

# Long Island Geologists

## Field Trip

### "Geology of Ditch Plains and Hither Hills"

**John Black, Dan Davis, Elliot Klein and Les Sirkin**

**Saturday October 23, 1999**

We will meet at **9 a.m.** at beach parking lot in Ditch Plains. Extensive erosion has produced steep bluffs exposing a variety of stratigraphic units. The lower stratified drift sequence is most likely Illinoian and the diamict is a lodgement till. The upper drift unit is Late Wisconsinan and the diamict is a flow till. We will also see peat bearing late Pleistocene to Holocene lacustrine deposits with  $^{14}\text{C}$  ages for peat and wood dated from 1,635 to 12,210 years ago. From this site we will go to the Hither Hills State Park where we will see both large and small scale structures resulting from Pleistocene glaciotectionic deformation. The orderly series of hills forming the topography in Hither Hills trend northeast - southwest as extremely well organized and uniformly spaced, antiforms. Many of the sea cliffs encountered on our walk along the northeastern coast of the park contain numerous complicated folds and faults exposed in cross section. Glacigenic sediments found here record substantial lateral variation in the thickness and arrangement of the exposed sedimentary facies and suggest episodes of significant syntectonic deposition during active glaciotectionic periods. These lateral variations in the stratigraphy over distances on the order of tens of meters suggest separate repeated pushes of cyclical glacial advance, probably seasonal, during a period of overall glacier retreat, rather than one prolonged glacial advance.

**We will go rain or shine. Wear appropriate shoes or boots for hiking along beaches.**


**There will be no refunds. Bring lunch and drink. The trip will finish by 5:00 p.m.**

Les Sirkin's books *Eastern Long Island Geology* and *Western Long Island Geology* are available for those attending the trip for a special price, the two books for \$20, or write Les Sirkin, P.O. Box 90 Johnsburg, NY 12843 add \$3 for shipping.

If you wish to participate, we need to know by **Tuesday, October 19**. Make your reservations by sending a check for \$10.00 per participant made out to Long Island Geologists. **No confirmation will be sent.**

Send check and form to: Long Island Geologists Earth and Space Sciences Building S.U.N.Y. Stony Brook, New York 11794-2100 Tel. 516 632 8535; Fax 516 632 8240
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Download the *Bibliography of Long Island Geology and Hydrology* at: [www.geo.sunysb.edu/bib/](http://www.geo.sunysb.edu/bib/)

	<p><b>DIRECTIONS: Take highway 27 east toward Montauk. Go through center of Montauk. Ditch Plains is immediately east of Montauk. Take a right on Ditch Plains Road. Go about 0.4 miles to Otis Ave. Take a right and park in beach parking lot.</b></p>
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#### **In-service credit is available for teachers.**

During the 1999-2000 academic year we will be offering one-hour of in-service credit for each of the: seven [Geology Open Nights](#), eight [Astronomy Open Nights](#), and three [Long Island Geologists Dinners](#) We will offer 7.5 hours of in-service credit for the conference on the [Geology of Long Island and Metropolitan New York in April 2000](#). We will offer up to 7.5 hours of in-service credit for each of the two Long Island Geologists field trips.

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Enclosed is a check for \$ \_\_\_\_\_ to reserve \_\_\_\_\_ places for the Field Trip on October 23, 1999.

Name(s) \_\_\_\_\_

Affiliation \_\_\_\_\_

Address \_\_\_\_\_

\_\_\_\_\_ Town \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Phone Number \_\_\_\_\_ Fax Number \_\_\_\_\_ e-mail \_\_\_\_\_

If you are a teacher, would you like in-service credit? \_\_\_\_\_

