



Field Trip

Selden Hill-Hole Pair

Sean Tvelia

9 AM to 12 Noon Saturday June 27, 2009

Bluemle and Clayton (1984) described the hill-hole pair as *"a discrete hill of ice-thrust material, often slightly crumpled, situated a short distance downglacier from a depression of similar size and shape."* In the case of the Selden Hill, Long Island's recently identified hill-hole pair, the associated hole may have filled during recession of the glacier and/or from outwash produced during the Harbor Hill event.

Lying just north of the Ronkonkoma moraine, the Selden Hill is unique when compared to other glacial features in the vicinity. Identifying such varied structures ultimately leads to the question of how glaciotectonic processes can vary so much over a relatively short geographic range.

During this field trip we will investigate the energy associated with the glacial margin. Using SCWA well logs, we will reconstruct the sedimentary environment prior to the development of the Selden Hill. Finally, using Ground Penetrating Radar (GPR) data, we will investigate the link between subsurface structure and surface topography and discuss how the previous glacial deposition may have influenced local glaciotectonic processes.

Links

- [Glaciotectonic Development of the Selden Hill](#)
- [Science Walk "Glacial History of the Ammerman Campus"](#)
- [Glaciotectonic Thrusting within the Selden Hill: Implications for Previous Models](#)

Directions: Meet at the Ammerman Campus of Suffolk Community College. Take the Long Island Expressway to Exit 62. Proceed north on Nicolls Road (CR97) about 2 miles to second traffic light. Turn right at the main campus entrance. Participants should park in parking lot 7 and proceed to room 109 of the Smithtown Science Building. Campus map is at <http://www3.sunysuffolk.edu/About/MapAmmermanStandard/index.asp> We will meet at 9 AM

Be prepared for inclement weather.

We will not go in a severe thunderstorm, northeaster or hurricane.

Wear long pants and sturdy **walking shoes** or **boots**.

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.

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