

P.O. Box 60566, Florence, MA 01062

Dedicated to the preservation of open space and the promotion of affordable housing

Volume 18, No. 2 Fall 2006

Invasive Plants Removed from Fitzgerald Lake

During the summer, BBC volunteers removed water chestnut (*Trapa natans* L.), an invasive aquatic plant, from Fitzgerald Lake. A patch of water chestnut was first noted in 2005 and removed. This summer, during an invasive plant inventory, a small patch was found near the site where it was observed in 2005, and a new, larger patch was discovered close to a group of rocks near the dam.

Between June and August, volunteers spent about 65 hours removing plants from both of these areas by hand pulling from canoes and kayaks. Special thanks are due to Brian, Morey, and Taylor Adams, Arianna Baum-Hommes, Lianna Hart, Bob Packard, Bruce Hart, Dave Herships, and Norma Roche, as well as Cynthia Boettner, coordinator of the New England Invasive Plant Group of the U.S. Fish and Wildlife Service.

The invasive water chestnut plant (which is a different species from the plant used in Asian cooking) is native to Europe, Asia, and Africa. It was introduced into the United States in the mid-1800s as an ornamental. The plant is generally found in lakes, ponds, and slow-moving streams. It has been reported in the northeastern part of the country and has become established in Massachusetts, Vermont (including a 47 mile section of Lake Champlain), New Hampshire, Connecticut, and New York and in several mid-Atlantic states.

Water chestnut has both floating and submerged leaves. The triangular floating leaves are arranged in a rosette pattern, and the submerged leaves are feathery and wrap around the plant stem, which can be up to 16 feet long. The fruit develops under water and has four sharp spines (as our volunteers know only too well). The single seed in each fruit is viable for up to 12 years and can be dispersed by waterfowl, floating plant fragments, or boats.

Water chestnut can have a significant environmental impact. Its leaves form dense mats on the surface of the water, shading and crowding out native plant species. Its decomposing vegetation may also lower dissolved oxygen levels, which can adversely affect fish populations. In addition, the thick leaf mats can impede boat access.

The pulling of water chestnut over the summer has averted a potentially significant increase in new plants next year. One seed can produce 10–15 rosettes, and each rosette, in turn, can yield 15–20 seeds. With close to 200 plants having been removed, a huge potential seed bank was prevented from developing.

While control efforts to date have been successful, there will have to be an ongoing monitoring program in the future to identify and pull additional plants that may become established. Fitzgerald Lake is the centerpiece of the Fitzgerald Lake Conservation Area, and maintaining its aquatic health is a high priority. If you see these plants in the future, please report their location to us.

Bill Williams



Water Chestnut. Courtesy of the New England Wild Flower Society/Jean S. Baxter. Please visit the NEWFS Web site http://www.newfs.org for much more information on plant conservation and invasive plants.

President's Report

How many naturalists does it take to create a Web site? Only two—when you find the right people. Julia Chevan and Bill Williams have done a magnificent job in getting BBC's Web site up and running. I hope you'll visit us at www.BroadBrookCoalition.org for all sorts of information about BBC. The Web site lists upcoming nature walks (Walks and Talks) and volunteer workdays. Our recent newsletters are there too, along with information about our history and philosophy, membership forms, and much more. Parts of the site are still under construction, and we hope to soon have more photos and more links to other conservation groups. We also welcome your input: if you have suggestions, please contact BBC Board member Jim Reis. Jim will communicate your suggestions to Julia and Bill.

BBC is lucky to have such an active group of committed volunteers. Each year, as we review our work, I am amazed by our accomplishments. We have added over 25 acres to the Fitzgerald Lake Conservation Area during 2006, bringing our total to more than 616 acres. And there are some promising land additions that we hope to announce soon. We have organized about a dozen nature walks open to all. We have done a survey of invasive plants around—and in —Fitzgerald Lake. This will help us plan strategies to control the invasives. In the course of several workdays we eliminated patches of Multiflora Rose and Garlic Mustard. We logged approximately 65 personhours in canoes and kayaks pulling Water Chestnut from the lake. We have resumed water quality testing in the lake. There is now a second shrub island planted in Cooke's Pasture. We accomplished a major

Bill Williams and Bob Packard inventory invasive species in FLCA. Photo by Bob Zimmermann.





Bob Rundquist works on shoring up BOB. Photo by Bob Zimmermann.

repair of the large Bridge over the Brook at the North Farms Road entrance, leveling it to a surprising degree. There were repairs to several small bog bridges, some new trail signs, and the usual trail maintenance. There was a large—and heavy—iron culvert at the base of the Marian Street trail near the turnoff to the wildlife blind. I thought that culvert would be there forever—or until it rotted into the ground. But four volunteers were able to cut it up and carry it out in segments. I was amazed.

Few of us are experts at these tasks; sometimes we muddle through, making a few errors along the way. But we nearly always complete the job. The workdays are always fun and end with a feeling of achievement and camaraderie. And we can always use more hands. Please check the newsletters—and the Web site—for dates and times of upcoming events. Robert Bissell

Dave Herships, Bill Williams, Bruce Hart, and Bob Packard helped out with the habitat island planting in Cooke's Pasture. Photo by Bob Zimmermann.



Walks and Talks: Fall 2006

Discovering the Eastern Forest Robert Leverett

Saturday, **November 11**, **2006**, **10** a.m.- **1** p.m. Meet at North Farms Road entrance to FLCA

Bob Leverett will be joining us for a discovery of the eastern forest at FLCA. We'll be looking at and discussing the development of the forest and its successional past. We'll be exploring how we can observe and identify non-charismatic species, what might or will expand its growth, and the age of the forest thru physical characteristics. Individual trees will also be identified by bark and form. Bob will also explain how the Eastern Native Tree Society documents forest sites and individual trees, how trees are measured, and what statistics are gathered.

Bob is the co-founder and executive director of the the Eastern Native Tree Society, co-founder and president of the Friends of Mohawk Trail State Forest, and the author of *The Sierra Club Guide to the Ancient Forests of the Northeast*. He has co-authored works on old growth forests of the Eastern US, and is the principal architect of the Eastern Old Growth Conference Series.

A helpful Web site to prepare for this presentation: www.nativetreesociety.org.

New FLCA Parcel Acquired by City

On July 20, the Northampton City Council voted to take by eminent domain 8.8 acres of land with owners unknown abutting the northeastern corner of Fitzgerald Lake Conservation Area (bordering one of the Michalski/Stewart parcels purchased last year).

This wooded, ledgy parcel, in tax delinquency for many years, has long been sought after for FLCA. BBC helped out not with funding in this case, but with volunteer time. Rachel Smith, a student in Brian Adams' environmental studies class at Greenfield Community College, took on the title research on this and several other parcels as her class project—something the staff at the Northampton Planning Office didn't have the time to do. Under the supervision of Wayne Feiden and the Planning Office staff, she pored over records at the Northampton assessors' office and the Hampshire County courthouse and made

numerous phone calls to families. In this case, she found the name of an owner who had died over 50 years ago and left no heirs. The City has taken the land by eminent domain, which will give it clear title after a waiting period of 3 years.

This acquisition will bring the Fitzgerald Lake Conservation Area to 617 acres. We sincerely appreciate the work that Wayne and the Planning Office staff have put into this acquisition, as well as the City Council's support for the taking.

We hope to have news of another land acquisition this spring, but if that happens, it will require an outlay of more dollars from BBC's Land Acquisition Fund. It's only thanks to your generosity that FLCA continues to grow. Please use your membership renewal form, or the form in this newsletter, to make your gift.

Yard Waste: No Good for FLCA

This year, in and around the Fitzgerald Lake Conservation Area, we have found at least eight piles of yard waste from people's homes and gardens. From about half of those piles at least one invasive plant was sprouting. Other exotic and potentially invasive plants were also growing in these piles. This is one of the major causes of invasive plant infestation, especially for those species that spread vegetatively. We realize that some people think that this is a completely innocuous and even beneficial way to recycle their yard waste, but it is not. Adding organic waste matter can not only change the pH, nutrients, and other characteristics of our native soils, but can also add invasive plants and invertebrates. The best solution to your yard waste problem is to compost it in your yard. Please do not throw it into the woods anywhere, never mind into a conservation area. Bob Packard

Remember that hunting is permitted in certain parts of
Fitzgerald Lake Conservation Area (see map brochure for details).
Please exercise caution at all times.

Be Prepared

By Connie Parks and Brian Rose BBC members and fans of Fitzys

Our late spring fishing trip on the afternoon of May 24, 2006, ended with a canoe flip and dip courtesy of a small waterspout on Fitzgerald Lake in Florence. We were privileged to witness—and survive—an incredible natural phenomenon.

It was a short-sleeve day with dense, flat-bottomed clouds, indicating an unstable atmosphere, typical of late spring. Brian wanted to try one more spot near the northeast side of the lake, where we normally don't fish. After we finished our worms and caught our last panfish and bass, we were about to pull the anchor line when a stiff breeze came up suddenly from the southwest. A stiff breeze indeed, as white caps formed quickly and we were dragging the anchor facing into the wind.

All of a sudden movement behind us caught our attention and we looked over our shoulders to see—

"Look out, a tornado!" Brian exclaimed.

Before we knew it, a turbulent eddy of air rushed from the forest, from the northeast, and traveled along the surface of the lake, directly toward the canoe. A circle of six-foot-tall jets of water, perhaps twelve to fifteen feet in diameter, approached and overtook our canoe. In an instant the starboard side of the canoe was lifted, the port side depressed, and we were in the drink.

After we surfaced, Brian having to extricate his leg from the anchor line, we watched the waterspout continue for a hundred yards across the lake and pause.

"Is it going to come back at us?" Brian was prepared for a second assault.

We watched as it hissed and dissipated. It was as if a mischievous water fountain had done a driveby spray and swamp. It couldn't have lasted more than fifteen seconds.

Luckily, everything floated, the fishing rods, the tackle box, the sandals, the personal flotation devices, the paddles. Even keys and wallets were safely stowed in the fanny pack clipped to one of the canoe crossbars. The water was not too deep and Connie could just reach the bottom, where her feet contacted not muck but submerged waterlily foliage. We righted the canoe, corralled our gear, and made our way to shore with the swamped watercraft. We've canoed from Florida to Maine, from lakes and rivers to the Chesapeake Bay and Atlantic Ocean, in millpond stillness to two-foot waves, and never capsized. Not once since we bought our 17-foot fiberglass Mohawk canoe at the factory in Longwood, Florida, in 1985. Never capsized until that afternoon at Fitzgerald Lake.

It just goes to show that you never know what might happen, so be prepared.



PEACE ON FITZGERALD LAKE

Amber oak leaves spiral down
On still water
Ripple reflections of silver ghost clouds
Clouds that hug the multihued forest
And backdrop for V-formation Canada geese
Dragonflies glide tandem
Over clumps of frost singed grass and ferns
And fuzzy wood duck feathers
Lazily drift among the gold green lily pods
Gentle breezes rattle orange, red and yellow
Maple foliage
And whistle thru pine needles
A soft autumn symphony
That calls up sweet organic fragrances
And Peace on Fitzgerald Lake

Stan Pollack 10-31-04

Please Join Us!

If you're not already a member, please complete this form and return it with \$25.00 to

BROAD BROOK COALITION, P.O. Box 60566, Florence, MA 01062

(All contributions to Broad Brook Coalition are tax deductible.)

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We app	Additional contribution to the Broad Brook (e Land Acquisi Coalition Ne	ition Fund: \$ _ eds Your teer time. Memb	
	Trail maintenance and repair Invasive species removal Clerical help/Mailings Computer help Volunteer at Interfaith Cot Shelter Writer/reporter for newsletter Newsletter editor	Ma Lar BB Ed Wa	nd Preservation C Board of Dir ucational/recre alks and Talks	nmittee (manages conservation area) n/Acquisition Committee

HELP WANTED

Clerical Assistant for Member/Donor Acknowledgments. Assist the BBC Treasurer by sending Thank You cards to new and renewing members and donors. Easy job you can do at home. Busiest in October-November. E-mail is helpful but not essential. Contact Alan Marvelli.

Apprentice Newsletter Editor. Work with the Newsletter Editor to solicit material and produce the

BBC Newsletter, and eventually take over the job. Basic computer skills helpful but not essential. Help keep BBC's main contact with its members lively and interesting.

Writers and reporters are needed, too! Have an idea for a story? Want an assignment? Give it a try. Contact Norma Roche.

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BROAD BROOK COALITION ANNUAL MEETING

DATE: Sunday, November 5, 2006

PLACE: Gertrude Hubbard Chapel, Hubbard Hall, Clarke School for the Deaf, Round Hill Road, Northampton

(From Elm Street, take Round Hill Road to the top of the hill and look for the flagpole at Hubbard Hall on your right. Go in the front entrance and walk to the Chapel at the back of the building.)

7:00 PM: Conversation and Refreshments

7:30 PM: Business Meeting, Elections to Board of Directors,

Presentation of Annual Award for Outstanding Volunteer Service

8:00 PM: Special Presentation:

The American Chestnut: From the Canopy to the Understory Robert B. Merritt, Professor of Biological Sciences, Smith College

The American chestnut was of tremendous ecological and economic importance in the hardwood forests of the eastern United States prior to the introduction of chestnut blight. This talk will review the history and biology of the American chestnut and chestnut blight as well as attempts to restore the tree to its former place as a domi-

nant canopy species.

Dr. Merritt's research has focused on genetic structure in natural populations of various fish and amphibian species. He uses genetic variation in American chestnut trees as a laboratory exercise in one of his courses. Currently he is studying genetic structure in Joshua trees in the deserts of the American Southwest.