



Great Pond Foundation

Newsletter

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A successful Pond opening has “Nessie” back dredging



This aerial shot shows “Nessie” beginning to tackle the sandy delta deposited by in-coming water. Above the dredge can be seen a prior channel leading to the new opening of the barrier beach (at very top of the photo).
Photo by Tom Wallace.

[Editor’s note: last year, GPF President Tom Wallace explained the need to maintain a healthy reserve in order to cope with on-going maintenance, repair, and eventual replacement of our dredge. His words could not have been more timely, as one can see from the article below.]

Having passed her “physical” in late August, Nessie seemed ready to start dredging in early November, shortly after the Pond opening. Unfortunately, instead of a busy dredging season, Nessie underwent several weeks of unforeseen repairs. First the hydraulic pump had to be replaced, as did a burned-out starter. Nessie was put in the water on January 7th but remained out of operation while a break in the discharge line was mended. In February, the last repairs to the pump motor were completed. Finally, the dredge was ready for action.

The Town of Edgartown cut a channel through the barrier beach and opened the Pond to the sea on March 16th. The following day GPF President Tom Wallace reported, “Even after very strong SW winds Thursday the pond has not only stayed open but we are looking at a particularly strong flow of water with each tide. Nessie is operating with great efficiency keeping the channel open and deep. We have been able to use each outgoing tide to reduce the size of the delta of sand adjacent to the opening. Today’s site visit to the pond was very encouraging.”



Opening Oct.11, 2015 *Photo by Elizabeth Ricketts*

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Meet Emily Reddington: our new Science & Education Coordinator



For fifteen years the Great Pond foundation reaped the benefits of the knowledge and wisdom from Bob Woodruff, who served as Science & Education Director. With Bob's retirement the Foundation sought and found the best candidate to fill Bob's shoes (no easy task!). The Foundation is delighted to welcome Emily Reddington on board to coordinate our Science & Education Program.

Born in Boston and raised in Mansfield, Mass., Emily's interest in aquatic life began at an early age as she spent summers around lakes in Maine. Her fascination with marine life started during a fourth grade field trip to Museum of Science to observe a live feed of deep water exploration with a team from the Woods Hole Oceanographic Institution.

Emily earned her bachelor's degree in biology with a marine emphasis at Occidental College in Los Angeles and went on to earn her master's in molecular systematics and conservation genetics. She works part-time at the Marine Biology Laboratory in Woods Hole studying deep sea hydrothermal vents and the microbes that live there. Conveniently for us, Emily lives on the Great Pond with her husband Marty, young son Harold, Springer spaniel Jet, and cats Tinkerbelle and Pêche.

Her deep interest in and love for the Great Pond are evident in Emily's own words:

My husband Marty and I met on the shore of Edgartown Great Pond. My job as the Islands Coordinator for the Coastal Water bird Program brought me to the Island; a nesting pair of piping

plovers brought me to the Pond shore. Since then our family has grown, and we now raise our 2 ½ year old son, Harold, next to this same body of water. To say that Edgartown Great Pond is important to our family may be an understatement. It is a privilege to be able to study the ecology and support the health of Edgartown Great Pond as the Science and Education Coordinator for the Great Pond Foundation.

Edgartown Great Pond is a small but complex ecosystem. It is a dynamic environment that at times has seasonal, tidal, storm-related, and human-influenced cycles. We are developing a sampling strategy that captures these dynamic changes on multiple scales of resolution. Physically opening and dredging EGP has a quick and dramatic effect on water quality parameters such as salinity, temperature, and dissolved oxygen. It often creates a tidal flow for days or weeks. How does this opening impact the microscopic and macroscopic organisms in the Pond? How do the lifecycles of these organisms then impact the long-term health of the Pond? Those are some of the things we will be exploring.

The size of an organism may not be proportional to its impact on the ecosystem. Small organisms can respond quickly to change by multiplying or "blooming" and can therefore have large-scale effects on biogeochemical cycles. Microbes such as bacteria and archaea influence aquatic ecosystems by moving nitrogen from one form to another in the nitrogen cycle through processes such as Nitrification, Denitrification, and N₂ Fixation. To fully understand and support the health of Edgartown Great Pond, we must zoom in and look at the fine scale organisms and cycles and then zoom out to see the full picture of this wonderful ecosystem.

The Foundation is looking forward to learning much through Emily's work, particularly how the efforts of the GPF can positively affect the health of the Pond.

Edgartown Great Pond now open to commercial oyster fishing...with limits

On March 4th, after voting to close commercial fishing in Sengekontacket Pond, Edgartown selectman approved the beginning of commercial oyster farming on Edgartown Great Pond, the season to begin on March 7th and end on April 29th. To prevent over fishing, no dragging is allowed, and the daily limit for commercial fishing is two 10 gallon baskets. [Note: family oyster fishing is allowed in all Island ponds.]

See more at: <https://vineyardgazette.com/news/2016/03/01/abundant-oyster-season-under-way-edgartown#sthash.f7PV5bsF.dpuf>

Kudos to GPF partner MV Shellfish Group for hefty grant awarded from EPA



Last fall the Martha's Vineyard Shellfish Group was awarded a \$135,693 grant from the EPA to fund a study of harvesting *Phragmites* as a means to lower nitrogen levels in coastal ponds. *Phragmites* is an invasive plant which, if left unchecked, can lead to a pond's demise.

MVSG Director Rick Karney and Emma Green-Beach propose to take advantage of what these plants do best – act as sponges soaking up nitrogen – harvest them during high nitrogen levels, and use the harvested plant matter for nitrogen rich fertilizer. The result is that the harvest keeps the plants at a manageable and useful level and staves off their potential encroachment into the coastal waters. They are to be commended for such creative and constructive thinking!

[We hope our letter of support helped with this award in some small way!]

A successful dredge operation is no simple matter.

Photos by Elizabeth Ricketts



(Left) Nessie in the water waiting for repairs. January 2016



(Right) Repairing the discharge line. March 4, 2016



(Left) A successful opening of the barrier beach. March 16, 2016
(Below) Water from Edgartown Great Pond rushes out to sea



(Above) Discharging sand dredged from the delta. (Right) Nessie hard at work. March 24, 2016
(Below) Impressive opening of the barrier beach. March 21, 2016



Coming up:

- ⇒ **GPF has new dredging Operations Manager.** John Coskie is a hard man to replace, but Steve Ewing is that man.
- ⇒ **GPF website gets a whole new look.** Our website is undergoing a much needed overhaul and ,when completed, will offer our friends and supporters an interesting, informative, and dynamic way to learn about the Pond.
- ⇒ **Like us on Facebook.** GPF finally joins the 21st century by putting together a presence on Facebook. After just a few tweaks, it should be up and running soon. What a great way to stay in touch!
- ⇒ **Live streaming from the barrier beach.** We are in the process of securing a web cam to stream and record storms, tides, dredging, and other activities occurring on the Pond. Coming soon to our new website.
- ⇒ **New focus for GPF Intern Program** One of Emily Reddington's first tasks as Science & Education Coordinator is designing and implementing this summer's Intern Program. We expect exciting things from Emily's thoughtful and fresh approach.



OUR MISSION:

The Great Pond Foundation was formed to enhance the health and beauty of Edgartown Great Pond by supporting solutions to environmental problems affecting it. Our goals are to educate the public to the pond's value and condition, and assist the town of Edgartown in enhancing its recreational and ecological features. We work with the town to promote the pond's management.

Your tax deductible donations mean so much and matching gift programs can double donations to GPF!

Many employers have matching gift programs in which they will match your donation to a charitable organization. The process is simple:

1. Find out if your employer has a matching gift program. Ask your Human Resource Officer or visit www.doublethedonation.com, click on "Search Programs", and enter your company name.
2. If your employer has a matching gift program, ask for a Matching Gift Form, fill out your portion, and include it when you send in your tax-deductible donation.

Please send your tax-deductible donations to:

Great Pond Foundation
PO Box 2005
Edgartown, MA 02539

Thank you!



Thank you for supporting us!