



# The Watershed

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**The Oyster Pond Environmental Trust Newsletter**  
**OPET, P.O. Box 496, Woods Hole, MA 02543-0496**

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**www.opet.org**

## *A Letter from OPET's President: Our Accomplishments from the Past Year and Upcoming Projects*

In the past two years, the OPET board has taken on several projects designed to maintain and improve the health of Oyster Pond and Zinn Park. They include:

- **Monthly water quality testing of the Pond**
- **An invasive plant control program**
- **Trail maintenance in Zinn Park,**
- **A Floristics Survey of Zinn Park performed by Mario DeGregario, who identified nearly 100 plants and will form the basis of a management plan for the OPET land**
- **Construction of an osprey platform in the marsh at the southwest corner of Oyster Pond**
- **Widening a channel through the lagoon to improve the passageway for herring fry to reach Nantucket Sound and to improve flushing to limit algae growth**
- **Annual spring maintenance of the Trunk River so that adult herring can make it into the Pond to spawn**

What lies ahead is a project to label the more interesting vegetation in Zinn Park and to place a bench under a magnificent, ancient Linden tree. We hope you approve all of these projects and that you will continue to support our work.

As was reported in our last newsletter, OPET is presently spending more money per year than it receives in donations. There is a large one-time expense looming in the near future. The Ransom Road Association has begun the process of paving and improving Ransom Road to improve the water quality of Oyster Pond and to make it readily accessible to emergency equipment. Every landowner on Ransom Road has already been assessed \$1,250 to pay for engineering design expenses. OPET is a landowner due to the four parcel Zinn Park, but our four parcels are treated as one. We have already paid our share of the design expense. The preliminary estimate is \$5,000 per landowner for the work yet to be done. For OPET this would be a very heavy burden.

An important part of the plan for Ransom Road is the installation of storm water catch basins to prevent storm water from flowing directly into the Pond. Currently, Ransom Road is unpaved and every rain storm carries dust, gravel, auto pollutants and other debris down the road into Mosquito Creek and then Oyster Pond. The upper basin of Oyster Pond is noticeably murky after heavy rains. The cost of these catch basins will be approximately one-third of the total cost of paving Ransom Road. The Board feels that it has a strong case for making a smaller contribution than the families that live on the road, but the Board also feels that OPET should make more than a token payment because of the Association's commitment to the health of Oyster Pond and because our visitors to Zinn Park also use Ransom Road.

The cost of controlling our *Phragmites* population will increase next year. This year we tried hiring Falmouth DPW pesticide applicators after their normal work hours, but this was not very successful. Applying the herbicide is a time consuming task because it can only be done one reed at a time. Licensed applicators can be hired at \$150 an hour—considerably more than the \$20 an hour for DPW personnel.

The above expenses are in addition to our normal budget. So we are making an especially fervent plea for you to make as large a donation as possible so we may continue with these projects. If you are not yet a sustaining member, please consider a donation of \$100. If you are already a sustaining member for this year, please consider a second gift. We have a beautiful pond, and we know that you want it to remain beautiful as much as the Board does. Please be as generous as you can.

Sincerely, *Lou Turner*



*An osprey on the newly installed nesting pole this summer. He or she did not stay, but we hope it will return next spring when nesting season begins.*

## Invasive Plant Work Update

One of OPET's major activities is to control exotic invasive plants in our watershed. Invasive plants aggressively choke out native vegetation, taking away food sources and shelter material from native animals and birds. Last spring we removed a substantial amount of bush honeysuckle from Zinn Park.

For the second year in a row, we cut and treated the common reed (*Phragmites australis*), growing along the southern shore of the pond, expanding the vistas of the pond to bike path users.

Now we are going after a third culprit, purple loosestrife (*Lythrum salicaria*), and this time using biocontrols or beetles. Two years ago

the Town Wetlands Invasive Steering Committee (WISC) released purple loosestrife eating beetles (*Galerucella spp*) at two locations, one at a marsh next to the bike path and another adjacent to the parking lot at Trunk River. It's been a great success. Now WISC wants to expand their program and OPET wants to purchase beetles to release at marshes around the pond. The only problem, they are expensive (\$.50 a piece) and difficult to get due to very high demand. The Massachusetts Wetland Restoration Program is encouraging volunteer organizations to grow their own beetles.

See the box below for details.



### White Perch Fish Stories

Lou Turner writes that in mid September he helped John Dowling catch white perch for John's annual research on the health of the white perch population in the Pond.

In one hour, they caught about 40 of them. The smallest was about 5 inches and largest about 11 inches. They all looked very healthy. They were all returned. John used worms and Lou a small white lure with a spinner. Being the fisherman that he is, Lou reports that the fish did not prefer one type of bait over the other.

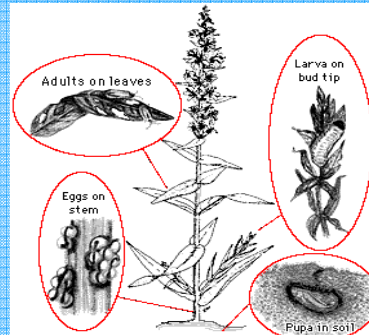
John Dowling adds: "For a number of years we used white perch from Oyster Pond for research on retinal neurons. We had found in the early 80s that white perch neurons culture better than any other neurons we had ever tried - perhaps due to the fact that white perch can go from fresh to salt water very readily and also that white perch can withstand very large changes in temperature. We would collect 200-300 of small fish (3-6" in length) every fall and take them back to Cambridge where we did our experiments. One fish could supply enough retinal neurons for one of my students to do experiments for a week!

In the late 80s the white perch disappeared - the pond essentially crashed because of the influx of salt water that was coming into the pond via the new culvert that the town had installed. The salt water sank to the bottom and the fresh water from the north end of the pond remained on top; hence the bottom became anoxic - not sufficient oxygen to support fish. When it was realized what was going on, the weir was installed at the entrance of the pond to keep the pond sufficiently fresh to keep the bottomoxic. The fish returned and today the pond is as healthy as far as white perch are concerned as it was in the early 80s. Our research, however, has shifted to zebrafish with which we can do genetics, and we raise all of our zebrafish today in our facility at Harvard that can have as many as 50,000 fish at any one time!

Bill Kerfoot also had great success catching white perch in late September. At the southern end of the pond, near the bike path, he caught a 4 lb white perch! It was so heavy it broke off the tip of his pole. This could be one of the largest white perch on record. Unfortunately he didn't take a picture to document this prize catch.

### Beetle Sitters Wanted

Volunteers are needed to grow loosestrife eating beetles for release through out the town. They will work



closely under the direction of the WISC and the Town Conservation Commission. This is an ideal classroom project.

In very early spring, root crowns of loosestrife are dug up, placed in pots, and then in a wading pool to keep the

roots moist. Everything is then placed out in the full sun. After four or five weeks, when the plants are about 18" tall, the beetles are released onto the plant and then wrapped in netting to keep the beetles in place. Adults begin feeding as soon as they are released and live about 40 days. Seven to 10 days after the adults are released, females start laying eggs; an average of 10 eggs a day for 30 days. The eggs hatch in two to three weeks. After feeding for two to three weeks, the larvae descend down the plant to bury themselves in the soil to pupate. The adults emerge two-to-three weeks later. The beetles are now ready to be released in the wild. The pot plant is taken to an loosestrife infested wetland, the netting removed and the beetles are ready to start the process all over again. They are prolific, 10 adults can produce 1,000 to 2,000 beetles! Contact Dick Payne of the WISC at [dannasrep@comcast.net](mailto:dannasrep@comcast.net)



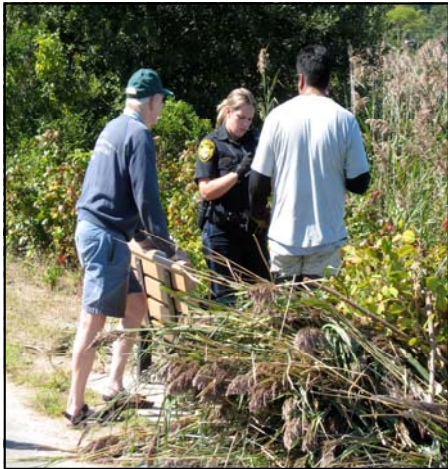


## Our Second Year of Phragmites Work

Thank goodness for Americorps! In mid-September, 14 young Americorps volunteers joined OPET members Lou Turner, Al Allenby and Wendi Buesslerer to cut Phragmites. Volunteers worked from the shore, in the water and from boats. With all of these busy workers we were able to clear nearly 200 feet of the shoreline, about four times more than last year's efforts. There was some momentary excitement when we found a handgun wrapped in a plastic garbage bag in the midst of the reeds, most likely thrown there from the bike path. The police were called, they took statements from the witnesses, and took it away. The police said it is unlikely any prints will be found on the gun, but it made for a bit of diversion from what can be tedious work.



Unfortunately, the needed pesticide treatment of the cut stems did not go as smoothly. Each and every cut stem must be squirted with Rodeo, a glyphosate based pesticide similar to Roundup, but safer for wetland use. At this time of year, Phragmites are drawing down nutrients into their root zones in preparation for winter, and they also pull down the herbicide. This year we hired licensed pesticide applicators from the Parks and Recreation Division of the Town DPW to apply the pesticide. This allowed us free use of the Town DPW dump trucks to haul the cut reeds up to the Town's burn site. Luckily DPW sent down one of their biggest dump trucks, it holds 10 yards of fill, since we filled it to the top! The DPW applicators were more affordable than private landscapers and were a great help, but difficult to schedule since they were available only after work hours. Next year we might need to hire private pesticide applicators at about \$150 an hour. OPET is working with the WISC to find a more affordable solution to this expensive problem. *By Wendi Buesslerer*



*Applying herbicide one stem at a time.*



*This truck was overflowing with Phragmites when we finished.*



### Improving the Trunk River Outflow

Originally the Oyster Pond outflow was to be maintained by an adjustable board in the concrete weir placed at 1ft NGVD, (National Geodetic Vertical Datum) or 1.7 ft Mean Sea Level, a .3 ft depth above a channel bottom elevation of .7 ft NGVD (1.4 ft Mean Sea Level). However, a delta of fine sand and decaying eelgrass, washed in by winter storms, has kept the water elevation up to 1 ft higher by forming a dam in the lagoon just before Trunk River. The damming creates a broad region of stagnate shallow (3 to 7 inch) waters which can turn anaerobic (no oxygen) during August, resulting in fish kills as young herring try to migrate out of the pond to the ocean and fosters algal growth. During the past three years, members of OPET, working with the Town Herring Warden, Chuck Martinsen, have manually shoveled out a distinct channel during late July or

August to provide a defined outflow of pond water with good dissolved oxygen.

In August of this year a different approach was taken. A sandplow, consisting of a triangular front blade attached to a dinghy, was used to open a channel across the delta region. On Saturday, August 4, Chuck and Natural Resources Officer Phil Lang and OPET members Bill, Dana Rodin, and Wendi Buesseler carried the sandplow across the marsh to be assembled with the dinghy at the edge of the lagoon. The plow was pulled forwards by a 3000 lb pull winch on Chuck's truck. Al Allenby, Jonathan Smith, and Birget Lowenstein worked to hitch up the pull rope. Wendi, Dana, and Phil pulled the sandplow in reverse, while Bill and Lou in a separate boat tried to direct the plow. The original intent was to make several passes along a channel, dropping the level of the blade, to cut a deeper trough.

Only one and a half pulls were completed before Chuck and Phil had to leave. Regardless, the channel did persist and was found to be 1 ft deep in October, compared to shallow zones over the western lagoon. This year the rainfall did not create sufficient volume of outflow to enlarge the cut. Often it will. The good news is that the herring apparently left during the late fall rain storms (according to Lou Turner's observations) and made it out to the ocean successfully. This next year, we will try to deepen the channel and make it better lined up with the river across the center of the sand delta.

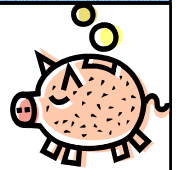
By Bill Kerfoot



### OPET Board Member News

#### Help Wanted- - - We Need a Treasurer!

**Barry Norris, our long time Treasurer is stepping down at the end of his term this summer. We need a replacement! We need someone with accounting knowledge and familiarity with Quick Books Basic 2005 as our book-keeper. You need to handle our income, pay bills, reconcile bank statements, manage CDs and report monthly to the Board and annually to members.**



#### Welcome Our New Board Members.....

**Dorothy Aspinwall** is a retired landscape designer. She served for two years on the Coastal Resource Working Group and is also active in the Moors Association. She has lived in Falmouth for 20 years with her husband Duncan, a former OPET Board Member.

**Jonathan Smith** is an architect in private practice in Boston. He serves on several professional committees with the Boston Society of Architects, is a former Medford Historical Commission member, and is head of the Ransom Road Improvement Association. He has lived on Ransom Road for ten years now.

#### And Many, Many Thanks....

to retiring Board Members, **Susan Gagosian** and **Peter Valtin**, for their many years of service and contributions!

OPET Board meetings are open to all OPET members. Meetings are usually held on the third Sunday of the month, at 4:30 pm in the Tree-tops Clubhouse.

We'd love to have you come!

OPET does not have an official phone, but you can leave a message at 508-540-3263. We'll gladly get back to you!

Or email [lturns67@comcast.net](mailto:lturns67@comcast.net) or [wbuesseler@comcast.net](mailto:wbuesseler@comcast.net)

Please visit our website [www.opet.org](http://www.opet.org).



**Dana Rodin** received the **FACES 2007 Falmouth Environmental Leadership Award** from FACES president, Brad Stumke this summer. It was given in recognition of Dana's tireless efforts to promote and maintain the quality of the environment in the Quissett area, including the Harbor House Land Trust, Quissett Harbor Preservation Trust, 300 Committee and Oyster Pond Environmental Trust.

#### Officers & Directors 2006—2007

<b>President</b> - Lou Turner	Max Holmes
<b>Vice President</b> - Michael McNaught	Bill Kerfoot
<b>Clerk</b> - Dorothy Aspinwall	Martin Monk
<b>Treasurer</b> - Barry Norris	Dana Rodin
<b>Directors</b>	Jonathan Smith
Alfred Allenby	<i>Executive Assistant</i> - Wendi Buesseler
Barbara Doe	<i>Hon. Board Member</i> Robert Livingstone
John Dowling	