The Watershed Vol. 3, No. 1

The Oyster Pond Environmental Trust Newsletter, Summer 1998

OPET, P.O. Box 496, Woods Hole, MA 02543-0496

OPET'S 4th Annual Meeting to be held July 9th at 7:30 pm at the Sea Education Association.

Keynote speaker will be Cameron Giftord whose topic will be "The Future of the Spohr Gardens". The Board Treasurer and Committee Chairs will report on OPET's activities during the past year and all the work that lies ahead. Also, new Board members will be elected. We are looking for energetic volunteers to help with fundraising, mailing, the Newsletter, pond studies, pond management issues, trailwork in OPET's park and more. There is always something to learn, and it all is for the benefit of our beautiful pond! Please call Birgit Rose at 289-7258 (day) or 548-5984 (eves) if you want to volunteer yourself or someone else for nomination to the Board or to any of the committees and other activities. Please join us. Refreshments will be served.

In Memory of Oyster Pond Science Pioneer K.O. Emery

K.O. Emery, renowned scientist and 30-year resident on the shore of Oyster Pond, died on April 12,1998. While K.O., as he was referred to by everyone who knew him, called himself a marine geologist, there were few things which didn't excite and challenge his intellect. He authored 15 books on topics as diverse as how to measure true sea level on a global scale, to the only existing synthesis dealing with the land forms and surface morphology of the rocky planets, moons and asteroids in our solar system. Educated at the University of Illinois, K.O. spent a career stint at the University of Southern California before settling at the Woods Hole Oceanographic Institution (WHO I) in 1962. At the WHOI, KO. immediately initiated a comprehensive study of the tiny "ocean" (Oyster Pond) he lived on, and in 1969 published his classic book, "A Coastal Pond Studied with Oceanographic Methods". Almost 30 years later, this book on Oyster Pond was reprinted by the Oyster Pond Environmental Trust, Inc., with an epilogue reviewing new studies carried out under the Falmouth Pond Watch program. Few ponds in the world can boast a 30-year tradition of ongoing study, and few, indeed, have been subjected to the penetrating scrutiny that K.O. focused on "our" pond.

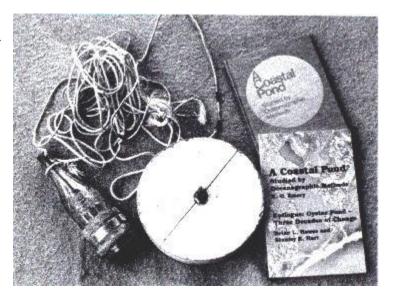
---K.O. (left) at the 1995 Annual Meeting of OPET, with George Heufelder (middle) and Carl Breivogel (right)

Let our stewardship of this resource reflect the qualities for which K.O. was admired



as a scientist: plain-spoken, prompt, energetic, and able to bring order out of chaos. --by Stan Hart

The original "instruments" used by K.O. for taking Oyster Pond water samples: a Coca Cola bottle equipped with a lead waistband and a rubber stopper. Once the desired length of line was paid out for the sinking bottle, the stopper could be "popped" by a jerk of the line that ran around the bottle's neck and through the stopper. For determining clarity of the pond water, K.O. used the round wooden disk, painted white and also weighted with lead on one



side. The disk is lowered into the water and the depth is noted at which the disk no longer can be discerned. At right, the original, 1969 edition of the Oyster Pond "bible", and OPET's reprinted edition. If you haven't yet purchased your copy, you can do so at www.amazon.com, the WHOI and MBL Giftshops or from OPET directly. Proceeds will directly benefit K.O.'s Oyster Pond!

Items courtesy of Lon and Carol Hocker. Photo by Birgit Rose

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The Weir

The weir is in at last. On March 13, the weir was finally in place at the Surf Drive culvert. It took no time to put a water block upstream and downstream of the weir location with a hefty sump pump sucking the blocked-off section dry and providing a bypass for the water to Trunk River Lagoon. The pre-cast weir, with one wide and one narrow slot for



Putting the pre-cast weir into place at the Surf Drive Culvert



The finished weir and newly stone-for ified banks

hoards, then was set at the proper elevation, the banks were fortified with stone, the water blocks removed, and the job was done. It took several more weeks, however, until the boards were added, and landscaping was finally done in June. No sooner was construction finished than the herring began to run. The pond level was very high throughout the winter and spring, so that there was plenty of water above the boards for the herring to cross into and out of Oyster Pond.

The pond level is still too high for the boards to show. The silted-in Trunk River, not the weir, now determines the pond level. OPET has requested that the DPW obtain a permit for digging the riverbed to the proper elevation.

Photos by R Livingstone and B. Rose

OPET's Conservation Land Debt

We have taken good strides towards retiring our debt on the 7 acre conservation land located along Ransom Road at the north end of the pond. Thanks to major gifts from several OPET members during our past fiscal year, we have reduced our debt principal to about \$60,000; and thanks to the many other donations to the Land Conservation Fund, we were able to meet our mortgage payments of about \$3,200 each quarter. Many thanks to all of you who have given so generously.

A large granite boulder along the path close to the entrance to our park has been selected for the day when we will have paid the last cent of the debt. It will then bear a bronze plaque inscribed with the names of all those who have contributed at least \$5,000 towards the park's purchase. Please review your personal donation history to OPET's land conservation fund (we'll be glad to help in this; call 289-7258 or 54~5984) and consider a major gift at this time so that your name can be one of those listed on the plaque! This is an ideal time to make gifts of appreciated stocks. You can deduct their full value from your income and avoid the capital gains tax.

Book Report

To date, 128 copies were sold to OPET members, to University libraries across the nation and even to one in Sweden, and to individuals with an interest in coastal pond environmental issues. A donation by OPET of 100 copies to the schools and public libraries of the Cape and Islands was financed largely by a \$1000 grant from the Community Foundation of Cape Cod. An additional 8 copies were gladly donated by OPET to the Falmouth Academy science department which expressed interest in student pond study projects.

OPET receives grant for pond studies from Community Foundation of Cape Cod.

We are very proud to have been awarded \$3,000 from the Community Foundation of Cape Cod to study the effect of the weir on the pond. The funds complement \$1,500 to be invested by OPET towards monitoring pond salinity, oxygen, nitrates and phosphates, fecal coliform bacteria as well as fish. We will be able to buy some water sampling equipment and pay for water analyses. With the check we also received a disposable

camera to monitor our project. The report from our studies is to be distributed to all towns in Barnstable county.

SEA takes an Interest In Oyster Pond

Sea Education Association (SEA), whose campus lies within the watershed area of Oyster Pond, has picked Oyster Pond as training laboratory for their under-graduate students. The students undertake six weeks of intensive coursework in marine sciences at campus, followed by six weeks aboard SEA's schooners. As an introduction to their labwork aboard ship, the students spend one day sampling the water, sediments, chemistry and biology of Oyster Pond and a second day analyzing the data. These are presented at poster sessions at SEA which are open to OPET members. Posters will also be shown at the OPET Annual Meeting - make sure to come and see the fine work being done by the students! SEA will dovetail their pond studies with OPET and the Pondwatchers by sharing sampling sites, data and other resources.

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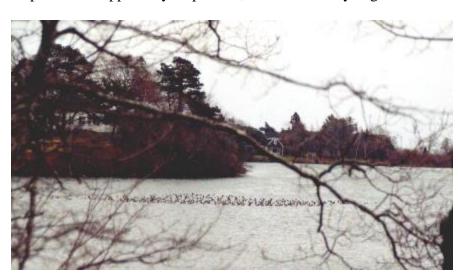
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POND Samplings

The past winter again was a very mild one. Not once did the pond freeze over. Bird life thus was abundant on the pond all winter long. Four great blue herons wintered over. The first buffleheads arrived on November 5th, noisily as usual. Next came the hooded mergansers, as cantankerous as they are beautiful. Trunk River Lagoon was home to 16-20 of them all winter long, and there always were 10-12 in the northern part of Oyster Pond. The arrival of the redbreasted mergansers is impossible to overlook: they fish the length of the pond in a group of about two dozen, diving fanned out in a wide phalanx. Their dives are followed in the air by many scores of noisy, graceful, little white Bonaparte gulls who skydive for the fish trying to escape their undenvater hunters by heading for the surface waters. It is a sight to see the pond's water and the sky above alive with these beautiful birds. Their presence on the pond all winter long tells us that there's food for them in our pond! Other steady Oyster Pond winter residents ,vere about a dozen Canada geese and Mallard ducks as well as 2 swans and at least 2 kingfishers.

Salt Pond, only a short distance away, is home all winter to hundreds of Greater Scaup and some common Golden Eye -- but none of them visited Oyster Pond until one storm in March when the flock came to stay on our pond for two days. They returned several days later and then stayed until the end of April. The summer swans built a nest way up the north end this year, but their eggs were taken by a predator, as were the two eggs of a pair of Canada geese which had nested at the Loewenstein dock. Who is the culprit -- raccoon, fox, coyote? One mid-April night there was a very noisy and splashy otter fight on the shore close to Treetops. And on May 17th, I spotted an otter in the pond or, rather, it spotted me: apparently displeased, it snorted annoyed grunts at me and my dog,



submerged, only to re-appear scoldingly. We obviously disturbed its hunt for herring! Several hundred greater scaup on Oyster Pond in April

OPET Sponsors Pond Science

Projects by Students

This past winter, a dinghy could he spotted several times on Oyster Pond, its crew taking water samples in the chilly air. Also waders, shivering in the December cold, were working a seine and several minnow traps along the pond's shore. OPET sponsored two school science projects: Falmouth Academy 8th grader Dan Murphy, under guidance of Dr. Linda Deegan of the MBL, determined fish species at various locations in the pond. Besides Dan's dad, OPET members Barry Norris, Bob Wilsterman and Birgit Rose assisted Dan in this project, and Bob Livingstone and John Scibek came to photograph/fllm the red-nosed fishermen.

Falmouth Academy juniors Andrew Davies and Misha Strumwasser braved the chilly air and water to take measurements and water samples from the deepest part of Oyster Pond. Luckily, most chemical analyses could be done in the more temperate climate of the lab at MBL. The poster describing the results from their study earned an honorable mention at the Academy's Science Fair. Julie Rankin was an inspiring sight out in the dinghy in 10 degree F chill, enthusiastically teaching the two youn men how to take water samples and measure their dissolved oxygen. Thanks also go to Ann Giblin and Hap Gerritt at the MBL who helped with the lab work.

Trunk River

The Trunk River outlet was a BIG headache past winter and spring: the jetties have been all but destroyed by a series of storms, beginning with hurricane Bob, and any minor storm now dumps enough sand and/or gravel into Trunk River to block the outflow with anything from a relatively minor berm at the mouth to filling the whole riverbed up to the bend. The minor blocks could be cleared by shovelling OPIFT members Carl Breivogel or Birgit Rose often did the digging -- but for the big stuff, Falmouth DPW used major equipment to clean out the riverbed. At times the river flowed only a few days between storms. OPET's Pond Management Committee will draft and sponsor an article to go on the fall Town Meeting watrant for repair of the jetties.

Meanwhile, some hand digging will need to be done at the upper portion of Trunk River. It is this sandy stretch and not the weir that now sets the pond level and which allowed the pond to get so high this past winter and spring that several low-lying houses had water in their basement. Repair of the jetties should solve this problem, too, because that upper Trunk River portion then would no longer experience the frequent silting-in. --br

Land Conservation in the Watershed

1998 undoubtedly is the lucky year for Oyster Pond! The single largest, privately owned, undeveloped piece of land in Ovster Pond's watershed area, the Peterson Farm, will be preserved for open space! On May 19th, Falmouth voted resoundlingly to buy the 88-acre Farm. Preventing development on the Peterson Farm is an immensely important step for Oyster Pond: it means that the addition to the watershed of 30-40 septic systems has been averted, no roads will be built there, the native vegetation will remain, as will the open fields of the Farm. Congratulations to the 300 Committee's many hardworking volunteers who waged a brief but very intense campaign, and who raised \$500,000 in private pledges to reduce the purchase price for the town. And thanks to all of you who voted YES on question 2. To further ease the debt burden for the town on the Peterson Farm purchase, the 300 Committee is applying for \$500,000 in state funds. You can significantly increase the chances of winning this grant by sending contributions to the 300 Committee -- the number of private donors weighs heavily in the decision. Even all you non-voting Oyster Pond watershed residents, you can still play a role in and be proud of the conservation of this beautiful, large property in our backvard: make a taxdeductible gift to the 300 Committee, designate it for the Peterson Farm purchase, and identify yourself as a member of OPET.

From the Membership Desk

OPET's membership has grown to more than 170 families and individuals, thanks to faithful renewals and to new members. We particularly welcome the newcomers from the business community. Together, we can make Oyster Pond into the healthy, productive and beautiful pond we all dream of and which future generations, too, will be able to enjoy!

Reminder: Annual Memberships expire May 31st. Please renew, and consider a donation to the Land Conservation Fund.