

“We’re waiting for your return”



AQUATIC INVASIVE SPECIES PREVENTION AND PREPAREDNESS PLAN FOR UPPER SARANAC LAKE

by Ross Whaley

The residents of Upper Saranac Lake can take pride that through the efforts of your Upper Saranac Foundation, our Lake has become a model for controlling Eurasian Milfoil on lakes in the Adirondacks. There is danger in resting on those laurels, however, when other aquatic invasive species are showing up in lakes in and around the Park. Therefore, as we continue our diligence in controlling Milfoil, it is imperative that we pay attention to prevention of other aquatic invasive species (AIS) being spread to our lake and to being prepared in case they do. With this in mind the Upper Saranac Foundation commissioned the Paul Smith’s College Adirondack Watershed Institute to prepare a Prevention and Preparedness Plan. The full document can be found on the Foundation’s website, <http://uslf.org>.

The Executive Summary of the Prevention and Preparedness Plan points out that there are ten invasive aquatic plant species and seven aquatic animal species identified as species of concern in our region.

INVASIVE AQUATIC PLANTS

- Brazilian Elodea
- Brittle Naiad
- Curly Leaf Pondweed
- Eurasian Watermilfoil
- European Frogbit
- Fanwort
- Hydrilla
- Variable-leaf Milfoil
- Water Chestnut
- Yellow Floating Heart

INVASIVE AQUATIC ANIMALS

- Alewife
- Asian Clam
- Fishhook Waterflea
- Quagga Mussel
- Round Goby
- Spiny Water Flea
- Zebra Mussel

Boats being trailored between lakes are the primary source for spreading these invasive species. Prevention begins with required actions at regional, watershed and lake scales to minimize the chance of AIS finding their way into Upper Saranac Lake.

Regional Actions include enforcement of the NYS Prevention Law and prevention efforts coordinated through the Adirondack Park Invasive Plant Program. Upper Saranac Foundation recently joined with the State of New York and 69 other municipal, lake, landowner, and environmental groups in a regional agreement to work on minimizing the spread of AIS through education programs and installation of boat washing stations at selected locations around the Park.

Watershed Actions-- There are six public access points for boats to enter Upper Saranac Lake-- two of which accommodate motorized boats and the others for canoes and kayaks. The most critical prevention strategy consists of boat inspections and decontamination of boats not meeting the Clean- Drain-Dry standard at the NYS DEC boat launch sites at Saranac Inn and Fish Creek Pond. This should be supplemented by passive prevention at the other public access points.

Lake Actions include a multilevel early detection surveillance program that ranges from lake-wide monitoring to more focused monitoring at the public access points. Monitoring must then be coupled to a rapid response process that would be initiated in the event that a new AIS is detected. This process includes: confirming AIS and notify authorities, determining the extent of invasion, developing a response plan, obtaining necessary permits, performing control, and monitoring the outcome. The details for implementing each step in a rapid response are included in the AWI Prevention and Preparedness Plan.

The Adirondack Watershed Institute warns that implementation of this Prevention and Preparedness Plan does not guarantee that new AIS will not become established in Upper Saranac Lake, but lack of implementation guarantees they will. This is another step undertaken by the Upper Saranac Foundation to protect and preserve this lake for future generations.

CAN YOU NAME THE INVASIVE? (answers on back page)



“The Actual and Potential Economic Impact of Invasive Species on the Adirondack Park: A Preliminary Assessment”

By Adirondack Park Invasive Plant Program Coordinator, Brendan Quirion

Have you ever wondered how much invasive species impact the Adirondack Park's economy? The ecological impacts of most invasive species have been studied and pretty much anyone that has experienced a large infestation of an invasive species, such as Eurasian Watermilfoil or Japanese knotweed, understands the environmental concerns. But as an example, do you know how much lakeshore property values decline after the arrival and spread of an aquatic invasive species (AIS) like Eurasian Watermilfoil? Questions like this hold relevance to shorefront property owners on lakes such as Upper Saranac that are already experiencing the detrimental effects of AIS. For the first time, the Adirondack Park Invasive Plant Program (APIPP), is able to help answer this kind of question. In September of last year, APIPP released a report entitled “The Actual and Potential Economic Impact of Invasive Species on the Adirondack Park: A Preliminary Assessment”. The report, which was privately funded and commissioned through Yellow Wood Associates Inc., is a first-of-its-kind assessment of the economic impact of invasive species on the Adirondack Park and is meant to provide a preliminary foundation for informed discussion regarding the economic risks of invasive species as well as the associated costs and benefits of taking action.

The need for this economic assessment stemmed from the fact that consideration of the economic impacts associated with invasive species had historically received relatively little attention; even though these impacts could be



substantial. As a first step in meeting this need, APIPP, advisory committee members, and Yellow Wood Associates identified 25 invasive species that posed the greatest threat to the Adirondacks as well as 9 different economic sectors active in the Park that were most likely to be negatively affected should these invasive species spread. The economic sectors identified included agriculture and horticulture, conservation, forestry and forest products, human health, local governments, real estate and construction, recreation and tourism, utilities, and state government. Key informant interviews were conducted with 23 organizations active in these sectors to determine which species should be featured in the analysis. Those interviewed were asked what invasive species were of the greatest concern to their sector. Based on the results of these interviews, 8 invasive species were prioritized for inclusion in the economic analysis. These species included 5 that were currently in the Park; Eurasian Watermilfoil, Asian Clam, Spiny Water Flea, Japanese Knotweed, and Spotted Wing Drosophila, as well as 3 that were present nearby and of

concern; Emerald Ash Borer, Asian Longhorned Beetle, and Hydrilla.

Yellow Wood Associates then conducted an online survey to 274 individuals across economic sectors in the Adirondacks to better understand the current level of investment on invasive species. This survey found that in 2013, 88 organizations spent approximately \$3.56 million on invasive species mitigation efforts. This did not include the value of more than 12,000 volunteer hours valued at \$708 thousand, bringing the total to approximately \$4.27 million. Of the organizations that were currently spending money towards invasive species mitigation efforts, non-profits led the way followed by state government, associations, academic institutions, local government, other, and for-profit companies. It was also found that of the money spent in 2013, 85% was directed towards aquatic invasive species with the rest towards terrestrial plants, animals, pathogens, insects, and fungi.

With priority species and existing investment information in hand, Yellow Wood Associates set out to compile data from existing studies and data centers on the economic impacts of invasive species. Of highest importance were studies and data centers related to the economic sectors at risk in the Park. Wherever possible, studies of economic impacts from nearby regions or regions with some similarities to the Adirondacks were used. Based on the available data and their findings, Yellow Wood was able to estimate the potential direct economic impact of the 8 previously identified invasive species on the Adirondack Park and share these results in the final economic report which was released in September.

The report found that the expansion of just these 8 high risk invasive species could result in an annual loss of as much as \$48-\$53 million to the recreation and tourism, agriculture, and forestry and forest product sectors of the Adirondack Park's economy. These losses were attributed to decreases in visitor spending as well as reductions in berry crop productivity, tree stumpage values, and maple syrup harvests. Furthermore, it was found that the long-term property value losses, experienced primarily in relation to aquatic invasive species and lakefront properties, could be as

continued . . .



much as \$420-\$840 million over time depending on the rate in which water bodies become invaded by AIS. Due to the lack of available research for certain economic sectors and the fact that the analysis only focused on 8 high priority species out of hundreds currently present in New York State, these annual and long-term impacts should be considered very conservative. As stated earlier, in 2013 the Adirondack region spent just over 4 million on invasive species mitigation efforts.

As a final component of the report, Yellow Wood Associates provided 4 key recommendations for where strategic invasive species investments could be made to achieve the highest returns. These recommendations included focusing on pathway management, public education, rapid response and strategic control, and regulation and enforcement. The report also identified the following questions for future discussion:

- What role does each stakeholder group have to play to protect their livelihoods and properties from the threat of invasive species?
- What level of effort is required in a landscape that is more pristine than most and heavily dependent economically on the health of its natural resource base?
- How much spending is appropriate and justifiable?
- How can the state best invest to support the local and regional economy in ways that also achieve effective protection?

Everyone has a stake and a role to play in protecting the ecological integrity and economic vitality of the Adirondack Park. As demonstrated in this preliminary assessment, the current and future economic impacts associated with invasive species to the region are significant. By expanding invasive species mitigation efforts in ways that yield the highest returns on investment, we can all ensure that the native Adirondack landscape and way of life continues to thrive. The executive summary and full report can be found on APIPP's website at the links below.

http://adkinvasives.com/wp-content/uploads/2014/11/ExecutiveSummary_FINAL090914.pdf

<http://adkinvasives.com/wp-content/uploads/2014/11/TheActualandPotentialEconomicImpactofInvasiveSpeciesintheAdirondacksFINAL110414.pdf>

"I had a good buyer in the \$2 million range. They looked on Lake George and ended up not purchasing because of fear of invasives".

~Dan Davies, Co-Owner, Davies, Davies & Associates Real Estate, LLC

"When I go to water quality conferences, it used to be non-point source pollution, run-off, phosphorus, etc — and now the focus is more so on invasive species. It is not like those other things got fixed, it is just that now invasive species has taken over."

~Emily DeBolt, Outreach Coordinator, Lake George Association

"If they [invasives] were to completely take over the lake —you could see [50]% decrease in value, a million dollar property will go for \$500,000; this has happened in the Thousand Islands"

~Dan Davies, Co-Owner, Davies, Davies & Associates Real Estate, LLC



Play in the Sand While Helping the Lake!

Want to help save the Lake while you play in the sand? The Upper Saranac Foundation is looking for volunteers to assist in surveying the Lake for the invasive, Asian Clam. This is a great opportunity for friends and families to get together to help our Lake and have fun in the water. Volunteers will be asked to use sieves provided by the USF, to sieve through shallow, sandy areas of the Lake looking for Asian Clams.

What is an Asian Clam you ask? Asian Clams are an invasive clam that can grow and spread rapidly, degrading water quality by feeding plant and algal growth. Concentrations of Asian Clams have the potential to cause damage to the environment, negatively impact the tourism economy, reduce property values, obstruct water pipes for drinking water, and cause lacerations in swim areas.

We are asking people to join us in the Asian Clam Survey effort by taking sediment samples from sandy, shallow areas near shore at predetermined locations. Volunteers of two or more can perform the survey at their leisure any time in August (the most opportune time to find the Clams). Depending on the size of the volunteer group, and the size of the sample site chosen, the survey shouldn't take much more than an hour or two. Can you think of a better way to enjoy a warm summer day while giving back to the Lake? Volunteers will be instructed in what to look for, how to look and what to do at the conclusion of the Survey.

Although we hope that Asian Clams are not in existence in the Lake, this inaugural survey effort will determine if they are present. Early detection of the Clam is imperative for eradication. Late discovery of Asian Clams in Lake George has resulted in expenditures over \$1.5 million in efforts to eradicate the Clams. In the unfortunate circumstance that Asian Clams are introduced to Upper Saranac Lake, we want to find out as soon as possible, to assure eradication and avoid such a cost.

Asian Clams are not native to the United States and were brought here as an unwelcomed import. Since then, they have spread through the bait and aquarium trade. Juveniles can be moved around in bait buckets and other areas of a boat that hold water. As with all invasive species, Asian Clams do not have any local competitors that will keep their population in check. A single Clam can self-fertilize, can reproduce up to twice a year and can produce 2,000 - 4,000 juveniles per year. Densities can reach up to 6,000 or more clams per square meter.

What do you have to do to participate? Find a friend, or better yet, a group of friends that are willing to help, and simply sign up with me, the Volunteer Asian Clam Survey Coordinator, Guy Middleton. I will help you choose one of the predetermined survey sites that best fits you. Prior to when you want to do the Survey, you will need to pick up your Survey kit which will include instructions and as many sieves as you will need for your group. Then, all you need to do is secure a boat to access the site, put on a bathing suit, sun screen and have fun in the sand. Contact with Asian Clams presents no health hazard risk to the surveyor.

If you are unable to participate in the Survey, you can still help stop the spread of Asian Clams, and other invasive species, by washing your boat and all equipment before entering Upper Saranac Lake. Be sure to drain all water, including live wells and bait buckets, and dry anything that has come in contact with previous water sources.

For further information about the Asian Clam Survey or better yet, to volunteer and pick up your survey kit, contact Guy Middleton, Upper Saranac Foundation Lake Manager and Volunteer Asian Clam Survey Coordinator, at lakemanager@uslf.org or 518 796-1052.



The Water Shield Workshop



The Upper Saranac Foundation (USF) is pleased to announce, in cooperation with the Adirondack Watershed Institute (AWI) at Paul Smith's College and the Upper Saranac Lake Association (USLA), the introduction of the Water Shield Workshop. An aquatic adventure, the Water Shield Workshop is an exciting new way for shore owners to get involved with the efforts to improve and maintain the water quality of Upper Saranac Lake.

Come aboard AWI's boat, the "Water Shield", and find out what makes Upper Saranac Lake so special!

Learn about the Lake's watershed, its ecosystem, lake stewardship, invasive species, and visit with our divers, who will be harvesting Milfoil. On board, you'll enjoy an Upper Saranac Lake hands-on water quality experience through experiential education and engagement.

Who? All ages are welcome but the focus will be on school aged children, 10 and older. Families are encouraged to take part. Participants under the age of 8 will need to be accompanied by an adult and provide their own lifejacket.

When? Two sessions, July 8 (July 9 rain day) & August 12 (August 13 rain day) from 9:30 am - 2 pm. Participants are asked to arrive between 9:00 and 9:15 am to be fitted with life jackets and to be divided into two alternating groups for both on and off water activities.

Where? USF's Water Shield Workshop will begin at the NYSDEC Back Bay boat launch at the northern end of the Lake at Saranac Inn.

Cost? For USLA members there is no cost for your Water Shield Workshop journey, but reservations are required no later than five days prior to the event. USLA will be providing lunch.

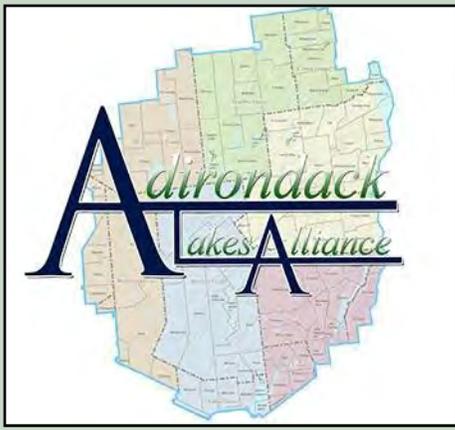
Your Journey: Aboard the AWI "Water Shield" you will be testing water quality, measuring water clarity and conduct plankton tows to see what's living just below the water's surface. On land, participants will learn how watersheds work by using a watershed model and see what impacts the watershed that they live in.

What to bring: Dress warmly in layers, sneakers or water shoes, sunscreen and a rain jacket. Life jackets are provided for participants age 8 and older, and required to be worn by participants under 18.

Reservation and liability releases are required. Sign up by contacting USF's Lake Manager; Guy Middleton at lakemanager@uslf.org, space is limited so sign up early. Additional information can be found on the USF web site at: www.uslf.org

I look forward to you joining us to find out what makes Upper Saranac Lake so unique.

Guy Middleton
Lake Manager
Upper Saranac Foundation
lakemanager@uslf.org



The Upper Saranac Lake is pleased to announce Membership in and Support of the Adirondack Lakes Alliance

By Guy Middleton

The Adirondack Lakes Alliance (ALA) represents Lake Groups and Associations within the Adirondack Park and has as its primary mission: “Protecting and Preserving our Adirondack waters.” ALA provides a forum for Lake Groups and Associations to share information and resources and to make recommendations to appropriate State, County and Local Municipalities, as well as educational and other relevant non-profit organizations, regarding environmental and ecological issues threatening Adirondack lakes.

All water bodies within the Adirondack Park qualify for membership. ALA has five defined regions, each region served by a Regional Director. Currently there are 60 Lake Groups and Associations on the membership roster. Regional Directors present the interests and concerns of the region to the Executive Board. As Lake Manager, I have been involved with the organization of the ALA and will be representing both the USF and USLA interests at ALA meetings. Forums are offered in each region, bringing together appropriate resource people to help in considering how to best respond to particular issues being addressed by a Lake Group or Association, as well as discussing current Aquatic Invasive Species (AIS) issues threatening the Park.

The ALA has established an organizational structure, with a Mission Statement and By-Laws, and has been included in discussions about AIS control as the Organization representing Lake Groups and Associations within the ADK Park. The ALA provides a voice and representation for Lake Groups and Associations, among other agencies and organizations working within the ADKs focused on AIS. Most recently, the ALA has been actively involved as a partner in the development of the Memo of Understanding (MOU), which was prepared for the Governor’s Office. The MOU was accepted by the Governor’s Office and has become a vehicle to fund pilot programs to establish a regional boat decontamination program within the Adirondack Park. The ALA has also developed a web page that can be found at <http://www.adirondacklakesalliance.org>.

In addition, the Adirondack Lakes Alliance will be hosting its integral Summer Conference, “Lake Associations Making A difference” at Paul Smith’s College, July 28.

Collaboration and partnerships are important to the work being carried out by ALA. Partners who assist ALA by serving in an advisory capacity include:

- Adirondack Association of Towns and Villages (AATV)
- Representatives from local government-Town and County
- Adirondack Park Invasive Plant Program (APIPP)
- Adirondack Watershed Institute of Paul Smith’s College (AWI)
- Soil and Water Conservation Districts
- Adirondack Park Agency (APA)
- New York State Department of Environmental Conservation (NYSDEC)
- Lake Champlain-Lake George Regional Planning Board (LCLGRP)
- Lake George Park Commission (LGPC)

Summer Events

July 8 - Water Shield Workshop at Back Bay Boat Launch

July 28 - Adirondack Lakes Alliance, Lake Association Symposium, at Paul Smith's College

www.adirondacklakesalliance.org

August 12 - Water Shield Workshop at Back Bay Boat Launch

Any time in August – Volunteer Asian Clam Survey

Registration and additional information can be found on the USF web page at www.uslf.org



Friends of Tommy's Rock

Summer is coming, and it will be a good time to think about your Legacy Gift to the Upper Saranac Foundation.

For more information contact any Board Member or friends@uslf.org.

Rocky Ridge Restaurant (Save the Date)

The families at Wenonah Lodge are providing lunch at their Rocky Ridge Restaurant on July 2 with seatings at 11:30 and 1:00.

Reservations can be made by phone (518-359-8474), e-mail (jschoff@schoffent.com), or text (216-496-1501)

All proceeds benefit the Milfoil control efforts of the Upper Saranac Foundation.

See you there.

Photo Credits

"We're waiting" - Ginny B. Schwartz

Boat Inspection - Guy Middleton

Asian Clams on hand - Emily DeBolt

Little girl with the goggles - Lake George Park Commission

Kids in the Boat - Adirondack Watershed Institute

Tommy's Rock - Guy Middleton

Invasives - Guy Middleton

Brendon's kayaks - Guy Middleton

Invasive Species Photo Credits

Greg Bales

Amy Benson - US Geological Survey

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Meghan Johnstone - APIPP

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Leslie J. Mehrhoff - Univ of Connecticut

David J. Moorhead

Randy Westbrook - US Geological Survey

Center for Great Lakes & Aquatic Sciences Survey

University of Michigan



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ANSWERS
1. Asian Clam 2. Curley Leaf Pondweed 3. Quagga Mussel
4. Spiny Water Flea 5. Brazilian Blodea
6. Eurasian Water Milfoil 7. Fanwort 8. Zebra Mussel
9. Alewife 10. European Frogbit 11. Yellow Floating Heart 12.
Variable Leaf Milfoil 13. Brittle Nial
14. Fishhook Water Flea 15. Water Chestnut
16. Hydrilla 17. Round Goby

Upper Saranac Foundation

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