

The Watershed

Vol. 5, No. 1

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

Summer 2000

**Maggie Geist, Executive Director of the Association for the Preservation of Cape Cod, to speak at OPET's Annual Meeting on July 13th.
Save the Date! Don't Miss this One!**

OPET's Annual Meeting will take place Thursday, July 13th 2000 at 7:30 pm at Sea Education Association, Woods Hole Rd / corner Ransom Rd. The program will begin promptly at 7:40 pm with the year's overview and reports on OPET's activities. At 8:15 pm, keynote speaker **Maggie Geist**, Executive Director of the Association for the Preservation of Cape Cod (APCC), will speak of the Association's perspective on what needs to be done to preserve or better the quality of life on the Cape. Maggie Geist has recently taken the helm at APCC after having served as science translator at Waquoit Bay National

Estuarine Research Reserve. (That means she can take the science 'stuff' and reword it so that anyone can understand it! And that includes how nutrients can cause problems in ponds.) Following the talk and the conclusion of other OPET business, we will adjourn to refreshments and socializing. ***Please plan to join us and bring comments, questions and suggestions.***

Have you considered becoming a volunteer for any of OPET's activities or to seek nomination to the Board? Call Birgit Rose at 548-5984 -- we'll find work for you!

GENEROUS YEAR-END DONATIONS BY OPET MEMBERS, TOTALING MORE THAN \$10,000, REDUCE DEBT ON CONSERVATION LAND TO LESS THAN \$6,000!

We, you have done it!! Before the end of the summer, OPET's conservation land will be free and clear of any debt! OPET's membership responded generously to our year-end fund-raising effort with donations to the Land Conservation Fund totaling \$10,245. THANK YOU, DONORS! You may take pride in having helped protect Oyster Pond by preserving seven acres of woods and wetland surrounding its headwaters. When the last penny of the debt has been paid, a bronze plaque bearing the names of donors who contributed \$5,000 or more will be placed on a large boulder alongside the main trail in the Conservation land! We'll throw a party then and expect you to join us there for the occasion. Watch your mail for the announcement!

The Land Conservation Fund will, however, continue to need money. Send in your tax-deductible contribution to OPET's Land Conservation Fund today!



For Donations to OPET's Land Conservation Fund Totalling \$5,000 or More Your Name or That of a Loved One Will Be Inscribed on a Plaque on this Boulder in OPET's Park!

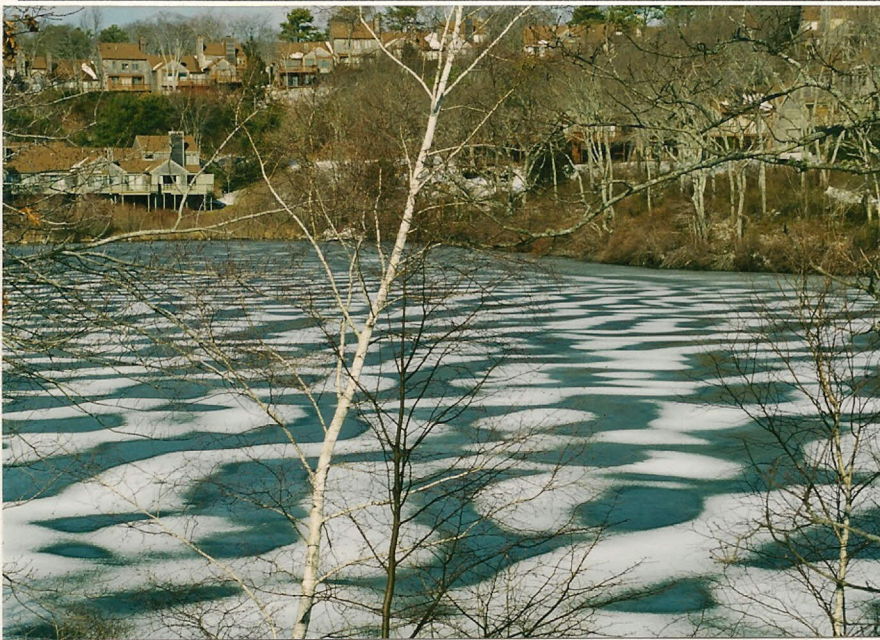
Soon to come: OPET website!

OPET's website committee is hard at work on the design of www.opet.org. If you have experience in website design and are interested in helping, give Len Kreidermacher a call at 548-5560 or contact him by e-mail at serene@capecod.net

Student Projects Involving Oyster Pond

The Effect of Storms on Pond Bacteria was the science project of Falmouth High School junior **Marjorie Wainwright**. It was prompted by a preliminary OPET study. OPET had found that samples collected in shallow water during a storm but before any rain had fallen, had a very high coliform count, and samples from deeper water had much fewer counts but still higher than on calm days. The shallow water had been all churned up and murky. Had the mud trapped coliform that then got released into the water by the storm's wave action? To answer this, Marjorie collected water and 4 different bottom sediment samples from Oyster Pond. She sterilized part of the water and part of each sediment type. She added sterilized pond water to unsterilized sediment in one experiment, and unsterilized pond water to the sterilized sediments in another experiment. She simulated a storm in each sample and counted bacteria in water or sediments before and after the "storm". She found that all sediments released bacteria during the "storm" and that black muck had high coliform counts, but sand had none, indicating that black muck but not sand 'traps' coliform bacteria and releases them in storms.

WHOI students **Fernanda Hoefel** and **Jody Katrein** (and initially also Avon Russell) worked on the design and construction of an acoustic flow meter to measure water flow into and out of Oyster Pond. WHOI scientists **Sandy Williams** and **Jim Irish** are the ones who guide this project. The instrument can detect water flow velocity, flow direction, water depth, temperature and salinity, and can log data for long periods of time. Sandy Williams and Jim Irish are still fine-tuning the instrument for the type of information OPET is looking for, namely to know how much saltwater actually gets into Oyster Pond per month or year. The instrument, all 20 foot of it, was placed inside the culvert, out of sight of any would-be vandals. Sandy and the students found it quite a challenge to develop this instrument for the particular site and for the low flow velocities involved. As of this writing, some bugs still need to be ironed out, and the software needs to be customized. **Come see Marjorie's poster and learn about the flowmeter at OPET's Annual Meeting July 13th !**



Ice-melt Pattern at Treetops, March 2000

Photo by B. Rose

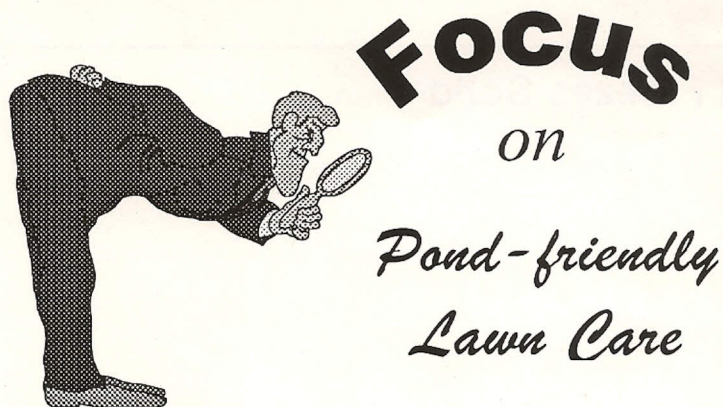
Pond Management Report: Trunk River Project

The November Town Meeting authorized the funds for repairing the Trunk River jetties. The work has not been contracted as yet, however. Bids were received for the project in the fall, but the contract was not let. It was going to take too long to negotiate the contract to leave enough time to do the work before the fall fish migration, so the Town decided to reject all the bids, rebid in the spring, and do the work in the early fall of 2000. For this summer, the Town Engineer has promised to have the Trunk River dredged after the winter storms so that we should be in pretty good condition for the summer until the permanent work is accomplished.

Barry Norris

Pond Watershed Loses More Acres to Development

A lot of construction has occurred during the past year in and around the northern part of Oyster Pond's watershed. Along the south of Woods Hole Rd, between Treetops and Cumloden, 3 houses are going up (Quissett Hills). Along the north side of Woods Hole Rd, between Ransom Rd and Quissett Ave, 3 new houses are already up, and 3 more are under construction. And yet another house has gone up, this one on the south side of Woods Hole Rd, between Hackmatack and Oyster Pd Rd. Development means additional septic systems and considerable loss of vegetation and thus of wildlife habitat. (Once machines moved into Quissett Hills, two great horned owls that had called from there night after night for the past five winters, were no longer heard.) Subsequent landscaping brings with it ample fertilizing of new plantings and heavy mulching (and yes, mulch is fertilizer, too, albeit slow-release). This and the additional septic systems will add to the groundwater's nutrient load -- **a further challenge for the pond**. Every one of us should do all he/she can to minimize use of fertilizer and to have landscaping that is appropriate for the Cape and that supports our wildlife.



Lawns require a lot of care. Someone quite accurately observed that *'you don't own the lawn -- it owns you!'* (If you don't want to be owned, let your lawn turn into a meadow that you mow once or twice in the summer. Or plant a butterfly garden, berry bushes for the birds, or native flowers.)

Fertilizer runoff from over-fertilized lawns add to the nutrient load of groundwater, streams, ponds and embayments. Nonetheless,

You Can Be Good to the Pond Even If You Are Owned by a Lawn.

Here are some tips that should make your lawn lush and healthy while minimizing the need for fertilizers, weed killers and water, and that help to keep those nutrients from getting into the pond.

Tip #1: It isn't necessarily fertilizer that's the solution for a sickly looking lawn

Have your soil tested for pH at the Barnstable County Extension Service. If the pH is too low, the lawn needs lime, not fertilizer.

Tip #2: Mow high and mow often.

Set your mower to a height of 3 to 4 inches. Longer grass shades the roots and prevents their drying out. The longer grass blades can produce more food that's needed to grow a deep and healthy root system. They also shade upstart weeds, depriving them of the light necessary for their growth. Frequent mowing does not kill grass, as long as the mower is set high. Many weeds, on the other hand, can't survive frequent mowing in the long run.

Tip #3: Leave the clippings on the lawn.

Clippings are slow-release fertilizer. As the clippings decompose, they will gradually release nutrients back to the soil, thus reducing the need for more fertilization.

Excessive clippings are a problem only if you mow too short or not frequently enough.

Tip #4: Water infrequently but thoroughly.

Grass roots can grow deeper than most weed roots do, so you want the water to penetrate deep into the soil. Brief watering, even if frequent, doesn't do the job; in fact, it can be detrimental by encouraging shallow rooting. Put a cup in your sprinkler zone and let an inch of water accumulate in it before turning off the sprinkler. Water again only when the grass blades start to curl.

Tip #5: Pick a 'Cape Cod' seed mix

When selecting grass seed for new lawns or for filling in patches, pick a "Cape Cod" seed mix that contains varieties specially selected for the Cape's climate and soils. Avoid Kentucky bluegrass, which needs more water and fertilizer to thrive on Cape Cod.

Tip #6: Fertilize sparingly, if at all, and only in late fall or very early spring

Grass can grow at lower temperatures than most weeds. To feed only your grass and not the weeds, fertilize in cool weather. Use only slow-release fertilizer, and use it sparingly.

Eric Davidson

Board Member in the Spotlight

OPET board member **Eric Davidson**, senior scientist at the Woods Hole Research Center, was featured on Earthday 2000 on the Op-ed page of the **Boston Globe** with a letter to the editor entitled *"It's the environment, stupid!"* (a take-off on Clinton's 1992 campaign slogan "It's the economy, stupid"). Eric writes that in order to keep our prosperity we need to take care the environment is healthy. Eric also is the author of ***"You Can't Eat GNP. Economics as if Ecology Mattered"***, a book that looks at the ecological foundations of prosperity. The book is available in book stores; excerpts and a link to on-line vendor can be viewed on www.whrc.org/publications/GNPset.htm Get your copy signed by the author at the Annual Meeting!



Cross-country Skiing on Oyster Pond, February 2000

Photo by B. Rose

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Money Matters: From the Treasurer's Books

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For those of you who want to know where OPET's money comes from and goes to.

+\$\$\$\$+ **OPET Income & Expense** -\$\$\$\$-

June 1999 through May 2000

Income

Book Income	440.80	
Cost of Books Sold	-286.02	
Net Book Income		\$ 154.78
Contributions Income		
General Fund	7,718.98	
Land Conservation Fund	13,383.37	
Total Contributions Income		\$21,102.35
Interest Income	131.81	
Total Interest Income		\$ 131.81
Grants	2500.00	
Total Grants		\$ 2,500.00
In-kind/Equipment Contributions (equivalent \$ value)		
Stock Shares	277.81	
Total In-kind Income		\$ 277.81

Total Income**\$ 24,321.53****Expense**

Equipment and Materials	15.60
Dues (FACES)	25.00
Insurance	1,709.00
Interest Expense (OPET Conserv.Land)	1,405.45
Office Supplies	179.55
Postage	463.94
Printing/Copying	710.31
Professional Fees (CPA)	1,400.00
Science Projects	1,400.00
Soliciting	71.13
Taxes	50.00
Telephone	113.40

Total Expense**\$ 7,543.38****Other Payments**

Reduction on Conservation Land Debt	\$ 11,724.66
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With the generous donations to the Land Conservation Fund the debt on OPET's conservation land was reduced to \$ 5,325.74 from last year's \$ 17,050.40!

Please note: no paid staff, no "development office", less than \$100 for fundraising ("soliciting")

Thank You, SEA and Treetops

As in the past years, the Sea Education Association (SEA) once again has generously offered their facilities for OPET's Annual Meeting on July 13th. We are very fortunate to have use of this conveniently located place in a beautiful setting, with ample parking, an excellent meeting room and space for socializing. We appreciate it! OPET's monthly Board of Director's meetings take place at the Treetops Club House, and we thank the Treetops Condominium Association for making this facility available to us. Again, it could not be more conveniently located, and the room is just perfect for our group.

From the Membership Desk: Recent Contributions

OPET has a loyal and caring membership family! Thank you all for your generous donations! Oyster Pond is well worth it!
Reminder: Memberships expire May 31st. Why not renew today with a generous gift?

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Honorary Life Members

Friederun Jannasch
 Herbert Willett

Life Members \$5,000 or more

Anonymous
 Carlson Charitable Trust
 Cecily Selby Coles

Elizabeth Davis
 John and Judith Dowling
 James and Pat Ferguson
 William and Patricia Kerfoot

Birgit and Werner Loewenstein
 Mindy Hall and Lawrence Pratt
 Harold and Kirsten Sears

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\$1,000-\$4,999

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 Ermine Lovell
 Mindy Hall and Lawrence Pratt
 Mr. and Mrs. John S. Price
 Henry and Joan Wheeler

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Leo H. Bendit Charitable Trust
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 Albert and Helen Wilson
 Maria and Graham Ward
 Marjorie Whittemore
 Mr. Fred Woodward
 Michael and Naomi Zigmund

Business Members

\$500-\$1500

Envirotech Laboratories
 Onset Computers

\$50-\$100

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 BankBoston
 Jeffrey S. Hamilton Landscape
 Woods Hole Passage

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 Brian Howes, Univ. Mass, Dartmouth
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 Jody Katrein
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