FRIENDS OF PLEISTOCENE GEOLOGY

FINGER LAKES FIELD TRIP, MAY 24-25, 1947

FIELD GUIDE

First Day, May 24th.

Field party starts from south end of Cazenovia Lake on Highway 20. The following directions are on a point to point basis, in each case starting at a marked road, numbered highway intersection, or a designated stop. Observations may be made en route as indicated in these notes.

1. Proceed westward from Cazenovia on Highway 20 about 12.5 miles to intersection of Highway 11 at the village of LaFayette. At two miles from Cazenovia, cross Limestone Valley and at 11 miles, Butternut Valley, which are Finger Lake-type trenches in the plateau.

Turn left (south) at LaFayette on Highway 11, proceed on Highway 11 to road fork 1.8 miles from LaFayette, take left fork and proceed to crest of hill 1.7 miles from road fork. Stop at hill crest.

Observations here will be of moraine which crowns the plateau surface in this area. The moraine belt is 1.5 miles wide, north - south, and can be observed in excellent development from the highway. Note especially lithology of the drift as well as topographic expression. This moraine is correlated with the Tully moraine to be observed at the head of the large valley to the west - Onondaga Valley.

2. Retrace route to road fork 1.8 miles south of LaFayette on Highway 11. Proceed southward on Highway 11 approximately 3 miles to off-road parking strip. Park for view of Tully moraine and Onondaga Valley. Salt wells may be seen at the sides of Onondaga Valley at the foot of the moraine.

The Tully moraine has been mapped as the correlative of the Valley Heads moraine which terminates the southern (upper) ends of the Finger Lakes Valleys. While this correlation should not be considered as certainly correct, the character of this moraine is similar to the valley-blacking parts of the Valley Heads Moraine.

3. Proceed south on Highway 11 to intersection of Highway 80; right (west) on Highway 80 a fraction of a mile to first road left, south to end of road, right to borrow pit at south end of Green Lake, a kettle lake.

This borrow pit is in outwash from the Tully moraine, both structure of the outwash and lithology may be observed.

4. Continue west on road, taking each right turn to a northward

course on Gatebouse Road! On way! observe morainic topography and numerous kettles, some occupied by ponds and lakes. North on Gatebouse Road to Highway 80, cross Highway 80, proceed one-eighth mile to gravel pit on right.

Stop for observation of structure and lithology and discussion of moraine building.

LUNCH will be eaten at this stop or at a nearby site, depending upon the weather.

Return from gravel pit to intersection of road with Highway 80. Northwest on Highway 80 for 5 miles to road fork; take left fork, leaving Highway 80; proceed 1.2 miles to Rice Hill Road, turn left on Rice Hill Road and follow to Otisco Lake. A brief stop will be made at a vantage point from which features of Otisco Lake and its valley may be observed. This is one of the small Finger Lakes as is indicated on the table of statistics of the Finger Lakes.

Left on Otisco Valley Road 2 miles to Sawmill Road; right on Sawmill Road to first right turn and follow to end of road at edge of Otisco Lake; left up steep hill to first right turn, following Stanton Hill Road due west to Highway 41; right on Highway 41 to first left turn; keep left on Woodworth Road. One or two brief stops will be made without dismounting to observe some of the features of the lower part of Skaneateles Lake Valley.

Continue on Woodworth Road to intersection with Highway 41, right on Highway 41 to the village of Spafford; right at Spafford to first lane left, follow this lane southward to abandoned farm. Stop for discussion of Finger Lake valley characteristics observable from this point which is approximately 500 feet above lake level.

Return to Spafford. Continue straight (east) on Cold Brook Road and continue on Cold Brook Road approximately 12 miles to Highway 281.

Cold Brook Road follows a southward draining valley which might be expected to contain morainic deposits correlative with the Valley Heads Moraine. The relatively minor morainic accumulations in this area are notable.

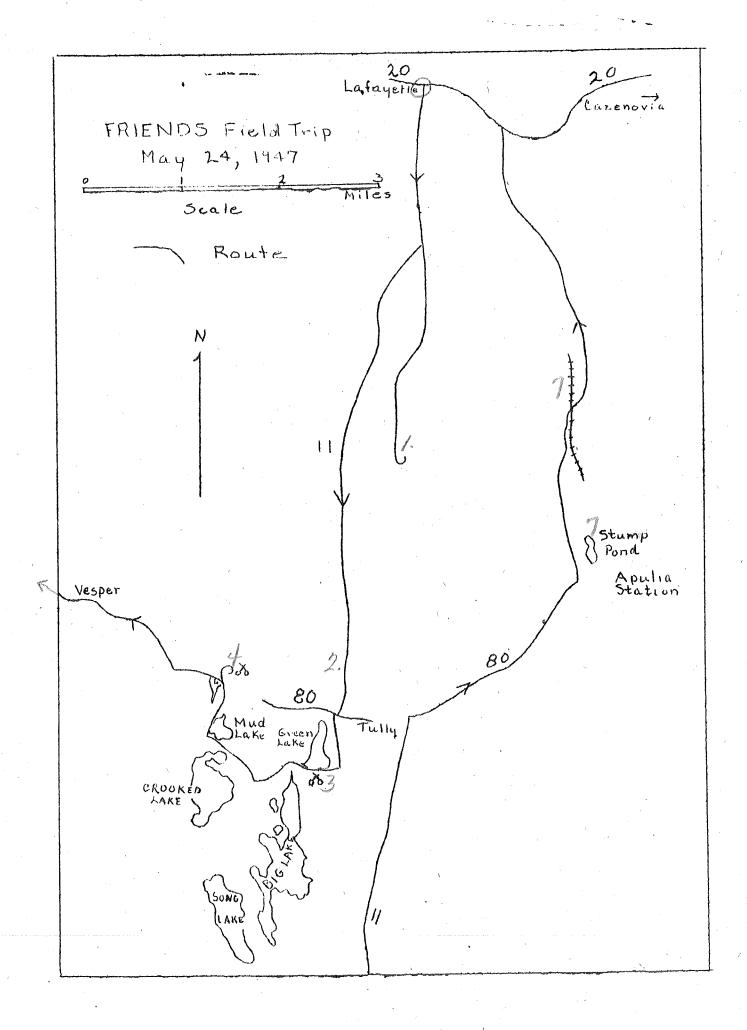
- 6. From intersection of Cold Brook Road and Highway 281 turn left (north) to Little York. A series of lakes occupies nearly the full width of Tioughnioga valley at this point. If these are kettle lakes, the ice which caused their formation must have been present after drainage waters ceased to flow over the Tully and Otisco valley moraines. Is there an acceptable alternative explanation to these being kettle lakes?
- 7. Northward from Little York on Highway 281 or 11 (new construction will determine route) to Highway 80; east on Highway 80 to

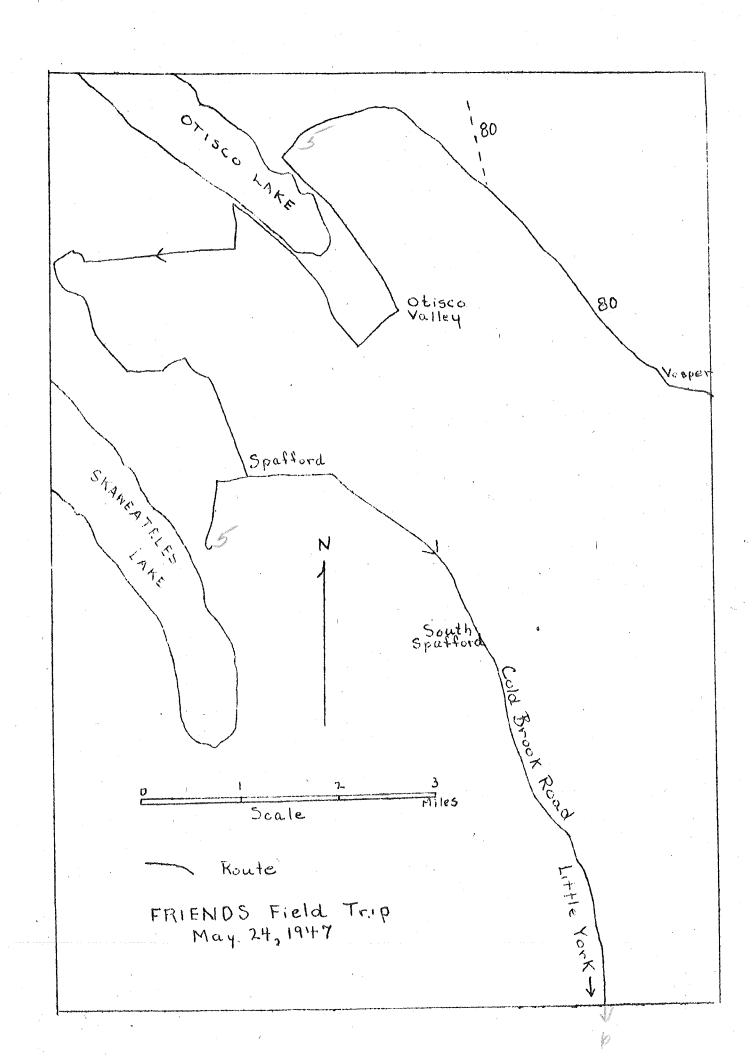
edge of Apulia Statien; left on paved highway which descends from crest of Butternut valley moraine to foot of the moraine. This apparently is the moraine to be correlated with the Tully moraine in Onondaga Valley and with the upland moraine first visited on this day.

Note especially the ridged hillside to the left, just north of the railroad overpass.

Continue north on paved highway to Highway 20, east on Highway 20 to Cazenovia.

It is anticipated that the party will reach Cazenovia about 6 c'clock. The annual dinner is scheduled for 7 P. M. at the Lincklaen House, Cazenovia.





DATA ON SOME OF THE FINGER LAKES

Lake	Depth	Altitude	Area Sq.Miles	Acres	Length	Width Waximum	Volume Willions Cu.Ft.
Canadice	831	1,092	ਜ	642. A.	3.2 Mi.	0.39 Mi.	1,505
Canandaigna	475	989	16.3	10,140.	15.5	1.50	58,190
Cayuga	435	381	4.99	45,520.	38.1	3.50	332,788
Conesus	29	818	Si		7.8	0.83	
Hemlock	8	968	% %		2.9	0.50	
Keuka	183	402	18.1	11,610.	19.6	5.06	50,200
Otisco	99	788	6.5 8.	1,689.	7,00	92.0	2,710
Owasco	177	710	10.3	6, 600	7.7	1.30	27,352
Seneca	618	7-1-1	2.79	43,330	35.1	3.25	548,544
Skaneateles	297	863	13.9	8,900	15.0	3,46	55, 155

Above data principally from A Limnological Study of the Finger Lakes of New York, by Birge and Juday Bulletin of the Bureau of Fisheries, Vol. XXXII, 1914.

PRIENDS OF PLEISTOCENE GEOLOGY

FINGER LAKES FIELD TRIP, MAY 21-25, 1947

FIRLD GUIDE

Second Day, May 25th

Field party starts from south end of Cazenovia Lake on Highway 20. The following directions are on a point to point basis, in each case starting at a marked road, numbered highway intersection, or a designated stop. Observations may be made en reute as indicated in these notes.

1. Proceed west from Cazenovia on Highway 20 through LaFayette to the overpass et Cardiff. From Cardiff follow Highway 20 for 4.3 miles to crossroad. A stop will be made near the crossroad to observe the deltas near South Onondaga at the mouth of Cedarvale channel. These deltas were built in lake waters pended in Onondaga Valley. Several delta levels as shown on the map can be correlated with outlet channels leading eastward from Onondaga Valley.

Turn right from Highway 20 at crossroad, 4.3 miles west of Cardiff, going north down long hill known as Lord's Hill, to South Onondaga.

- 2. Turn left (west) at South Onondaga following paved highway through Cedarvale gorge to Marcellus. This cross-channel is the channel through which glacial Lake Dana (Lundy) drained eastward. At Marcellus turn left, then right, then left (south) following a road along nine mile creek valley bearing left at the first road fork and right at the second road fork, 2.3 miles south of Marcellus. This westerly trending road lies along the face of a morainic accumulation which shows ice contact phenomena. This moraine is apparently built on a platform of clay which will be seen exposed at the surface farther south. The moraine is probably to be correlated with other morainic accumulations which block the northern ends of the Finger Lakes valleys.
- 3. Turn sharp left at first road intersection, crossing the morainic ridge and go on to a clay mantled valley to the south. Continue southward to Highway 20.
- 4. Right (west) on Highway 20 to Skaneateles village at the north end of Skaneateles Lake. Stop for brief inspection of this part of the lake valley. This lake furnishes the municipal water supply for Syracuse.
- 5. Return eastward on Highway 20 about 0.5 miles to Highway 20N. Turn left on 20N, follow to Marcellus. About 3 miles from Skaneateles, 20N crosses a conspicuous glacial drainage way called The Gulf. This is another one of the series of cross-channels which carried drainage waters when the lake plain to

the north mas blocked by glacial ice.

6. Turn left at traffic light in Marcellus; proceed on Highway 174 northward to Camillus and junction with Highway 5. The last two miles of the road into Camillus follows a part of nine mile creek valley which carried a flood of glacial waters coming from the west.

The party will disband at Camillus. From Camillus, travelers to the east may take Highway 5 through Syracuse and Utica to Albany. Travelers going north or south will find Highway 11 crossing Highway 5 in Syracuse. Westward, Highway 5 joins Highway 20 at Auburn 18 miles west of Camillus.

Friends of Pleistocene Geology

The 1947 meeting and field trip of the Friends will be held in the Finger Lakes area in central New York Saturday, May 24 and Sunday, May 25. Headquarters will be at the Lincklaen House in Cazenovia, N.Y. The excursion will be guided by Earl T. Apfel of Syracuse University. Details of the meeting will be sent to those who plan to attend by April 15.

The Friends will meet at 9:00 am. on Saturday, May 24, on U. S. Highway 20 at the south end of Cazenovia Lake, at the edge of Cazenovia village. The day will be spent along the upper ends of the eastern Finger Lakes, studying the drift, morainic dams, spillways and ice margin phenomena. Lunch will be eaten in the field. The group will return to the Lincklaen House in Cazenovia for the annual dinner. Lodging may be secured there or at one of the nearby modern tourist cabins.

Sunday, May 25th, the group will visit the northern ends of the Finger Lakes and the notched escarpment where the Finger Lake valleys open onto the lake plain. Old till, drumlins and the escarpment with its cross-channels will be seen. A short time will be spent at some of the beaches of ancient Lake Iroquois and other glacial lakes. The trip will end near Syracuse shortly after noon on Sunday.

The enclosed postcard should be filled out and returned as soon as possible in order to permit final planning for the group. You are cordially invited to attend this meeting of the Friends of Pleistocene Geology and take part in the discussions in the field and after the annual dinner. Please return the card at once.

FRIENDS OF PLEISTOCENE GEOLOGY

Finger Lakes Meeting

May 24-25, 1947

The preliminary announcement of the Finger Lakes meeting stated that plans for the meeting would be sent to you later. The detailed field guide will be available at the time of the meeting. This sheet includes the names of the quadrangle maps which will be needed and arrangements for lodging which should be made ahead of time.

The Finger Lakes are large features and therefore require many maps to cover the whole area. The maps which will be used on the "Friends" trip will include the following 15 minute quadrangle maps published by the U. S. Geo-logical Survey.

Auburn Moravia
Genoa Syracuse
Ithaca Tully
Baldwinsville Cortland
Skaneateles Cazenovia

In addition, it will be desirable to have available the following $7\frac{1}{2}$ minute quadrangles which are published by the Army Map Service, 6101 MacArthur Blvd., Washington, D. C. These quadrangles cover the principal localities in which detailed observations will be made.

Army Map Service - 72 Minute Quadrangles, New York

Otisco Valley Tully Homer Spafford Sempronius

The headquarters of the trip will be at the Lincklaen House, Cazenovia, N. Y. This is on route U. S. 20, about 20 miles from Syracuse. Lodging will be available either at Lincklaen House, the Williams Inn, or one of the nearby tourist camps. Prices are approximately as follows:

Lincklaen House, \$6.00, \$7.00 and \$8.00 double

" 3.00, 3.50 and 4.00 single

The Williams Inn, about the same rates.

Tourist cabins, \$3.00 and \$4.00 double.

The Lincklaen House, Cazenovia, N. Y., will make reservations both for themselves and for the Williams Inn and correspondence should be directly with that hotel. Communications should be addressed to Earl T. Apfel, Geology Department, Syracuse University, for tourist cabin accommodations, as reservations will be made by the cabin camps only a limited number of days in advance of the meeting.

The field trip will start at 9:00 o'clock Saturday morning from the south end of Cazenovia lake, on U. S. Highway 20, about one mile west of the village of Cazenovia. Those who arrive too late to start with the party should call at Lincklaen House, Cazenovia, for the field guide and sketch maps which will direct them to the group.

FRIENDS OF PLEISTOCENE GEOLOGY

Supplementary Instructions Finger Lakes Trip, May 24-25, 1947

This supplementary note is sent because trainic conditions to Cazenovia have been somewhat changed over those which were in effect at the time the last instructions were distributed. Highway 20 east of Cazenovia is closed and the detour to reach Cazenovia is directed by way of Route 5 from Oneida to Chittenango, N. Y. Route 5 may be somewhat shorter than route 20 with its detour, for those who come from the east. One lane of Highway 20 was to have been kept open, but that route has been completely closed since the recent beginning of a construction project. From Chittenango to Cazenovia the detour passes Chittenango Falls State Park. The history of this falls is described by Dr. Chauncey D. Holmes in A. J. S. 29, 4-47: Glacial and Interglacial Development of Chittenango Falls State Park in central New York.

The field party will gather at the south end of Cazenovia Lake on Highway 20 at the place where the road lies along the lake shore. The party will leave the rendezvous very shortly after 9 O'clock Saturday morning. Those who arrive late may pick up sketch maps and field directions at the Lincklaen House in the village of Cazenovia, with directions for finding the excursion party.

There will be no facilities for getting lunch in the field. Therefore, each member of the party should be supplied with a bag lunch at starting time. A beverage will be supplied at the lunch hour.

Summary

- 1. FRIENDS start Finger Lakes field trip Saturday morning, May 24 from south end of Cazenovia Lake.
- 2. Lunch in the field each member supplying his own.
- 3. Annual dinner Saturday evening, May 24, Lincklaen House, Cazenovia 7 o'clock. Be sure you have requested a reservation either from Flint at Yale University or Apfel at Syracuse University.
- 4. Lodging individually arranged at the Lincklaen House or through Apfel of Syracuse.
- 5. Field trip Sunday, May 25 starting from south end of Cazenovia Lake, 9 A. M.
- 6. Field party disbands near Syracuse about noon Sunday.
- 7. Present anticipated attendance about 40.



Querlay on Friends photo

Key to people shown in group photo

1947 Northeast Friends of the Pleistocene trip Finger Lakes area, New York

Photo taken by John B. Lucke, University of Connecticut

- 1. Warren Gilman (Univ. Toronto)
- 2. Donald M. Brown (Ohio State Univ.)
- 3. Charles S. Denny (USGS)
- 4. James R. Jones (Syracuse Univ.)
- 5. William Spackman (Harvard Univ.)
- 6. Hugh M. Raup (Harvard Univ. [1950])
- 7. Rodney Avenius (Syracuse Univ.)
- 8. Kirk Bryan (Harvard Univ.)
- 9. Lloyd G. Reeds (Univ. Toronto)
- 10. Sidney White (Tufts Univ.)
- 11. Philip Schafer (Harvard Geol. Museum)
- 12. A. K. Watt (Univ. Toronto)
- 13. Louis W. Currier (USGS)
- 14. Peter Juengst (Syracuse Univ.)
- 15. Walter M. Tovell (Univ. Toronto [1950])
- 16. Earl T. Apfel (Syracuse Univ.)
- 17. R. C. Clement (Brown Univ.)
- 18. Roy E. Deane (GSC)
- 19. Kemble E. Widmer (Princeton Univ.)
- 20. Mrs. Roy E. Deane
- 21. Herbert E. Wright Jr. (Univ. Minnesota)
- 22. Paul MacClintock (Princeton Univ.)
- 23. Sheldon Judson (Harvard Univ.)
- 24. W. E. Benson (Yale Univ.)

- 25. Richard F. Flint (Yale Univ.)
- 26. Richard P. Goldthwait (Ohio State Univ.)
- 27. Mrs. Louis C. Peltier (Bucknell Univ.)
- 28. Louis C. Peltier (Washington Univ. [1950])
- 29. William M. Merrill (Ohio State Univ.)
- 30. Roger Colton
- 31. Mrs. W. S. Cole
- 32. Mrs. Howard E. Simpson
- 33. Robert O. Bloomer (Syracuse Univ.)
- 34. Harold Masursky (Yale Univ.)
- 35. Richard C. Weart (Syracuse Univ.)
- 36. Norman K. Flint (Ohio State Univ.)
- 37. W. S. Cole (Cornell Univ. [1950])
- 38. Howard E. Simpson (Yale Univ.)
- 39. ?
- 40. O. D. von Engeln (Cornell Univ.)
- 41. L. W. Ploger (Syracuse Univ.)
- 42. George B. Cressey (Syracuse Univ.)
- 43. Victor E. Schmidt (SUNY Brockport [1950])
- 44. Donald F. Putnam (Univ. Toronto)
- 45. Mrs. Herbert E. Wright