



FRIENDS NEWSLETTER: ELLISVILLE MARSH RESTORATION PROJECT OCTOBER, 2010

This newsletter is produced on a periodic basis to keep members of the Friends of Ellisville Marsh, Inc., apprised of developments and opportunities to become involved.

Final Permit to Reopen Ellisville Inlet Expected Shortly

We are delighted to report that the Friends are nearing the culmination of more than two years of work to obtain the local, state and federal permits needed to reopen the long-blocked Ellisville Marsh inlet. Based on feedback from the individual at the US Army Corps of Engineers responsible for handling our federal permit application, we expect to receive our final permit this month. In anticipation of this, the Friends' board of directors is working on several fronts to move the marsh restoration project forward. When we receive the last permit, you'll be the first to see the press announcement of this major milestone! For a small nonprofit like the Friends to complete this complex, regulatory permitting process without using any public money is a remarkable, and possibly unprecedented, achievement in Massachusetts.

A Busy Summer of Environmental Data Collection

Teams of volunteers fanned out across Ellisville Marsh, Ellisville Beach, and inshore waters this summer to collect scientific monitoring data that will be used to study the before and after-effects of reopening and maintaining the Ellisville inlet. We have been collecting this so-called "baseline data" for more than four years in some cases. It was submitted to several state agencies in September to comply with permit conditions. The remainder of our 2010 data will be submitted prior to year end.

These monitoring programs cover:

- Wetland vegetation
- Shellfish
- Fin fish
- Offshore eel grass
- Inlet migration
- Beach elevations
- Threatened species
- Water quality
- Tidal elevations

We believe this is one of the most extensive and wide-ranging environmental monitoring programs related to a salt marsh restoration project in Massachusetts. A description of the specific data collection methodologies is available to anyone with an interest.

(continue to next page)

Friends director Kelley O'Neel (right) and partner Mary Ellen Mastrorilli record beach elevation changes to within centimeters using the Emery Rod system.



Interested in doing this? We'll be training a second team next spring. signup@EllisvilleMarsh.org

Wetland Vegetation: One Key Indicator of the Marsh's Health

Did you notice someone out in the middle of Ellisville Marsh on a ninety-plus degree day this summer and wonder what she was doing? Chances are it was Ellen Russell, a founding director of the Friends and current doctoral candidate at UMass-Amherst doing her thesis on factors influencing the health of wetland vegetation in the marsh. Ellen and her family have a longstanding connection to Ellisville that dates back a century so she's in a unique position to appreciate how the marsh has changed over time while she conducts scientific research into factors that affect its health. This past summer she supervised the installa-



tion of piezometers (one-inch diameter screened PVC pipe) at 97 locations throughout the marsh. The volunteer team then identified the vegetation present in a meter square plot surrounding each piezometer and estimated percent cover using standard survey techniques. Two water quality monitoring rounds were conducted at eight locations in the marsh, channel, freshwater inputs and ocean front, looking at temperature, dissolved oxygen, conductivity, chlorophyll, salinity, total dissolved solids, pH and turbidity. Three stilling wells were built to house our pressure data loggers (tidal gauges) and were sunk in the marsh, channel and ocean at fixed heights in order to record the variation in tidal range between these locations. Tidal data were downloaded in September and GPS locations were obtained for all plot, sampling and stilling well locations so that FEM may return to these exact locations in subsequent monitoring years.

Just a Reminder...

If you haven't yet renewed your Friends membership for the 2010-2011 year, please consider taking a minute to do so today. While the Friends are in good shape financially due to our conservative spending approach, we still need to raise a few thousand dollars to fully fund the reopening of the inlet this winter. This is definitely within our reach!

The mail-in membership renewal form can be downloaded from our web site at:

<http://ellisvillemarsh.org/FEMcontent/membershipapplication.pdf>

And remember, contributions to the Friends, a 501(c)(3) tax-exempt organization, are fully tax-deductible to the extent allowed by law. Matching grants from your employer are especially appreciated!

Bringing GPS Technology to Bear

Thanks in part to on-site training we received from Professor Malcolm MacGregor of the Mass Maritime Academy this summer, the Friends now apply GPS technology in a variety of ways that support our environmental monitoring programs. Using one of the simplest and lowest cost handheld devices available, we have GPS-located the positions of our tidal
(continue to next page)

gauges in the marsh, channel and ocean. We have also twice mapped the offshore eel grass bed. And we have GPS locations accurate to within a few feet for the beach and marsh transects we use for ongoing survey work. Mapping the edges of the inlet channel to the bay at low tide with the GPS unit has produced an especially valuable record considering how dynamically the beach and tidal flats can change within a matter of weeks.

After Permitting – What Next?

What happens once the Friends have the final regulatory permit required to reopen the Ellisville inlet? The organization is already shifting gears. Directors Eric Cody and Jack Scambos have been requesting bids from construction firms to reopen the inlet this winter. A bidders' meeting is planned in the next month to obtain best and final bids. A pre-dredge shellfish survey inside Ellisville Harbor will be completed by LEC Environmental this month. A punch list of compliance and reporting requirements stated in all of our permits is being compiled to insure that every step we take is "by the book." And we will submit our second CD containing environmental data collected during 2010 to the Mass DEP and several other agencies by December 31st as required. And of course we continue to seek additional funds to complete the initial stage of the marsh restoration -- reopening the blocked inlet. Another grant application was submitted last week.

Special Thanks to our 2010 Volunteers!

The board of directors expresses its sincere appreciation to the volunteers listed below who have participated in the work of the Friends so far in 2010, including those who volunteered but haven't yet been assigned to a team. Your combined efforts enabled the Friends to accomplish what we have this year.

Sandy Clark	Greg and Rosemary Lano
Eric and Christine Cody	Malcolm MacGregor
Frank Doyle	Paula Marcoux
John Michael Field	Bobbi Martino
Diane Fletcher	Mary Ellen Mastroilli
Ellen Russell, Peter, Chris, Abby and Betty Foley	Kim Michaelis
Carol Gilligan	Kelley O'Neel
Bob Goldthwaite	Susan Pleadwell
William Gray	Don Quinn
Adela Hruby	Henry Riter
Peter Hruby	Jack Scambos
Denis LeBlanc	Karyl Silva
Heidi Sanders	



Director Frank Doyle assesses wetland vegetation.

Sincere thanks also to Senate President Therese Murray for communicating the importance of the Ellisville Marsh restoration project and her support for it to Environmental Affairs Secretary Ian Bowles.

(continue to next page)



William Gray exemplifies the Friends' can-do spirit while Chris, Peter and Abby Foley prepare to deploy a pressure logger to its offshore mooring location using a makeshift raft. (Photo by Ellen Russell)

To Contact the Friends' Board or Share Your Ideas:

Please email us at Board@EllisvilleMarsh.org . We welcome your ideas and inputs.



www.EllisvilleMarsh.org