

Mordecai Matters



PHASE I SWMER: ALL IN A WEEKEND'S WORK – AND THEN SOME!

Anyone looking out on Mordecai early morning on Friday, June 9th, knew that something major was happening. Over a dozen workers were arriving by boat unloading large wormlike logs onto the island, along with flats of spartina, hundreds of stakes, rolls of netting and burlap, and an assortment of tools. Amazing to any spectators and to the organizers of this project, by the end of the morning 53 biologs, 20 feet long and between 12 and 16 inches wide, were staked around the southern perimeter.



Saturday work detail

in an effort to retard the continuing erosion of that part of the island.

Over the weekend volunteers worked several hundred hours installing the biologs, planting spartina grasses, and constructing biodegradable coverings to protect the young spartina plugs from perusing geese.

Volunteers came from as far away as Maine, by boat and by kayak, in the case of Margo Pellegrino (below), who kayaked three hours from the Medford area to help with the effort.



Planting the last of the spartina, end of July.

Following the June weekend, volunteers have continued to work on the project. Over several visits in June and July, groups completed planting spartina on the biologs, ordered and planted 1,200 more grasses, and have continued to photograph and monitor the area.

The assessment currently, according to Linda Colgan, MLT President, is that "the logs are very stable, and the grasses appear to be holding,

(Continued on page 2)

2006 UPCOMING EVENTS

Sunday, August 27,
3–4:30 PM:
Annual Meeting, Beach Haven Emergency Operations Center, West and Pelham Avenues

Saturday, Sept. 9, 11 AM:
Terrapin release on Mordecai (see inside page 2).

Saturday, Sept. 16, 9:30 AM:
Fall Clean-up. Meet at Molly Allison dock.

Monday, Sept. 18, TBA:
Ecological Survey Field Trip (see page 3)

Friday, Oct. 6, 7 PM:
Trustees meeting at Molly Allison



Unloading materials from Pinelands Nursery, 7 AM Friday.

And that was just the beginning. 68 volunteers assembled Saturday as part of the massive effort to complete Phase I of MLT's SWMER (Southwest Mordecai Ecosystem Restoration) project.

The project is a combination of the Mordecai Land Trust, the American Littoral Society, the US Fish and Wildlife Service and the National Oceanic and Atmospheric Administration (NOAA) restoration center. It involves installing biologs along both the southwestern and southeastern perimeters of the island, above high mean water,



Margo wins for most interesting mode of transportation.

There are gifts that touch lives beyond ourselves. Mordecai Land Trust welcomes contributions in memoriam and in recognition of friends and family. For information email info@mordecaimatters.org

Biologs (continued)

(Continued from page 1)



Pete Hook and Jack Lampman.

particularly on the southeastern side. We will continue to monitor the area and intend to make another trip soon to remove materials no longer needed to protect the spartina from geese.”

Funding for Phase I came from a \$22,000 grant from the American Littoral Society and \$1,000 each from the Long Beach Island Garden Club and the Northeast Shore and Beach Preservation Association.

Doug Gaffney, Ocean and Coastal Consultants, Inc., worked with MLT in designing and implementing the project. Brian Becker, American Littoral Society, and Craig Woolcott from NOAA also provided valuable assistance to the MLT group over

the weekend.

The Trust has begun work on the planning/permitting of Phase 2 of the project, which involves more substantive restoration efforts.



Thank you to our volunteers.

Mordecai to Participate in New Project: Saving the Diamondback Terrapin

On September 9, 2006, the Wetlands Institute will release newborn diamondback terrapin hatchlings on the island. Volunteers are welcome to participate. Please contact Linda Colgan at lcolgan@msn.com if you are interested. The below is an informational article from the Wetlands Institute.

Since 1989, the Wetlands Institute and The Richard Stockton College of New Jersey have conducted a diamondback terrapin conservation project. Each summer, college and university students come from all over the United States to assist these creatures so desperately in need of our help. Conservationists from Southeast Asia joined the program in the year 2000 under the New York Turtle and Tortoise Society's Asian Scholarship Program. All of the researchers are joined in their efforts by a small group of dedicated local volunteers.

Of the more than 250 species of turtles in the world today, only diamondback terrapins have adapted to life in the brackish waters of coastal salt marshes. For well over a century, terrapins have been adversely affected by a variety of human activities.

In the late 1800s and early 1900s, terrapin populations were decimated by hunting because these turtles were regarded as a gourmet delicacy that fetched extraordinarily high prices in major cities such as Baltimore and Philadelphia. Subsequently, terrapin habitat was greatly diminished and degraded; extensive areas of salt marsh were filled in and marsh waters were polluted by industrial waste and poorly-treated sewage.

Nevertheless, by the 1970s terrapin populations in New Jersey appeared to have largely recovered from their late 19th century decline. Unfortunately, the sand dunes on barrier islands, which are the natural nesting areas for terrapins, had been

mostly leveled to make way for the development of coastal resort communities. The terrapins had to find a new place to nest.

Sadly, the most readily available alternative nesting site for terrapins proved to be the embankments of roads crossing salt marshes, a dangerous place indeed for unsuspecting turtles. Adult females seeking nest sites above the high tide line frequently cross the roads, both during the day as well as at night. Every year, hundreds of terrapins are hit by motor vehicles and killed or maimed.

During the nesting season, which usually begins in late May and ends in mid July, road patrols are sent out around the clock. Roads crossing or adjacent to salt marshes are patrolled in both Atlantic and Cape May County. Patrols help live terrapins to cross the road safely. Injured turtles are brought back to the lab at the Wetlands Institute for first aid. If the injuries are severe, the turtles are taken to a veterinarian for repairs. Dead terrapins struck by motor vehicles are also taken back to the lab where an “eggectomy” is performed. An eggectomy is the removal of any potentially viable eggs from the female's carcass. The eggs are placed in containers and incubated at the Wetlands Institute and Stockton College.

Depending on the temperature at which they are incubated, the eggs hatch in 7 to 12 weeks. Higher temperatures result in relatively short incubation time and produce females. Lower temperatures result in a longer incubation period and produce males. We hatch mostly female terrapins in an attempt to replace those that are killed during the nesting season.

The hatchling terrapins are transferred to a facility at Stockton College known as the “turtle farm.” Here they are fed continuously for approximately

(Continued on page 3)



Hatching and just hatched diamondback terrapins.



Ecological Survey Field Trip Planned for Local Middle School Students

Plans are well underway for MLT's Ecological Survey Field Trip scheduled for September 18th. Under the guidance of Steve Evert, Field Station Manager of the Richard Stockton College Marine Science and Environmental Field Station, and his staff, approximately 36 students from Southern Regional Middle School will participate in this event.

The field trip will provide a hands-on, on-site opportunity for SRMS students with an interest in ecology and science to learn more about the extremely valuable fish, bird and plant habitat that Mordecai affords.

The participating students will be divided into three teams, which will rotate among an eelgrass bed finfish survey, a high marsh to low marsh

plant survey and a wildlife survey. Findings and materials developed are expected to be utilized in SRMS's science curriculum later in the school year.

SRMS Ecology Club faculty advisors, Sarah Line and Caroline Murphy, will be joined by several MLT volunteers who will also provide assistance.

This project is made possible in part through a grant from The Trust for Public Land's Barnegat Bay Environmental Grant Fund. TPL was designated as the administrator of the Bay Fund through a donation from Ciba-Geigy Corporation to the State of New Jersey Department of Environmental Protection.



Oystercatcher hatchling. Photograph by Doug Gaffney.

(Continued from page 2)

ten months. The newborn hatchlings grow from the size of a 25 cent coin to a length of 2 to 3 inches. The result is relatively predator-proof terrapins that have a better chance of survival in the wild than if they were returned to the salt marshes as soon as they hatched.

After their visit to the "turtle farm" comes to an end, the head-started terrapins are released back into the wild.

During a typical nesting season over 400-600 adult female terrapins are killed. Approximately 700-900 eggs are rescued each season but only 35-40% (about 200-300) of these hatch. Not all of these will survive to adulthood. Our best guess is that no more than two out of three of these hatchlings will reach maturity (after 6-8 years), and not all of these will be females.

At best, several hundred fewer terrapins are released every year than there are killed by traffic. Consequently, year after year the terrapin population dwindles by several hundred adult females. No population can sustain this kind of loss indefinitely. The population will inevitably crash.

Sadly, there is another even more serious source of mortality for terrapins, not just in southern New Jersey but throughout their entire range. The threat comes from drowning in commercial crab traps (or "pots", as they are commonly called). In New Jersey's coastal waters alone, conservative calculations indicated that 14,000 to 15,000 terrapins of all sizes and both sexes are indiscriminately killed annually by these traps. Unlike blue crabs, which have gills, terrapins have lungs and are air-breathers just like people. Inevitably, once inside the traps, many terrapins drown.

We have developed a simple, inexpensive, and effective terrapin excluder. This can be easily fitted onto the inner (narrow) end of the entrance funnels of commercial crab traps. Excluders are highly effective at preventing terrapins from entering commercial crab traps. Moreover, the crab harvest in pots equipped with terrapin excluders is comparable to the catch in pots without excluders.

In view of the foregoing facts, a new regulation went into effect in New Jersey as of January 1, 1998. This regulation states that all commercial-style traps used in waters less than 150 feet wide at low tide or in any man-made lagoon must be fitted with devices designed to exclude diamondback terrapins. This regulation is in-

tended to protect an increasingly threatened natural resource- the diamondback terrapins- without detrimentally affecting the catch of New Jersey's crabbers. Maryland and Delaware have followed suit by implementing their own terrapin excluder regulations.

New Jersey terrapins are in serious trouble. It's our fault. We are the ones who invaded their territory. It is up to us to ensure their survival. When you see a terrapin crossing the road: slow down, stop, pick her up, cross her in the direction she was traveling, and wish her good luck. We hope that by educating the public and continuing with our conservation project, the diamondback terrapin will again thrive in the region's salt marshes.

With A Heartfelt Thank You

The Mordecai Land Trust thanks the friends and families of the following for their generous donations in memory of:

Peg Galloway

Kit Heilman

Virginia Lucas

The Trust also thanks these special persons who included Mordecai Land Trust in their fundraising efforts:

The dedicated and dynamic MLT O6 House Tour Committee, the eight homeowners who opened their homes to us, our 130 volunteers, and the restaurants and donors, all of whom raised approximately \$15,000 during this July 9th annual fundraiser.

Eliza Hastings and Hannah Miller and their Berkeley and Beach Avenues Lemonade Stand.

Members of the Junior Yacht Club of Little Egg Harbor Yacht Club and their carwash this July.



Missy Maschal and committee for naming Mordecai as the recipient of the August 11th Benefit Art Show and Sale at Little Egg Harbor Yacht Club.

Mordecai Land Trust
P.O. Box 1414
Beach Haven, NJ 08008-0084



Address Correction Required

Mordecai Matters

*A publication of Mordecai Land Trust
Richard G. Oelkers and Linda L. Colgan, Editors
Photographs by Gene Ann Hook
Email: info@mordecaimatters.org*

We're on the web! Mordecaimatters.org

YOU ARE INVITED TO ATTEND

THE MORDECAI LAND TRUST

ANNUAL MEETING & PUBLIC DISCUSSION

Sunday, August 27th, 2006, 3:00 to 4:30 PM

Beach Haven Emergency Operations Center
(formerly the Coast Guard Station)
West & Pelham Avenues

Presentation by the Wetlands Institute:

DIAMONDBACK TERRAPIN CONSERVATION PROJECT

New Video of the June Biolog Installation
Update of Planned Events
Annual Business Meeting