvasives.com</u> <i>>*.
- Retain volunteer monitors and build volunteer base in communities with few or no volunteers.
- Coordinate systematic Early Detection Rapid Response efforts for new species, eg. pale swallowwort in the western Adirondacks.
- Assist partner agencies' early detection programs for other invasive species, eg. Sirex woodwasp, etc.
- Coordinate Adirondack Park Invasive Species Awareness Week, July 8-July 14, 2007.
- Support parallel program initiatives such as the Lake Champlain Basin Program's ANS Rapid Response Planning effort; the Paul Smith's College Watershed Stewardship Program's Volunteer Boat Inspector Program to train volunteers to intercept aquatic nuisance species at boat launches; the Adirondack All Taxa Biodiversity Inventory – Aquatic Taxonomic Working Group; and, the NYS Flora Atlas's invasive plant voucher collection initiative.

Please see attached document with tables, figures, and maps.

Thank you for your help to protect the Park from invasive species.

Thank you to past and present cooperating partners!

More than 280 Volunteers! Adirondack Association of Towns and Villages Adirondack Cooperative Loon Program Adirondack Council Adirondack Lake Survey Corporation Adirondack Mountain Club Adirondack Museum Adirondack North Country Association Adirondack Park Agency Adirondack Park Agency Visitor Interpretive Centers Association for the Protection of the Adirondacks Au Sable River Association Becket-Chimney Corners YMCA **Boquet River Association** CAP-21 Clinton and Essex County Master Gardeners Cornell Cooperative Extension County Offices Darrin Fresh Water Institute Department of Agriculture and Markets Department of Environmental Conservation Department of Transportation Federal Highways Administration Franklin County Network of Shoreline Associations Garden Club of America Hamilton College Hamilton County Soil and Water Conservation District Invasive Plant Council of NYS Lake Champlain Basin Program Lake Champlain Sea Grant Lake George Land Conservancy Lake George Park Commission Lake George Watershed Conference Massawepie Scout Camps Natural History Museum of the Adirondacks North Country School and Camp Treetops Paul Smiths College Adirondack Watershed Institute Residents Committee to Protect the Adirondacks Saranac Lake Waterkeeper Student Conservation Association St. Regis Mohawk Tribe SUNY ESF Wanakena, Newcomb SUNY Plattsburgh The Nature Conservancy Town of Inlet Town of Webb, DPW Trout Unlimited Village of Saranac Lake Warren County Soil and Water Conservation District Wildlife Conservation Society

Shoreowner groups including, but not limited to 6th and 7th Lakes Association Bellmont Mountain View Indian Lakes Foundation Big Moose Property Owners' Association Big Wolf Lake Association Blue Mountain Lake Association Brandreth Lake Association Brant Lake Association Brantingham Lake Association Chateaugay Lakes Association Cranberry Lake Boat Club East Caroga Lake Protective Association Fulton Chain of Lakes Association Gull Pond Association Horseshoe Pond/Deer River Flow Association Indian Lake Association Jones Pond Association Lake Colby Association Lake George Association Lake Pleasant Sacandaga Association Little Long Lake Association Livingston Lake Association Long Lake Association Loon Lake Association Mirror Lake Association Mt Arab Eagle Crag Association Mt View and Indian Lakes Association **Osgood Pond Association** Paradox Lake Association Rainbow Lake Association Raquette Lake Property Owners' Association Schroon Lake Association Shoreowners' Association of Lake Placid Silver Lake Association St. Regis Chain of Lakes Association Spy Lake Association Upper Saranac Lake Foundation Upper Saranac Lake Association West Caroga Lake Association And More!

Table 1. APIPP lakes surveyed in 2006 and aquatic invasive plants observed.Alphabetized by county and town. Please refer to website for detailed plant surveyreports for lakes listed below, and lakes surveyed to-date.<u>http://www.adkinvasives.com</u>

Lake Surveyed	Town	County	Invasive Plant Found
Lake Sulveyed	100011	County	- Touria
Chazy Lake	Dannemora	Clinton	Eurasian watermilfoil
Mill Pond	Elizabethtown	Essex	None Observed
Murrey Pond	Elizabethtown	Essex	None Observed
Russett Pond	Elizabethtown	Essex	None Observed
Tanaher Pond	Elizabethtown	Essex	None Observed
Minerva Lake	Minerva	Essex	Eurasian watermilfoil
Newport Pond	Moriah	Essex	None Observed
Lake Harris	Newcomb	Essex	None Observed
Rich Lake	Newcomb	Essex	None Observed
Lake Placid	North Elba	Essex	None Observed
Mirror Lake	North Elba	Essex	None Observed
Big Pond	Schroon	Essex	None Observed
Goose Pond	Schroon	Essex	None Observed
Pharoah Lake	Schroon	Essex	None Observed
Crane Pond	Schroon	Essex	None Observed
Paradox Lake	Schroon	Essex	None Observed
Schroon Lake	Schroon	Essex	Eurasian watermilfoil
Moose Pond	St. Armand	Essex	None Observed
			Eurasian
Putnam Pond	Ticonderoga	Essex	watermilfoil
Rock Pond	Ticonderoga	Essex	None Observed
Indian Lake	Bellmont	Franklin	Eurasian watermilfoil
Mountain View	Bellmont	Franklin	Eurasian watermilfoil
Barnum Pond	Brighton	Franklin	None Observed
Jones Pond	Brighton	Franklin	None Observed
Mountain Pond	Brighton	Franklin	None Observed
Osgood Pond	Brighton	Franklin	None Observed
Clear Pond	Duane	Franklin	None Observed
Eagle Pond	Duane	Franklin	None Observed
Buck Pond	Franklin	Franklin	None Observed
Loon Lake	Franklin	Franklin	None Observed
Rainbow Lake	Franklin	Franklin	None Observed
Lake Clear	Harrietstown	Franklin	None Observed
Lake Clear Outlet	Harrietstown	Franklin	None Observed
Stony Creek Ponds	Harrietstown	Franklin	None Observed
Green Pond	Santa Clara	Franklin	None Observed
Hoel Pond	Santa Clara	Franklin	None Observed
Little Clear Pond	Santa Clara	Franklin	None Observed

Middle Pond	Santa Clara	Franklin	None Observed
Slang Pond	Santa Clara	Franklin	None Observed
Turtle Pond	Santa Clara	Franklin	None Observed
Whey Pond	Santa Clara	Franklin	None Observed
Big Wolf Lake	Tupper Lake	Franklin	None Observed
Gull Pond	Tupper Lake	Franklin	None Observed
Little Wolf Pond	Tupper Lake	Franklin	None Observed
		1 Iuniin	Variable -leaf
Simond Pond	Tupper Lake	Franklin	Milfoil*
Peck Lake	Bleeker	Fulton	None Observed
			Eurasian
East Caroga Lake	Caroga	Fulton	watermilfoil
West Caroga Lake	Caroga	Fulton	None Observed
Oxbow Lake	Arietta	Hamilton	None Observed
Piseco Lake	Arietta	Hamilton	None Observed
Raquette Lake	Arietta	Hamilton	None Observed
Spy Lake	Arietta	Hamilton	None Observed
Blue Mountain Lake	Indian Lake	Hamilton	None Observed
Indian Lake	Indian Lake	Hamilton	None Observed
Lake Abanake	Indian Lake	Hamilton	None Observed
Sprague Pond	Indian Lake	Hamilton	None Observed
			Eurasian
5th Lake	Inlet	Hamilton	watermilfoil
			Eurasian
6th Lake	Inlet	Hamilton	watermilfoil
8th Lake	Inlet	Hamilton	None Observed
			Eurasian
7th Lake	Inlet	Hamilton	watermilfoil
Echo Lake	Lake Pleasant	Hamilton	None Observed
Fawn Lake	Lake Pleasant	Hamilton	None Observed
Lake Pleasant	Lake Pleasant	Hamilton	None Observed
Lake Sacandaga	Lake Pleasant	Hamilton	None Observed
Whitaker Lake	Lake Pleasant	Hamilton	None Observed
Brandreth Lake	Long Lake	Hamilton	None Observed
Forked Lake	Long Lake	Hamilton	None Observed
Lake Eaton	Long Lake	Hamilton	None Observed
Little Tupper Lake	Long Lake	Hamilton	None Observed
			Variable -leaf
Long Lake	Long Lake	Hamilton	Milfoil*
Round Lake	Long Lake	Hamilton	None Observed
Eldon Lake	LongLake	Hamilton	Variable -leaf Milfoil*
Morehouse Lake	Long Lake Morehouse	Hamilton	
Brantingham Lake / Lily	worenouse		None Observed
o ,	Croig	Lewis	None Observed
Pond		20110	
Pond Chase Lake	Greig Watson	Lewis	None Observed
Chase Lake	Watson	Lewis Oneida	None Observed
Chase Lake Little Long Lake	Watson Woodgate	Oneida	None Observed
Chase Lake	Watson		

Cranberry Lake	Clifton	St. Lawrence	Variable -leaf Milfoil*
Catamount Pond	Piercefield	St. Lawrence	None Observed
Deer Pond	Piercefield	St. Lawrence	None Observed
Eagle Crag	Piercefield	St. Lawrence	None Observed
Horseshoe Lake	Piercefield	St. Lawrence	None Observed
Horseshoe Pond	Piercefield	St. Lawrence	None Observed
Massawepie Lake	Piercefield	St. Lawrence	None Observed
Mount Arab	Piercefield	St. Lawrence	None Observed
Townline Pond	Piercefield	St. Lawrence	None Observed
Brant Lake	Horicon	Warren	Eurasian watermilfoil
Garnet Lake	Johnsburg	Warren	None Observed
Livingston Lake	Stony Creek	Warren	None Observed
Crane Mountain Pond	Thurman	Warren	None Observed
Pack Forest Lake	Warrensburg	Warren	None Observed

* *Myriophyllum heterophyllum*, variable-leaf watermilfoil, was observed during plant surveys in the following lakes: Cranberry Lake, Newton Falls Impoundment (Chaumont Pond), Jenkins Bay of Tupper Lake, Raquette Lake, Long Lake, and Piercefield Flow. Variable-leaf milfoil may also be present in the lower Fulton Chain of Lakes, Simond Pond, and Lake Flower. Although native to the U.S., *Myriophyllum heterophyllum* is considered an exotic invasive plant in New Hampshire, Maine, Connecticut, and Massachusetts. It is included as a 'watched species' in the Adirondack Park.

Lake Name	Voucher specimen
7 th Lake Fulton Chain	Eurasian watermilfoil
Brant Lake	Eurasian watermilfoil
Chazy Lake	Eurasian watermilfoil
Copperas Pond	Eurasian watermilfoil
Cranberry Lake	Variable-leaf watermilfoil
Deer River Flow	Eurasian watermilfoil
East Caroga Lake	Eurasian watermilfoil
Fifth Lake, Fulton Chain	Eurasian watermilfoil
Fish Creek	Eurasian watermilfoil
Fish Creek Pond	Eurasian watermilfoil
Floodwood Pond	Eurasian watermilfoil
Follensby Clear Pond	Eurasian watermilfoil
Franklin Falls Pond	Eurasian watermilfoil,
	curlyleaf pondweed
Horseshoe Pond, Duane	Eurasian watermilfoil
Grasse River	European frog-bit
Kiwassa Lake	Eurasian watermilfoil
Lake Flower	Eurasian watermilfoil,
	curlyleaf pondweed
Little Square Pond	Eurasian watermilfoil
Long Lake, Long Lake	Variable-leaf watermilfoil
Long Pond, Willsboro	Eurasian watermilfoil
Meacham Lake	Eurasian watermilfoil
Minerva Lake	Eurasian watermilfoil
Putnam Pond	Eurasian watermilfoil
Raquette Lake	Variable-leaf watermilfoil
Sixth Lake of Fulton Chain	Eurasian watermilfoil
Taylor Pond	Eurasian watermilfoil
Union Falls Pond	Eurasian watermilfoil

Table 2. APIPP lakes with voucher specimens on file with the Adirondack ParkInvasive Plant Program.

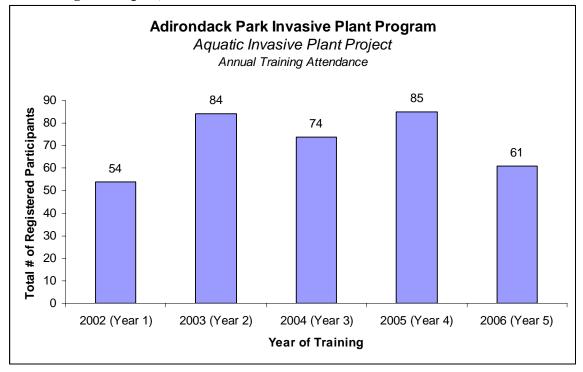
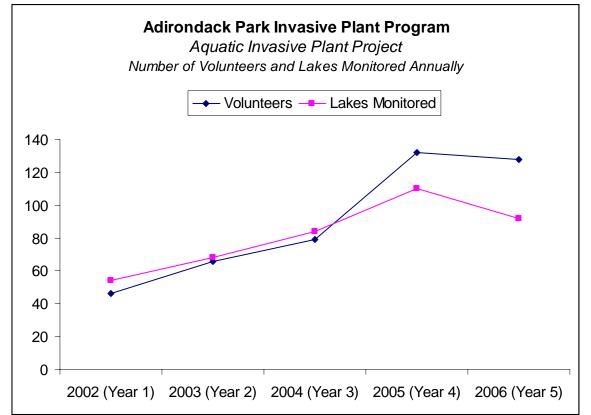


Figure 1. Participants at training sessions for aquatic plant identification and monitoring techniques, 2002-2006.

Figure 2. Number of lakes monitored and APIPP volunteers, 2002-2006.



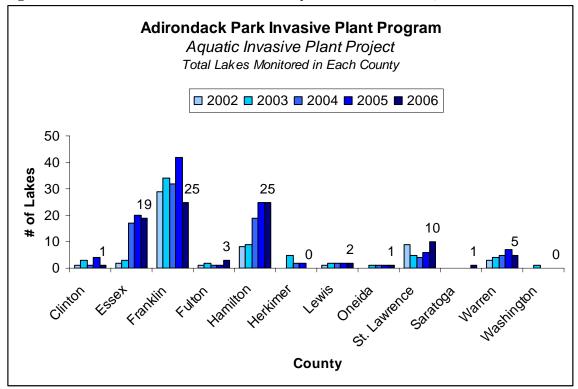
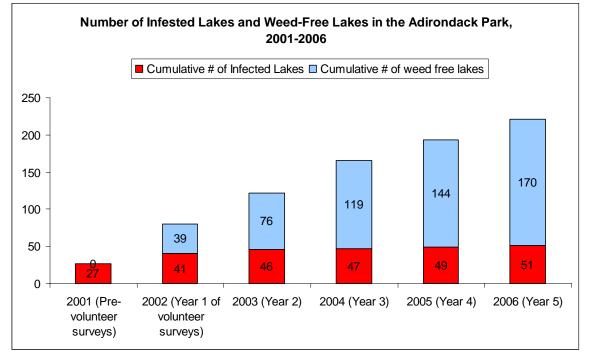


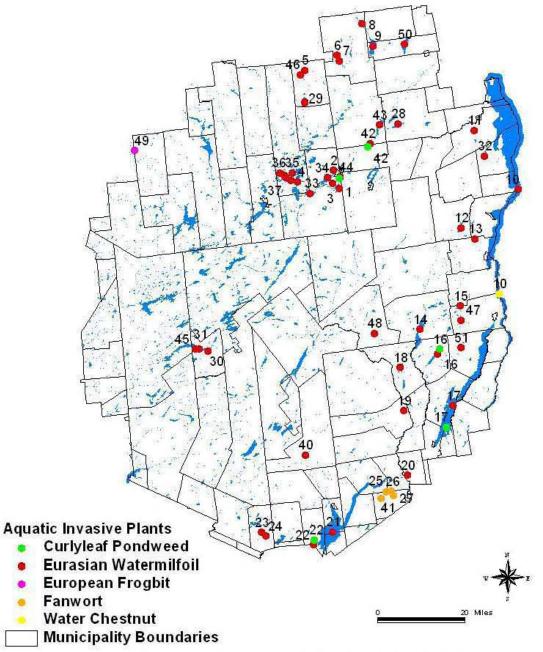
Figure 3. Distribution of lakes monitored by APIPP volunteers, 2002-2006.

Figure 4. Cumulative number of infested lakes and lakes monitored by APIPP volunteers where no invasive plants were detected.



Map 1. The list of lake names corresponding to the numbers below is attached.

Distribution of Waters Infested with Aquatic Invasive Plants in the Adirondack Park, 2006

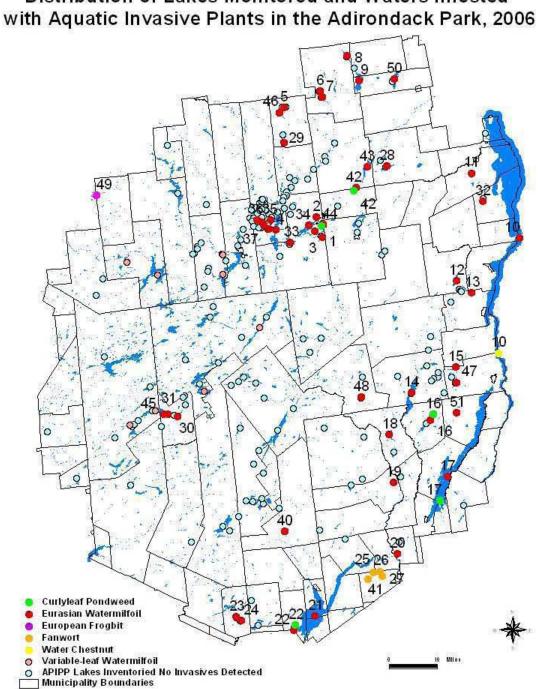


Map produced by the Adirondack Park Invasive Plant Program

Map 1 Adirondack Park Waterbodies Reported with Aquatic Invasive Plants

	Α
1	Oseetah Lake
2	Lake Colby
3	Kiwassa Lake
4	Upper Saranac Lake
	Horseshoe Pond
	Indian Lake
7	Mountain View Lake
8	Lower Chateaugay Lake
	Upper Chateaugay Lake
	Lake Champlain
11	Augur Lake
12	Lincoln Pond
13	Bartlett Pond
14	Schroon Lake
15	Eagle Lake
16	Brant Lake
17	Lake George
18	Loon Lake
19	Daggett Lake
	Lake Luzerne
	Great Sacandaga Lake
22	Mayfield Lake
23	West Caroga Lake
24	East Caroga Lake
25	Effner Lake
26	Jenny Lake
27	Hunt Lake
	Taylor Pond
29	Meacham Lake
30	Seventh Lake
31	Sixth Lake
	Long Pond
	Middle Saranac Lake
	Lower Saranac Lake
	Follensby Clear Pond
	Floodwood Pond
	Little Square Pond
	Fish Creek Pond
	Copperas Pond
	Mill Pond
	Franklin Falls
	Lake Flower
	Fifth Lake
_	Deer River Flow
	Putnam Pond
_	Minerva Lake
	Grasse River at Lampson Falls
	Chazy Lake
51	North Pond

Map prepared by APIPP. Aquatic plant reports provided by a variety of plant monitoring programs and cited in the Darrin Fresh Water Institute Annual Reports.



Distribution of Lakes Monitored and Waters Infested

Map produced by the Adirondack Park Invasive Plant Program