The Watershed

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The Oyster Pond Environmental Trust Newsletter

Winter, 1997

Fund Raising Campaign to pay off debt on OPET's conservation land off to a running start

OPET's Board of Directors agreed in April of 1997 that it is time to pay off the \$98,000 debt on OPET's 7 acres of conservation land (see History on page 4). A \$100,000 Capital Campaign was initiated to secure this property once and for all from development. In the quiet phase of this campaign, pledges totaling \$30,000 were secured from OPET members living on Ransom Rd. And since announcement of the campaign at the Annual Meeting, leadership gifts of \$5,000 to \$10,000 have been made by Cecily Selby Coles, John and Judith Dowling, James and Pat Ferguson, adding to an earlier \$5,000 gift by Marjorie Whittemore. Further major gifts by other generous donors have already reduced our principal to about \$72,000 at the date of this writing. Now it is your turn to come forward with as generous a donation as you can make to help us achieve our campaign goal. Oyster Pond is your pond to enjoy - - with human activities ever increasing in its watershed by continued development, we no longer can leave the Pond to its own devices for a healthy survival. One way to help is by conserving undeveloped watershed areas. Become a partner in this effort -- make a generous donation now! All donations are tax-deductible. OPET accepts gifts of cash, shares or real estate (by donation of appreciated stock shares or real estate you may avoid capital gains tax yet you can deduct the full gift value from your income tax).

Why We Need Conservation Land in the Oyster Pond Watershed.

During the past few years, as Oyster Pond has become fresher, we have seen the return of white perch and, presumably as a result of better spawning/nursery conditions, evidence of a large crop of alewife fingerlings. Oxygen was found again in deeper waters this summer. The pond seems to be doing well. Why then the need for land conservation in the pond's watershed?

Simply put, we must consider what the future holds and act now. The pressures on the pond from surrounding development are ever-increasing. The seepage from septic systems, run-off from road pollutants and lawn/garden care products, decreased filtration capacity due to decreased vegetation coverage all are part of the pressures that will grow as more lots are put up for sale and become developed. Although there is still a lot of undeveloped acreage in the Oyster Pond watershed, we must not be complacent: the nitrate level in the Pond is very high and Land-for-Sale signs are sprouting by the month everywhere in the watershed.

Will the Ransom Rd wetlands that constitute a buffer, filter and cleansing system for much of the surface water inflow into Oyster Pond, be able to cope with the consequences of more development in its immediate and greater vicinity (undeveloped properties on Fells, Hackmatack, Oyster Pond and Woods Hole Rd)? Will the pond be able to bear the burden of a build out in its watershed and survive as a healthy spawning ground and nursery for resident and ocean-going fish? Let's not wait and see the answer to this question. Lacking nitrogen-removing septic systems and control over landscaping, fertilizer application and road runoff, land conservation NOW is the only option.

Large White Perch Make Comeback in Pond

The fishing continues to improve in Ovster Pond! Large white perch (up to 14 inches) have been caught both by hook (humans) and claw (3 ospreys fished the pond past summer) and who knows by what else under water (snapping turtle, cormorants, otter?) or from shore (herons). The alewife spawn must have been very successful: thick mats of 2" fingerlings could be seen seeking shelter in the shallows in September, and throngs of hundreds upon hundreds left Oyster Pond via Trunk River outlet as late as mid-November (see following pages).



White perch caught by Peter Ray at the Oyster Pond culvert in September

OPET's Book Project Receives \$1000 Grant

OPET is very proud to be the recipient of a \$1000 grant from the Community Foundation of Cape Cod for the Cape-wide distribution to high schools and libraries of K.O. Emery's classical study on Oyster Pond, updated and reprinted by OPET. The grant application called for distribution to public schools and libraries, However, the Board of Directors decided to include private schools and libraries so as to make available this reference book on how to study a coastal pond and to arrive at a possible management plan for it based on such long term studies. We sent out 85 books! We received letters from some very grateful science teachers and librarians, and hope the books will acquire a fair share of "ears" and smudge marks from frequent use by students of all ages interested in the ecology of coastal ponds.

POND Samplings

Alewife Spawning Big Success This Year!

The Nov 8/9 storm was not a big one but potent enough to fill in the Trunk River mouth. A narrow channel, easily shoveled, quickly grew by itself once the water started flowing. Dark with alewife fingerlings ready to head out into the ocean world, the water came alive as the schools of little fish made their way to the Sound, silvery undersides flashing as they got tumbled in the shallow water rippling across the final stretch of pebbles. Oyster Pond must have been a good nursery for this year's spawn!



Update on Oyster Pond Bacteria Counts

In anticipation of the expected construction of the weir at the pond outlet, OPET has been collecting "baseline" data on fecal coliform bacteria counts in the pond. With these data, we will be able to assess whether the restriction of mixing with the ocean and consequent freshening of the pond will have any negative impacts on water purity in regard to bacteria. The accompanying figure compares the data from the past 18 months with historical monthly averages for the 1984-1994 period. With the exception of the high 1996 summer values, and the one high value from the upper pond in June of this year, the pond appears to be substantially cleaner than normal. It is noteworthy that the peak of the spring waterfowl migration, this year from about mid-April to mid-May, did not cause any elevation of the coliform counts (a duck census during this period ranged from 150-200 birds; geese were present as well, but they excrete only 10% as many bacteria as do ducks). At present we are unsure as to why the pond has been cleaner this year than in years past. Insofar as the present salinity of the pond is close to the target range to be established following weir installation, we are hopeful that low coliform bacteria counts will be the new standard for the pond. We will continue to monitor this issue throughout the coming year. Stanley Hart



Fecal coliform bacteria counts taken from Oyster Pond during the 1996/1997 time period. Squares with arrows are readings quoted only as "greater than 50"; open squares are samples taken from the head of the pond, at the Ransom Road dock; filled squares are samples taken from various locations on the lower pond (Onawa Lane, Quonset Road, Surf Drive outlet). Data are courtesy of S.R. Hart and John Mendes (Mass. Dept. of Marine Fisheries). The solid-line histogram gives the average monthly coliform counts for the 10 year period 1984-1994, as reported in the epilogue from the recently reprinted edition of K.O. Emery's book. The May and June averages are 160 and 140, respectively (off-scale in this figure).

The Weir is Coming -- No Kidding

Well, it looks like it is going to happen! Town Meeting, on Nov 11/18/97, approved \$35,000.00 for construction of a weir at the outlet of Oyster Pond. Invitations to Bid are out, and bid opening will be 12/28/97. It is George Calise's (Town Engineer) intention that the weir will be in and operating by 3/18/98, in time for the herring run.

It is Brian Howes' plan that the Pond Watchers will continue to monitor the pond to help set the proper elevation for the outlet at the weir and to assess water quality. As we collect information on the pond as time goes on, we will report it here. We wish to thank all OPET members and others who put in effort and "good words" for this project. Barry Norris

The Trunk River Problem

The storms that pummeled the Cape in the beginning of November were a sharp reminder that while Oyster Pond's salinity level may be controlled in the future by the weir, its runoff remains dependent on the Trunk River outlet to Vineyard Sound. The big Southeaster of November 1/2 played havoc with the boulders of the already weak Trunk River jetties and stuffed the outlet with tons of rock. This completely stopped any outflow from the pond whose level kept rising with the heavy rains.



Trunk River outlet chock full of rocks on Nov 2, 1997

The Falmouth DPW acted very quickly and efficiently rebuilt the caved-in jetties, scooped out the rocks from the river bed, and by Nov. 5 noon had a brisk stream of Oyster Pond water rushing into the Sound, sweeping along thousands of alewife fingerlings that had been ready to leave their Oyster Pond nursery grounds but had found barred their exit to Vineyard Sound.



Trunk River flows again after restoration by Falmouth DPW

During the full-moon extra-high tides of the storm of Nov 14, Oyster Pond received a hefty fresh dose of saltwater. Trunk River outlet got plugged once more, allowing the high surf pass into the outlet but no water to leave the pond.

OPET will need to turn its attention to Trunk River. As Dave Aubrey pointed out in his talk at the Annual Meeting, we will need to face the fact that the beach along Surf Drive and the bike path is eroding rapidly, and that the Trunk River jetties that protect the Oyster Pond outflow into Vineyard Sound, are falling apart.

The Spohr Gardens

The passing of Charlie Spohr last spring, brought sadness to many OPET members. Many of us in the Oyster Pond watershed community frequent the trail that connects Fells with Ransom Rd and passes through Spohr Gardens. We were accustomed to see Mr. Spohr working hard in his Gardens, directing the pruning or thinning of trees, the placement of plants, boulders, artifacts or sprinklers, the mulching, weeding and transplanting. The Spohr Gardens, originally designed by Mrs, Spohr and planted, enlarged and cared for by Charlie Spohr, have been open to the public for many years. They are a special attraction in the spring when they burst with the colors of azalea, rhododendron, daffodil, magnolia and other spring flowering bushes, trees and plants. The fate of the Gardens, which offer public access to the northern shore of Oyster Pond, is of great concern to OPET: for one, the property comprises several buildable lots should the Gardens become subdivided; and second, if the Gardens continue as such (as would be Mr. Spohr's wish) the way they are managed in the future is important, especially with regard to the application of fertilizers and pesticides (Mr. Spohr had no use for either). OPET hopes to be able to have some measure of influence if not in the fate of the Gardens then in their management.

OPET Sponsors Science Projects

To promote awareness among Falmouth's youth of the fragility of coastal pond ecosystems, and to be better able to evaluate the impact of construction of a weir at the Pond's outlet into the culvert at Surf Drive, OPET is sponsoring pond study projects in collaboration with Falmouth Academy students. One study centers on water properties such as salinity, dissolved oxygen and nutrients -- extending the Pondwatchers' summer water samplings throughout the year. OPET collaborates on this with Falmouth Academy juniors Misha Strumwasser and Andrew Davies. Dr. Anne Giblin from the MBL, and Drs. Dale Goehringer and Brian Howes from the Pondwatchers are the advisors. Another project is to determine what fish species are making a comeback in the Pond and how they will be faring once the weir is in. Dr. Linda Deegan from the MBL is the adviser here for OPET and Dan Murphy, yet another student from Falmouth Academy. Watch for hardy seiners wading out into the pond and hardy water samplers in a dinghy during the cold (burrrrr) months to come!

Trying to Save Money

OPET is now exempt from having to pay Massachusetts Sales Tax for "all Purchases of tangible personal property ... to the extent that such property is used in the conduct of the business of OPET.

We have also acquired a bulk mail permit for tax-exempt organizations which, at the present rate of mailings, will save us about \$100 per year and lots of stamp-licking/stamp- sticking. Barry Norris

Omitted Photo Credits

The Watershed editors regret having omitted photo credits in the previous issue. the historic photos depicting K.O. Emery and friends collecting water samples from Oyster pond were taken in the late 1960's by Bob Livingstone who generously allowed us to print them.

OPET's Annual Meeting

OPET's 3rd Annual Meeting was held July 12, 1997 at SEA and drew an attendance of about 30 members. President John Dowling first called for a minute of silence in memory of Charlie Spohr, Ruth Sager and other OPET members who have passed away during the year. Guest speaker Dr. Dave Aubrey then presented the fascinating geological history of Cape Cod and Oyster Pond and warned that for a wise long-term management plan for Oyster Pond, the population growth in the pond's watershed, the increasing beach erosion along Surf Drive, and the rising sea level will all have to be taken into account.

Special Recognition Awards

Bill Kerfoot announced special recognition awards (including Honorary Life memberships in OPET) to Friederun and Holger Jannasch and to Herbert Willett, individuals who have contributed substantially to our community and without whose financial and other help OPET would not have come into existence.

Committee Reports

Brief committee reports were the next order of business -- Lon Hocker reported on the treasury (OPET is sound financially); Birgit Rose, on membership (150 members in 1996/7, 80 renewals so far for 1997/8, including one Life Membership); Cecily Selby Coles, on fund raising and the quiet phase of OPET's capital campaign (\$30,000 pledged); and Barry Norris on the status of the pond and the proposed weir (financing will be voted on at the fall town meeting). The Nomination Committee then presented nominees for the Board of Directors, which were approved by a voice vote. The meeting was adjourned for refreshments and informal discussions.

Officers Elected

The officers for 1997/1998 were elected at the subsequent Board of Directors meeting: John Dowling President; Birgit Rose, Vice President; Pat Kerfoot, Clerk; Barry Norris, Treasurer. 1997/8 Directors are: Duncan Aspinwall, Carl Breivogel, William Brewer, Stanley Hart, William Kerfoot, Robert Livingstone, Julia Rankin, Dana Rodin, Cecily Seby, John Scibek, John Steele, Robert Wilsterman. Outgoing members Wendy Gabriel, Lon Hocker and Werner R. Loewenstein were thanked for their valuable services to OPET.

Six New Board Members

The 6 new additions to the Board bring a variety of expertise, interests and concerns about Oyster Pond to OPET and all are enthusiastic about OPET's work and projects.

<u>Carl Breivogel</u> from South Rd., has never lived on Oyster Pond or within its watershed, but has always loved this particular pond and watched with concern its changes throughout the years. Carl can be found almost any week of the year somewhere along the Oyster Pond shore, or checking the Trunk River Outlet.

<u>Pat Kerfoot</u> from Ransom Rd has been one of the prime movers involved in the formation of OPET, although behind the scenes. She brings to OPET her knowledge of town government committee members, movers, shakers and issues, and where and how to get relevant information about bylaws, zoning etc.

<u>Julie Rankin</u> from Oyster Pond Rd, a retired marine microbiologist is still interested in estuary research and has for many years been Pondwatcher Captain for Oyster Pond.

<u>John Scibek</u>, an ecologist by training and now fund-raising for the MBL, moved to the Cape less than a year ago and does not live near Oyster Pond. However, his love for the outdoors (he bikes, fly fishes and kayaks with passion) drives him to volunteer for

A Brief History of OPET's Conservation Land

OPET's conservation land, 7 acres of uplands and wetlands known to most of us as the Fisher parcels, had been advertised in 1989 for sale as a site for 5-7 new homes. This acreage is of special importance to the well-being of Oyster Pond because it is the only wetlands-type source of water to the pond, storing water like a sponge during rains and releasing it slowly during dry spells after a thorough filtration process. It also is a major part of the only large undeveloped acreage abutting the pond, providing habitat and refuge for many species that form an integral part of a healthy pond's ecosystem.

Recognizing the importance of these parcels for an already compromised Oyster Pond, Bill Kerfoot with the legal aid of Dana Rodin tried barring their development via zoning appeals. Once those efforts failed, they realized the only recourse was acquisition of organizations such as OPET. His particular expertise and professional connections will be very useful to us.

<u>John Steele</u>, from Treetops, is a former director of WHOI who is still active in research on fish population dynamics, and who is a member of the boards of various large corporations and organizations.

Bob Wilsterman, orthopedic surgeon, lives and raises his young family on Oyster Pond in the Cumloden area. He likes to fish and is thrilled to see the White Perch repopulate the pond. He also is much involved with The Cumloden Association whose membership lives within Oyster Pond's watershed.

OPET is very fortunate to have so many active volunteers on its Board representing not only almost all regions of the pond's watershed but also individuals not directly associated with Oyster Pond. After all, with the bike path running along its southern shore, and the popular Spohr Gardens in the north, this is very much a pond that should concern all of Falmouth.

this crucial land. With major financing by Bill and Pat Kerfoot, Holger and Friederun Jannasch and Herbert Willett, an initial, substantial down payment on a mortgage for this land was made, with Salt Pond Areas Bird Sanctuaries providing the nonprofit organization base.

Confident that the Oyster Pond watershed community would rally to the aid of their endangered Pond, OPET was formed in 1993 partly to relieve Salt Pond Areas Bird Sanctuaries from the burden of carrying the mortgage on their books, and title of the parcels, along with the debt, was transferred to OPET. All in all, about \$250,000 have been received so far in gifts toward this land purchase, of which approximately \$100,000 has gone in interest to the bank. About \$100,000.00 were still owed in the spring of 1997.