Please post or circulate.

Long Island Geologists

Field Trip

Reading the Beach

Michael Slattery

Saturday October 31, 2009

9 AM to 12 Noon

The beach is dynamically altered by the ocean, via waves, tides, storms, and by winds. Even long after these agents of change that shape the beach are over, the signs of these events can still be seen. The features on the beach can give you insight into how varying processes shape the beaches that become our summer get-aways.

Rip currents and longshore transport can give us insight into the ocean waves. We might see signs of both in beach cusps along the shore or the buildup of sand around obstacles. Breaking waves can be an indication of an unseen, offshore sand bar. Debris left on the beaches can indicated the types of tides affecting the region. Scarping of the dune and the state of dune vegetation can give us an indication of storm events that have affected a particular portion of the beach. Even the sand on the beach give us a clue as to what kind of coastal system is present; the amount of shell material, sand color, and even the size of the sand grains all give us clues as to the current setting and past impacts shaping the Long Island south shore.

We will look for these clues along the beach off of Smith Point Park and see what there is to learn about this particular barrier island system.

We will meet at 9 AM in the Wilderness Visitors Center at Smith Point County Park.
Park in the large parking lot and **walk** to the Visitor Center.
Directions: from Interstate 495 go to exit 68 or from Sunrise Highway (rte 27) go to exit 58S and go south on William Floyd Parkway (rte. 46) to Smith Point Park.

Be prepared for inclement weather.
We will not go in a severe thunderstorm, northeaster or hurricane.
We will be walking about one mile total.

Three contact hours toward in-service credit for teachers or professional geologists.
Please let Gil Hanson know if you want a letter for in-service credit.

No Fee!

Please e-mail Gil Hanson, if you plan to attend. gilbert.hanson@sunysb.edu