

Shana Miller, NYSG
Technical Outreach
specialist for the Peconic
Estuary Program, visits the
Shifting Sands exhibit on
view at the Suffolk County
Historical Society until
October 2004.
Photo by Paul C. Focazio

The Suffolk County
Historical Society,
300 West Main Street,
Riverhead, NY
(631.727.2881), is a
private, not-for-profit
organization and an
authorized agency of the
county that receives partial
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The Shifting Sands Exhibit
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Council on the Arts.

A snowy afternoon in February isn't your usual day to pack up the kids and head to the beach. But that's exactly what some families did when they came to the Suffolk County Historical Society and visited the exhibit *Shifting Sands: Long Island's Ocean Beaches.* This exhibit culminates three years of work on the part of the Historical Society's staff with the help of NY State Council on the Arts planning and installation grants.

Shifting Sands combines the societal with the scientific. Through historical photos and artifacts, video and sound bytes, the exhibit brings to life the natural forces that shape and diminish Long Island's barrier beaches and the cultural, economic and historical trends that have

Working with the exhibit curator Marsha Hamilton, NYSG coastal processes specialist Jay Tanski helped to develop the *Shifting Sands* exhibit by blending more objective, science-based information with the historical perspective. Says Mr.Tanski, "Long Island's coast is a dynamic environment, constantly changing in response to natural processes and human activities. Proper manage-

molded human interactions with them.

ment of this important resource requires a good understanding of the factors controlling erosion and the impacts they can have on different coastal areas."

The exhibit also provides the casual viewer with snapshots of how people have long interacted with Long Island's beaches and been affected by its patterns of erosion. Historical photos show us what it was like to be a clammer or a beachgoer a hundred years ago. An old clam rake and the woolen bathing "costumes" worn by women and men make that era come alive. More recent photos show us property damage caused by winter storm erosion. A video

Jeannette Ott of Flanders, her son Collin and friend Marissa Russo watch a video of the 1993 breach in the Westhampton barrier island that created Little Pike's Inlet that was subsequently closed. New inlets formed during storms are a major concern because they may cause changes in the bay and mainland areas, as well as along the ocean shore. Photo by Paul C. Focazio



Watch

animation (made available by Fred Mushacke of the NYSDEC) speeds up the process of a storm breaking through a barrier island and forming Little Pike's Inlet. Audio recordings (provided by George Maul of The Werkshop) let us hear both sides of the beach nourishment issue – whether or not to add sand to beaches that have been eroded by storms.



Erosion control structures and beach nourishment have helped slow down erosion and preserve the beach in front of the heavily-developed Coney Island shoreline.

Photo courtesy of Jay Tanski

Said Wallace Broege, Director of the Suffolk County Historical Society, "Shifting Sands is an exhibit that tells the story of our changing view of the natural world and the complex interaction between people and the environment, over time. Our actions have an effect on the natural world, just as the natural world affects us. Many of the issues and problems we face today, along our south shore, are not new and are a direct result of our actions or inaction."

Tanski informs us that like all coasts, Long Island's beaches depend on four major factors: the supply of sand available for beach building; the energy of waves and currents that impinge on the coast – especially during storms; short



and long-term changes in sea level; and finally, those human activities in the coastal zone that

alter or disrupt natural processes or sand transport.

It's those human activities, such as building houses, protective seawalls and groins along the beach that have escalated in recent years and are the subject of some controversy. This exhibit gives visitors some sound scientific facts as Long Islanders seek to balance the environmental, social and economic costs of conserving the barrier islands, protecting private property, and ensuring public access to

beaches. The scientific and social factors interact in complex ways and are different along each particular stretch of coast.

Tanski tells us that the diverse nature of development along New York's ocean shoreline requires a variety of approaches to erosion management. Structures, such as the breakwater and groins at Coney Island (pictured), along with beach nourishment have helped slow erosion and preserve the beach since the 1920's in this heavily developed area. If such structures are used improperly, however, they can disrupt the natural flow of sand and cause erosion problems on adjacent shorelines, usually to the west on Long Island's south shore.

Says Broege, "Understanding the history of the contemporary problems of beach erosion and its possible solutions will help to equip Long Islanders to make informed decisions for the present and the future."

- Barbara A. Branca

In the fall, Jay Tanski (right) was honored with a Special Distinctions Award in **Natural Resources** Programming, one of just two people so honored in 2003 from the Association of Natural Resources **Extension Professionals** (ANREP), New York Chapter. At left, Robert Kent, NYSG Marine District **Extension Coordinator,** congratulates him. Tanski was recognized for work on storm surge awareness. Photo by Barbara A. Branca