



Geology Field Trip

“Pebbly Loess and Carolina Bays on Long Island”

Gil Hanson and Glenn Richard
Stony Brook University

Saturday November 2, 2013
9:00 a.m. to 3 p.m.

Pebbly loess is a common surficial deposit on Long Island and forms the soil that allows Suffolk County to be the leading agricultural county in the state of New York. Loess is wind-blown sediment consisting dominantly of silt with minor sand. However, this “wind-blown silt” contains pebbles up to several cm in diameter. Pebbles are usually not associated with windblown deposits. Pine barrens are common in those areas which do not have pebbly loess.

Carolina bays are elliptical to circular-shaped, shallow depressions found in abundance along the Atlantic Coastal Plain and have recently been found in undeveloped areas of Suffolk County. They are characterized by a closed elevated rim and a flat bottom. On this trip we will explore the possible relation of Carolina bays as secondary impact craters and pebbly loess as ejecta associated with a bolide that struck the Laurentide ice sheet 12,900 years ago at the beginning of the Younger Dryas cooling event. We will start at the Suffolk County Farm in Yaphank, visit a Carolina bay feature in Manorville, and evaluate the soils in the Pine Barrens and the Dwarf Pine Plains.

Directions are available on the Long Island Geologists web site at <http://www.geo.sunysb.edu/lig/>

We will go rain or shine.

Bring lunch and a drink.

Wear long pants and walking shoes or boots with long socks to protect you from ticks.

Six contact hours toward in-service credit or professional development.

No Fee!

If you wish to participate, please let Gil Hanson know at gilbert.hanson@stonybrook.edu