

# THE IPA NEWSLETTER

Mystic Lake, Middle Pond, and Hamblin Pond

Fall 2006

A quarterly publication of the Indian Ponds Association, Inc.

Vol. 6 No 4



## INVASIVE PLANT EXPERTS VISIT IPA

On Tuesday October 24, the IPA welcomed two important visitors and received a one-day education on the subject of invasive plants. The visitors were Tim Simmons, a restoration ecologist with the Massachusetts Division of Fisheries and Wildlife Natural Heritage & Endangered Species Program, and Tom Rawinski, a botanist with the U.S. Forest Service. They journeyed to Cape Cod at the invitation of the IPA to investigate firsthand the particular trees growing on the shores of the Indian Ponds that we thought were gray willows (*Salix cinerea*), an invasive species described in the Summer 2006 issue of *The IPA Newsletter* ([www.indianponds.org](http://www.indianponds.org)).

Since gray willows closely resemble certain native pussy willows, we invited these two scientists, both of whom are gray willow specialists, to confirm the identity of the trees. We

were also interested in learning the best way to deal with these invasive plants.

Their visit to the Indian Ponds area included a boat trip on Mystic Lake and a walking tour of the Hamblin Pond public beach and adjacent shoreline. The trip around Mystic Lake aboard IPA member Don Houghton's pontoon boat included Don, IPA President Emory Anderson, Newsletter Editor Geri Anderson, IPA Vice President Holly Hobart, and the two guest scientists. Tim and Tom immediately spotted mature gray willows in large numbers on every shore. We stopped many times for Tom to take samples, show us how to distinguish the invasive species from other willows, and investigate other plants growing along the shore.

*Continued on page 4*



*Left to right: Tom Rawinski, Tim Simmons, Holly Hobart, Emory Anderson, and Don Houghton.*

## INDIAN PONDS IDENTIFIED AS CORE HABITATS

The Natural Heritage & Endangered Species Program of the Massachusetts Division of Fisheries and Wildlife has identified **Mystic Lake, Middle Pond, and Mill Pond** as "Core Habitats" because they are home to rare plant and animal species and exemplary habitats. **These are the only water bodies in the Town of Barnstable to be so designated by Natural Heritage's Living Waters Project** (see map on page 5).

The Living Waters Project was initiated in 2001 by the Natural Heritage & Endangered Species Program to "identify, map, and formulate conservation priorities for the diversity of freshwater plants and animals in Massachusetts." The "Core Habitats" that have been identified represent sites that are the most important for the preservation of freshwater diversity in Massachusetts based on current knowledge.

For each "Core Habitat", a "Critical Supporting Watershed" is outlined to highlight the upland and upstream areas that have the greatest potential to influence, positively or negatively, the species living in the "Core Habitat". As with the "Core Habitats", **the area surrounding the above three ponds constitutes the only "Critical Supporting Watershed" in the Town of Barnstable.**

*Continued on page 5*

### – IN THIS ISSUE –

- INVASIVE PLANT EXPERTS VISIT IPA
- INDIAN PONDS IDENTIFIED AS CORE HABITATS
- PRESIDENT'S REPORT
- WEQUAQUET SEWER REPORT
- BSA TROOP 54 HELPING THE ENVIRONMENT
- MIDDLE POND HERRING RUN RENOVATION
- WHY INVASIVE PLANT SPECIES ARE A SERIOUS THREAT
- AND THEY DON'T EVEN BITE OR STING!
- SMEDLEY
- NEW TAX INCENTIVES HELP TO PRESERVE FAMILY LANDS

## IPA OFFICERS AND DIRECTORS – 2006-2007

### Officers

Emory Anderson  
*President*

Holly Hobart  
*Vice President*

Richard Wheeler  
*Clerk*

Nancy Wong  
*Treasurer*

### Directors

Paul Craig

Jon Halpert

Robert Kohl

James McGuire

Robert Mesrop

Steven Paglierani

Jane Smith

### Newsletter Editor

Geri Anderson

IPA, Inc., P.O. Box 383  
Marstons Mills, MA 02648

E-mail: [info@indianponds.org](mailto:info@indianponds.org)

<http://www.indianponds.org>

*Webmaster*

John Anderson

The IPA is a 501(c)(3) organization and a registered public charity. All dues and contributions are tax deductible.

*This newsletter, with a circulation of over 600, is a forum for the exchange of ideas on matters germane to the IPA mission and, as such, the views expressed by authors of articles do not necessarily represent official IPA policy.*

## PRESIDENT'S REPORT

As is evident from the articles in this newsletter, a **current major focus of the IPA** is the recently discovered **invasive species, the gray willow**. The visit several weeks ago by two invasive species experts (see story on page 1) was enlightening, to say the least, and a literal shot in the arm to our conservation and environmentally-oriented efforts to improve the Indian Ponds. I have had several meetings during the past several months with Town officials regarding plans to seek approval for the removal of both gray willow and *Phragmites* from our ponds.

Our other major focus, of course, is the remediation of the excess phosphorus in Mystic Lake. As reported in the Summer 2006 issue of this newsletter ([www.indianponds.org](http://www.indianponds.org)), Town Manager John Klimm, during a meeting with me and several Town officials on June 27, promised that the Town would take action, most likely an alum (aluminum sulfate) treatment. Recently, I learned that Rob Gatewood, Director of the Town's Conservation Division, has included a request for funds for the **design and permitting phase of an alum treatment for Mystic Lake** in his submission to the Town Manager of conservation-related items for inclusion in the **fiscal year 2007 Town budget** proposal. We expect the Town Manager to fulfill his earlier promise and include funding for Mystic Lake in his budget proposal to the Town Council next March. Since our project will be in competition with others for funding, **it is imperative that IPA members and other concerned citizens express their views to Mr. Klimm. Messages and letters of support should be sent to Town Manager John Klimm at Town Hall, 367 Main Street, Hyannis, MA 02601, [john.klimm@town.barnstable.ma.us](mailto:john.klimm@town.barnstable.ma.us), or (508) 862-4610.**

We feel that the designation of Mystic Lake, Middle Pond, and Mill Pond as Core Habitats by the MA Natural Heritage & Endangered Species Program (see story on page 1) adds significant credibility to our efforts to seek remediation of Mystic Lake and the eradication of invasive species.

Lastly, don't forget to include the IPA in your end-of-year, tax-deductible charitable contributions. Even though we'll be sending out 2007 membership renewal letters in January, it's not too early to pay those dues now. Also, the IPA will again sponsor a \$500 scholarship for a Marstons Mills graduating high school senior next spring. Your donations to this fund are greatly needed. Please be generous. Happy holidays!

*Emory D. Anderson, PhD*

## WEQUAQUET SEWER PROJECT

Plans for a sewer system around Wequaquet Lake began over 8 years ago. The Town of Barnstable Board of Health, in addressing the subject at a Town Council meeting shortly after that, stated that a survey of the septic systems of the homes around the lake indicated that upwards of 65% had failed or were not functioning properly.

In addition, the Town-Wide Wastewater Study identified the project as the most needed in the town. At many presentations by the DPW, a map was shown that gave top priority to the area around Wequaquet Lake as one that should be sewered.

From an environmental standpoint, everyone seems to be in agreement that the project should have been completed a number of years ago. However, in order for this project to be

constructed, it requires approval by the Town Council, but we have been told by various Town officials that the necessary number of approval votes are not there. So, the project languishes!

At the present time, the DPW is issuing a survey to all lake-front property owners to determine their current attitude toward the project.

Perhaps when all of this is done, the project will move ahead. As of this writing, the project is somewhat in limbo and no timetable exists for the final engineering drawings required before bids can be solicited for the project.

*Hid Welch*  
*Wequaquet Lake Protective Association*



Left to right: Mike Silvia, Eric Lavigne, Reneé Lavigne, Nolan Ryan, Nick Atchinson, David Beatty, Matthew Ryan, Peter Lavigne, and Justin Massarsky

## BSA TROOP 54 HELPING THE ENVIRONMENT

Members of Boy Scout Troop 54 spent several hours on Saturday September 23 participating in the International Coastal Cleanup sponsored by The Ocean Conservancy. Volunteers from around the world join together each September to help clean up beaches. In Massachusetts, this activity is called Coastsweep and is sponsored by the Office of Coastal Zone Management. For the last several years, the IPA has participated in Coastsweep, coordinated locally by Fred Stepanis of the Town's Conservation Division.

Peter Lavigne of Marstons Mills encouraged his son's troop to take on the task of cleaning up two sites on Hamblin Pond: the Town beach and the Town boat launching ramp. In doing this public service project, they collected over 50 pounds of trash.

### LETTERS TO THE EDITOR ARE WELCOME!

SEND YOUR LETTER TO THE EDITOR VIA  
EMAIL TO: [INFO@INDIANPONDS.ORG](mailto:INFO@INDIANPONDS.ORG) OR BY  
REGULAR MAIL TO: IPA, P.O. BOX 383,  
MARSTONS MILLS, MA 02648

### VISIT OUR WEBSITE

[WWW.INDIANPONDS.ORG](http://WWW.INDIANPONDS.ORG)

ACCESS AND DOWNLOAD NEWSLETTERS  
IN COLOR

DOWNLOAD MEMBERSHIP FORMS

## MIDDLE POND HERRING RUN RENOVATION

During September and October, personnel from the Town's Natural Resources Division rebuilt 140 ft of the Middle Pond herring run. They replaced the sections of FastDitch, a patented, plastic ditch-lining product installed during the summer of 2005, with environmentally safe pressure-treated lumber. The FastDitch sections, purchased using funds from a grant obtained several years ago from the Gulf of Maine Council on the Marine Environment, had been installed on an experimental basis to replace the old, deteriorating regular lumber that had previously been used to line the 1000-ft herring run. Unfortunately, the FastDitch sections, which are designed primarily for use in the warm southwestern United States, did not function satisfactorily in our colder winter climate.

The newly installed 140 ft of pressure-treated wooden siding is a vast improvement over the unsightly FastDitch. According to Doug Kalweit of the Natural Resources Division, soil will eventually be brought in to back-fill on the outside of the wooden walls and then be seeded to return the area along the run to a more aesthetically pleasing condition.

Funding for replacing the FastDitch sections was secured by Don Liptack of the USDA Natural Resources Conservation Service in Barnstable. Additional funding is being sought to

cover the cost of replacing the deteriorating wooden walls of the remaining 800-900 ft of the herring run.



View downstream from Middle Pond herring run ladder showing 140 ft of newly installed pressure-treated lumber side walls.

## INVASIVE PLANT EXPERTS VISIT IPA *(Cont'd from page 1)*

One very large willow on Mystic Lake was estimated by Tom Rawinski to be about 70 years old, the oldest he had ever seen. These trees have apparently been growing on Cape Cod for about 100 years, but their resemblance to other willows has allowed them to spread unnoticed until recently. Tom pointed out that the leaves of the gray willow are wider at the tip than at the base, like olive leaves, a characteristic that has caused the subspecies to be named "*oleifolia*", meaning "olive-leaved".

"Gray willow shades out everything," said Tim Simmons, explaining how the tree destroys habitat for native plants, spreading by seeds and sprouting roots from the tips of its branches as it takes over more and more of the shoreline. If uncontrolled, gray willows will eventually obliterate the pond's shoreline and invade open water areas.

The walking tour at Hamblin Pond included the Town beach and shoreline of the adjoining Town property. At the Town beach, there was a close examination of the several stands of *Phragmites* or common reed (see the Summer 2006 issue of *The IPA Newsletter* ([www.indianponds.org](http://www.indianponds.org)) that, together with gray willow, purple loosestrife, poison ivy, and other assorted plants, have taken over at least half of what was once a sandy beach. The walk along the shore revealed



*Tim Simmons and Geri Anderson discussing invasive plants at Hamblin Pond.*

more *Phragmites*, gray willow, and assorted plants of interest to the experts, who identified many of the native plants and trees growing there.

We learned that the distinctive plant community of the Indian Ponds is called the "Coastal Plains Ponds Associates" or CPPAs, and that when pond levels are low, certain rare plants grow on the beach from seeds deposited in previous low-water years.

Simmons and Rawinski pointed out that it is necessary to eradicate the gray willows and other invasive

plant species in order to preserve native plant species and the animal life that depends on them for habitat and sustenance. They complimented the IPA for drawing attention to the dangers of these invasive plant species and for working with the Town to develop plans for their control.

The IPA has initiated discussions with Rob Gatewood, Director of the Town Conservation Division, and David Curley, Director of the Town Recreation Division, to develop eradication plans for gray willow and *Phragmites* in the Indian Ponds area and to recover portions of the Hamblin Pond



*Tom Rawinski examines a huge gray willow on the shore of Mystic Lake.*

beach overgrown with them. We hope that such plans will be approved for implementation sometime in 2007.

As a first step in building an information base on which to develop these plans, the IPA has just completed a survey of the three Indian Ponds and Mill Pond to determine the number of gray willows growing along the shores. Gray willows were found on nearly every parcel of waterfront totaling several hundred trees around the perimeter of each of the three Indian Ponds. Only a handful were seen around Mill Pond.

We will keep readers informed of progress with this initiative in subsequent issues of this newsletter.

*Holly Hobart*



*Tom Rawinski (left) and Tim Simmons (right) observing invasive plants on the Hamblin Pond Town beach, including the stand of *Phragmites* behind them.*

## AND THEY DON'T EVEN BITE OR STING!

Among the threatened or endangered species that inhabit Barnstable's coastal plain ponds are one species of dragonfly and two species of damselfly. Dragonflies and damselflies are closely related, each being a suborder of Odonata, an order of insects so ancient that it predates the dinosaurs by over 100 million years. These fascinating creatures first appeared in the Carboniferous age when the great primitive forests that eventually became our coal and oil deposits were alive and growing. They are among the oldest of insects.

Although dragonflies and damselflies resemble each other, dragonflies always hold their two pairs of long, lacelike wings at right angles to their bodies, while damselflies fold their wings against their backs when at rest. Dragonflies are strong fliers, while damselflies appear fluttery and indecisive. Dragonflies are generally larger than damselflies. Both flaunt spectacular colors and patterns.

The Odonata are familiarly called "odes" by their many admirers. There is an American Dragonfly Society, complete with dragonfly meetings, institutes, seminars, and conferences. A newsletter, *Ode News*, published right on Cape Cod, boasts 300 subscribers in 32 states and provinces and lists sightings by species so fellow enthusiasts can exclaim and compare notes. In just the past couple of years, no fewer than four new field guides to the "odes" of the eastern United States have been published.

Some of the odes have fanciful and evocative common names: stream cruiser, powdered dancer, sphagnum sprite, seaside dragonlet. Others sound downright sinister: stygian

shadowdragon, ebony boghaunter. But none of them bite, sting, or harm people in any way. Our locally endangered odes are the comet darter, a dragonfly, and the New England bluet and pine barrens bluet, damselflies. The two bluets have azure and black striped bodies, while the darter is large, with a green head and a coral abdomen.

Dragonflies hatch in fresh water and spend from three months to four or more years living underwater as larvae. On a spring or summer day when the time is right, the larva climbs out of the water onto a reed or other plant. As it clings there with its claws, its rigid casing splits down the back and slowly the adult insect emerges. As blood pumps into its wing-buds, the beautiful wings unfold and stiffen, and the insect flies away from the water into the surrounding countryside. During the next few weeks, it becomes sexually mature, and its colors develop and deepen. After mating, the female lays her eggs on a pond or stream bank or on vegetation, but always near fresh water. The adult phase of a dragonfly's life lasts only a month or two in temperate climates, and by autumn's end, they're gone.



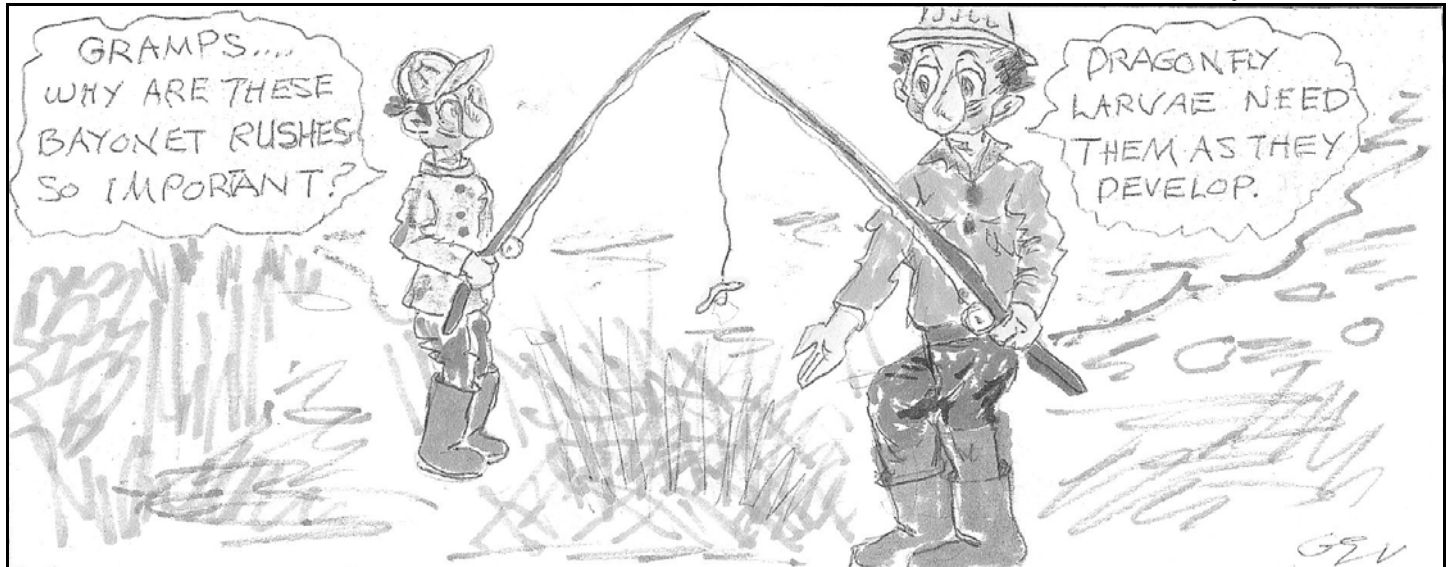
*Comet darter. Collection of the Illinois State Museum, photographed by Dr. Everett Cashatt*

Many species of odonates are particular about the kind of water they will live in. Some prefer brooks and rivers, others insist on ponds or bogs or marshes. The three species that have been identified as threatened in Barnstable County are all creatures needing clear ponds with plenty of open water. **When marshes are drained, streams polluted, and ponds become clogged with algae and overgrown by invasive plants, habitat for many creatures, including dragonflies, is lost, and before we know it, they disappear forever.**

*Holly Hobart*

**SMEDLEY**

**by Gordon Nelson**



## NEW TAX INCENTIVES HELP TO PRESERVE FAMILY LANDS

Congress just passed new tax legislation that can help landowners who are interested in protecting natural systems, family lands, and traditions in their communities. It does so by providing enhanced tax benefits for landowners who donate conservation restrictions on their land. Conservation restrictions are an effective way for private landowners to protect critical natural resources in their community while keeping land in the family and traditions alive.

A conservation restriction is an agreement between a landowner and a land trust in which a landowner gives up his/her right to develop the property for the protection of the property's conservation values. The landowner continues to own and manage the land and may sell or pass it on to heirs. If the conservation donation benefits the public and meets other federal tax code requirements, landowners become eligible for significant federal tax benefits.

Previously, conservation restriction (CR) donors received tax deductions up to 30% of their Adjusted Gross Income (AGI) for a maximum of 6 years. Under the old rules, many lower income level donors were not able to fully realize their deduction within the 6-year period, forcing them to leave money "on the table".

New legislation extends the opportunity for donors to fully realize their benefits by increasing the deduction to up to **50%** over a maximum of **16 years** for landowners and up to **100%** over 16 years for qualifying farmers.

Many towns, like Barnstable, offer additional tax incentives at a local level for conserving private property. The town rewards land donors with property tax reductions if they consider the land to be of a high conservation value. New tax incentives, combined with property tax reductions, can make

it significantly more feasible for people to hold on to their family land.

### Why is it critical for landowners to take advantage of these new tax incentives now?

Because this legislation is only effective for donations made through December 31, 2007. After December 31, the legislation will be subject to reexamination. This may be a once-in-a-lifetime opportunity to maximize the monetary benefits of preserving your family lands – the time to act is now!

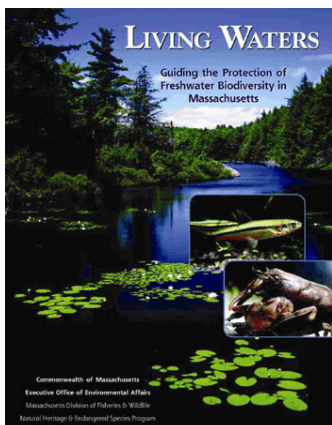
According to The Compact of Cape Cod Conservation Trusts, there are currently more than 300 conservation restrictions protecting 5,000 acres across the Cape. Barnstable Land Trust (BLT) and The Compact hope that new tax incentives may help to boost this number over the next year. Conservation restrictions are an effective tool for the people of Cape Cod to take back the future of their communities by preserving their family lands. The future is in our lands. The power to preserve it is in your hands.



BLT is a private conservation organization dedicated to the preservation of open spaces and natural areas of the Town of Barnstable – its woodlands, wetlands, and wildlands. Its office is located at 407 North Street in Hyannis. Since 1983, Barnstable Land Trust has protected 670 acres in the Town of Barnstable through conservation restrictions and acquisitions.

For more information about BLT's programs or how to make a gift of land, visit [www.BLT.org](http://www.BLT.org) or call (508) 771-2585. For more information about local land trusts, conservation restrictions, and the new tax law, visit the website of The Compact of Cape Cod Conservation Trusts, Inc. at [www.compact.cape.com](http://www.compact.cape.com).

Andrea Seddon  
Special Events & Program Coordinator  
Barnstable Land Trust



To get a copy of the publication *Living Waters: Guiding the Protection of Freshwater Biodiversity in Massachusetts* produced in 2003 by the Massachusetts Natural Heritage & Endangered Species Program, contact Natural Heritage at [natural.heritage@state.ma.us](mailto:natural.heritage@state.ma.us) or (508) 792-7270 ext. 200.