



Great Bay MATTERS

Winter 2010

Volume 18 • Number 1

*Promoting research, education
and stewardship throughout
the Great Bay Estuary*

Healthy Kids, a Better Planet



To most of us over thirty, playing outdoors seems like the most natural thing in the world. Unfortunately, in a rapidly changing world where technology plays an increasingly larger role, there

is concern that our kids are not spending enough time outdoors.

Even though I grew up in suburban New York, I was lucky that we lived in a house that came with a huge backyard. While the wildlife was limited to bugs and frogs, we spent a lot of time digging in the dirt and the only rule was to be in house by dark. Psychologists call this unstructured play and believe it is essential for healthy child development.

Today there are many factors that are keeping kids indoors; from child safety issues, a shift from rural to urban living, to highly organized activities for kids, and the growing attachment to electronic toys. At the same time, more intensive land development is destroying those natural places that used to welcome exploration.

Many experts have called attention to this trend, most notably best-selling author Richard Louv who wrote *Last Child in the Woods: Saving Our Children from Nature Deficit Disorder*. Last year, several Reserve staff had the opportunity to hear him speak and were greatly moved by his message. His research has shown that free play in nature increases children's self-esteem, creativity and critical thinking skills while making them happier and healthier.

Nature also introduces children to small, calculated risks, like jumping across a stream or climbing a tree. You quickly learn about your physical limitations and what happens if you make a mistake, like


getting wet. Most importantly, you begin to understand that nature is incredibly complex and you feel a bond with your natural world.

The challenges facing future generations are enormous, especially when we think about Climate Change. How can we ask our future leaders to deal with environmental change on a worldwide scale, when our kids don't even know what animals live outside their bedroom window? At the Reserve, we strive to create educational programs that include exploration and wonder. We want to get kids out of the classroom and into their natural environment.

The Great Bay Discovery Center offers a wide variety of programs both for schools and the general public. Our goal is to provide increased opportunities for people of all ages to enjoy the natural beauty of the Great Bay estuary.

Thanks to the success of the Great Bay Partnership, the Reserve now manages a large portion of the Crommet Creek watershed. Reserve lands also comprise a large portion of the newly opened Sweet Trail that runs from Longmarsh Road in Durham to Bay Road in Newmarket.

In 2010, we are planning to dedicate a new parking area and wildlife viewing platform along Dame Road. This remarkable area has many stories to tell, especially how beaver have changed the landscape. Besides being the spot where Onassis wanted to build his refinery, we will provide local residents with an incredible opportunity to visit a wilderness right in their own backyard. Most of all, we want a place where our kids can play and explore. For more information about the site, please see the Great Bay web page.

 Peter Wellenberger
Reserve Manager, GBNERR



GREAT BAY
NATIONAL
ESTUARINE
RESEARCH
RESERVE

Great Bay National Estuarine Research Reserve (GBNERR) is an estuary comprised of 7,300 acres of tidal waters and 2,935 acres of coastal land. Acquired through land purchases and conservation easements, GBNERR was designated on October 3, 1989 to be preserved for the purposes of education, research, and resource protection.

GreatBay MATTERS

89 Depot Road, Greenland, NH 03840
603-778-0015

Great Bay Matters is published cooperatively by GBNERR and the Great Bay Stewards

Editor: Kelle Loughlin
Design and Composition: Victor Young
Cover Photo: © Devin Wadleigh, GBNERR

Financial support for this publication was provided by a grant under the Federal Coastal Zone Management Act, administered by the Office of Ocean and Coastal Resource Management, National Oceanic and Atmospheric Administration, Silver Spring, MD.

GBNERR

Manager: Peter Wellenberger

Great Bay Discovery Center

Education Coordinator:
Kelle Loughlin

Great Bay Stewards

President: Nancy Cauvet



GBNERR is funded by the National Oceanic and Atmospheric Administration and the New Hampshire Fish and Game Department. The Reserve is supported by its non-profit friends group, the Great Bay Stewards



This publication is printed on FSC certified 50% total recycled content / 25% post consumer content paper.

“Walking the Line”: A Journey Around Great Bay

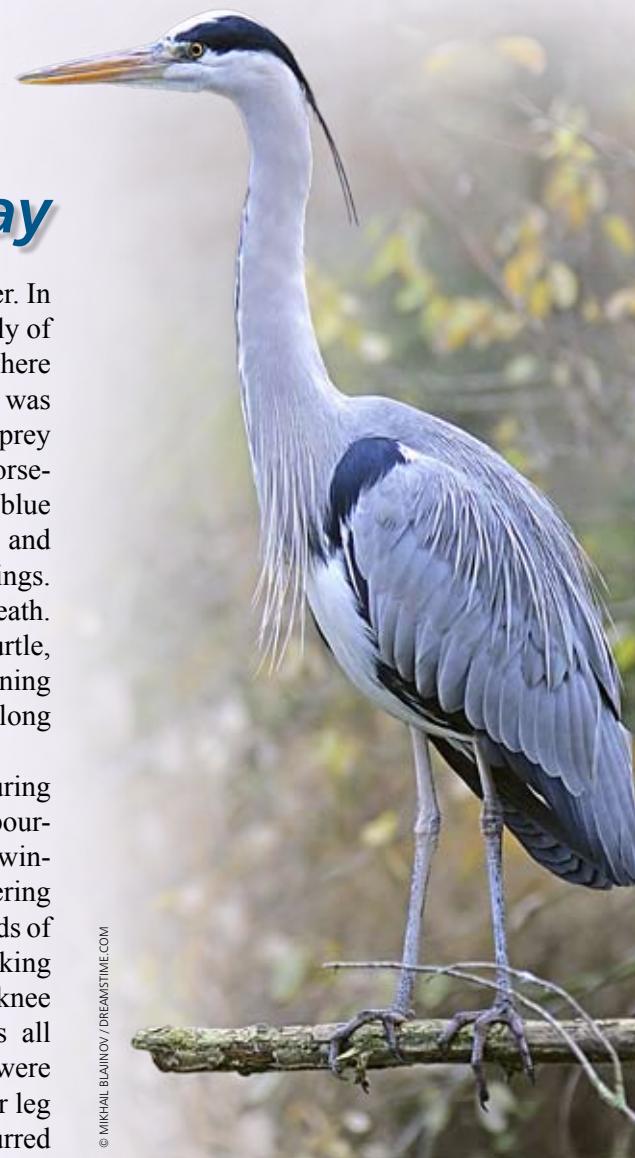
As an intern with the Great Bay National Estuarine Research Reserve, I was assigned the task of “Walking the line” around Great Bay. On June 22, 2009 I began my journey mapping the high marsh/low marsh boundary throughout the Reserve using a Trimble XR Pro backpack Global Positioning System. This vegetative boundary line in the salt marsh is important as it marks the height of mean high tide. If sea level changes, due to factors such as climate change, this line will shift. I was accompanied by an assistant each day in the field in the event I was to break a leg, get stuck in mud, collapse from heatstroke or any other mishap.

During my twenty-one days walking around the bay I could imagine naturalists such as Charles Darwin or Alfred Wallace who explored a century ago. I became familiar with bird calls, the smell of sulfur in the mud and the texture of salt marsh grasses. I learned first hand the ecological importance and extensive biodiversity of the ecosystem. I had the feeling of discovering new territory as I was exploring and walking where most people do not.

I enjoyed walking along the many GBNERR conservation properties that abut the bay. These little known areas were where I would wake many deer and

send them prancing into forest cover. In the salt marsh I came across a family of otters that scurried into the river where they displayed their playfulness. I was able to get within thirty feet of osprey guarding their nest. Green frogs, horseshoe crabs and mummichugs, great blue herons, cormorants, green herons and red tail hawks were regular sightings. Where there is life there is also death. I saw raccoon, fox, snapping turtle, hawk, deer, horseshoe crab, morning dove chick and crow carcasses along my walks.

The conditions varied widely during these five weeks. Some days were pouring rain and so cold I had to wear a winter hat while others were a sweltering 92° days with no shade and thousands of greenheads and mosquitoes. “Walking the line” required hiking through knee deep mud and waist high grasses all while avoiding hidden holes that were hip deep that could easily snap your leg - amazingly no injuries were incurred by my assistants or myself. Some days required building bridges from downed trees while others required bushwhacking through 8-foot tall *Phragmites*. Tributaries and man made ditches were discouraging as they required backtracking and sometimes took hours to map and find the inland most point of



© MIKHAIL BAINOV / DREAMSTIME.COM

Great blue heron

the salt marsh.

As a naturalist spending many hours in tough conditions, I learned to appreciate the simple things – a slight breeze, a cool freshwater creek to wash my face or soak my hat in. I encourage you to take a stroll on one of the conservation properties or to take a paddle on the bay so you too can enjoy the beauty and adventure of Great Bay.

A huge thanks to Katie Arey, Megan Bonenfant, Jessica Gale, Tessa Grzybowski, David Loch, Mark Pedersen and Devin Wadleigh for helping Andy out with this project. You were a great team and we appreciate all your work!

Andy Gould
Summer Intern Great Bay NERR



© DEVIN WADLEIGH PHOTO

Stewardship intern, Andy Gould, embarks on his trek around Great Bay to map the high marsh/low marsh boundary throughout the reserve.