1946

NEW YORK STATE GEOLOGICAL ASSOCIATION

Vassar College,
Poughkeepsie, N.Y.
Sept. 21, 1945

To the member institutions:

The Association has been dormant since its last meeting in the spring of 1941, but it now seems proper to at least discuss the date of its revival. With that in mind we send this letter to each geology department which has been an active participant.

If the Association membership so desires, Vassar College, chosen in 1941 as the school to be host at the next meeting, can put on the customary two day meeting next spring. Such a meeting would probably give one day to the folded Appalachians in the Binnewater area, and one day to the series showing increasing metamorphism in eastern Dutchess County.

At this time we think it in order to restate the primary aim of these meetings. They were originally set up to give the students in the member colleges a chance to see other parts of the state in the field. At some meetings it has seemed to us that this aim was a little obscured, and that the meeting was conducted on more of a professional level, for the benefit of the faculty members attending. With the formation of the Northeastern section of the G. S. A., the professional interest can perhaps be best taken care of by meetings of that section, leaving us to care more specifically for the students.

In order to give us even an approximate idea of your feelings regarding a meeting next spring, we would appreciate hearing from you on the following points:

1. If a meeting is held, would your school attend? If so, a very rough guess as to numbers would be helpful.
2. Would you travel by car?
3. Would you prefer to come by train, and ride in a bus provided here, if the total bus fare for the two days was less than five dollars per individual?

An expression of opinion along any other lines than those indicated above will also be welcome.

T. M. Hills, President
A. S. Warthin Jr., Sec'y.

NEW YORK STATE GEOLOGICAL ASSOCIATION

Preliminary Notice of 18th Field Meeting, May 10-11, 1946.

Please circulate this notice to all members of your department.

Friday, May 10th.

Registration at a place to be announced in Kingston, N. Y., from 9 A. M. to 1.30 P. M.

10.00 A. M. Those who arrive in time for a morning trip will make a short excursion over the Siluro-Devonian section in the Vlightberg at Rondout, and the Pleistocene varved clays near Kingston Point. Lunch at restaurants in Kingston.

1.30 P. M. Drive to High Falls (Shawangunk-High Falls-Binnewater-Rosendale-Cobleskill formations), and then to Binnewater, where the party will walk over folds in the Siluro-Devonian beds.

5.15 P. M. Drive to Poughkeepsie, register at hotels, and eat supper at restaurant of your choice.

8.00 P. M. Gather at Geology Department, Vassar College. Short meeting of the Association, visit and smoker at Geology Museum.

Saturday, May 11th.

8.45 A. M. Pick up box lunches and drive eastward across Dutchess County to see the increasing metamorphism of sediments. Stops will be made at a slate, a highly pyritic phyllite, a garnetiferous schist, and a low-rank marble. These will all yield good specimens.

12.00 Noon. Box Lunches in the field.

12.45 P. M. Those who have time will visit a quarry in the Harlem Valley, where higher-rank marbles occur, and following that will see a staurolite schist locality.

Map Quadrangles: Rosendale, Rhinebeck, Poughkeepsie, Clove.

Accomodations: Rooms (particularly singles) are very scarce and we advise you to make reservations directly with hotels now and request written confirmation. In Kingston, the Governor Clinton Hotel has doubles only (from $5.50), the Stuyvesant (from $2, will not accept reservations for arrival after 6 P. M.) and the Hotel Kirkland. In Poughkeepsie, the Nelson House, the Campbell, the Kings Court (all $2 up). For tourist rooms and cabins (2, 3 or 4 in a room, at $1 or $1.50 each) write Mrs. Mary T. Lynch, Route 31, Poughkeepsie. No accomodations will be available at Vassar College. If you are unable to get a room, write the undersigned and we will find one somewhere for you.

Transportation: Replies to the letter circulated last autumn indicated almost everyone would come by car, so a bus is not planned for at present. There will be seats in cars for a few people who may come by train. Those wishing such transportation should write the Secretary.

Routine: This meeting has been planned with the idea of making only a few stops. At each stop there will be a very brief exposition by the leader, followed by ample time for each instructor to talk further with the students in his own party, and time for collecting.

MAKE THAT HOTEL RESERVATION RIGHT NOW!

A. S. Warthin, Jr., Secretary
Vassar College, Poughkeepsie, N.Y.

18th meeting

Contr.: A.S. Warthin

NEW YORK STATE GEOLOGICAL ASSOCIATION

Friday Morning, May 10, 1946

0.0 Park at Governor Clinton Hotel, headed east or southeast, ready to leave at 10 CO A. M.
0.1 Straight ahead on route 9-W.
0.2 Turn right on Saith Avenue.
1.3 Dead end; turn left.
1.35 Stop street; turn right on Foxhall Avenue.
1.5 Turn left on Washbrouck Avenue.
2.3 At Texaco station turn left on tarred lane (Union St.)
2.6 Park just beyond Emmanuel Baptist Church and walk up the path by the street light. In 10 yards turn up hill on old path to abandoned quarry in Vlightberg, where Silurian beds are exposed in unconformity with the Austin Glen beds of the Normanskill formation.
Return to car, fork right, and continue 8 blocks on Union Street to dead end at 3.1 miles.
3.1 Turn left on North St., and continue through four corners to 3.5 miles.
3.5 The Hutton Company brick plant. Park cars on right side of road and walk into pit to see banded Pleistocene clays used for the manufacture of common brick.
Return to cars, turn around, and backtrack to four corners
3.7 At four corners, turn right uphill.
4.1 Angle left past mushroom farm in old waterline mines, and go uphill on the road guarded with a stone parapet on the left side (Delaware Avenue), parking at 4.3 to 4.4 miles. The leader will take the party into the old Gross quarry to see the Becraft-Alsen-Port Ewen beds overthrust on the Rondout and Manlius.
After returning to cars, proceed ahead on Delaware Avenue to its intersection with Broadway at 5.1 miles, turning right there toward restaurants and lunch.

The afternoon trip leaves promptly at 1 30 P. M. from the Governor Clinton Hotel, but note that we will move in the opposite direction at that time. Park cars facing west or northwest.

NEW YORK STATE GEOLOGICAL ASSOCIATION
18TH MEETING - POUGHKEEPSIE 1946.

Friday Afternoon, May 10th.

Miles

Park at Governor Clinton Hotel, facing west or northwest.

0.0 West at traffic light on Pearl St., for 4 blocks.

0.2 Right on Washington Avenue for 4 blocks.

0.5 At traffic light angle left on Route 209.

1.0 to 11 miles. The route runs along the top of the Onondaga limestone, which can be seen in many exposures as a light gray rock with occasional darker chert nodules or bands. In this area the fossil collecting is poor. The Onondaga dips gently to the NW. under the valley of Esopus Creek, which is cut on the weak Bakoven shale, not exposed here. The far wall of the valley is formed by Mount Marion sandstone and shale. On the low plateau between the Mount Marion cuesta and the main Catskills lies the Ashokan Reservoir of the N. Y. City water supply system.

3.0 Hurley. SLOW. Two right-angle turns in village.

3.3 Straight ahead; do not cross bridge.

10.0 Stone Ridge village; straight through.

11.2 Turn left on N. Y. Route 213 to High Falls.

12.3 SLOW. Hill, turn and underpass.

12.8 STOP 1. The High Falls of Rondout Creek. Park cars on right side of village street and follow leader to see the section given in detail on the next page.

12.8 Continue straight through village.

14.0 The ridge with many pines visible on the right is the north end of the Shawangunk Mtn. range, here seen across a valley occupied by a narrow syncline.

14.7 STOP 2. 10 minutes only. Park cars on right, cross road to foot of cliff of New Scotland limestone (fossils not collectible here) and walk up on footpath of bridge over Rondout Creek to see anticline of Manlius-Kalkberg beds cut by creek. Good picture if lighting is favorable.

15.3 Shawangunk conglomerate, brought up to this level in another fold, on left side of road. DRIVE SLOWLY, and get the cars as far off on one side of the road only, as is possible, at:

15.4 STOP 3. The Rosendale "caves". Structure and stratigraphy here are somewhat complex, so follow the leader, who will explain it and take you into the "caves" at the best spot.

16.0 Turn left up hill off route 213. Note this corner as you will return to it in about an hour.

16.2 Manlius limestone and higher beds in cliff on right.

17.0 Right and immediately left across railroad tracks.

17.4 Park on right; follow leader on foot along railway track cutting folds in Silurian and L. Devonian beds. Total walk about 1.5 miles.

Retrace route to:

18.8 Turn left at corner on route 213, and go straight through Rosendale to 20.0 miles.

20.0 Turn right on Route 32, which is followed for about 7 miles. After crossing the Wallkill at 22.8 many exposures of the brownish Snake Hill shale appear along the road. The Shawangunk Mountains make the ridge on the right.

27.5 New Paltz. Turn left off Route 32 at Diner.
27.7 Turn left up hill with trolley tracks.
33.6 From here on, particularly on the approach road to the Mid-Hudson Bridge, the massive Austin Glen grits of the Normanskill formation appear at intervals.
35.1 Junction, turn right into Highland.
35.3 Jog right, then left, through Highland business district.
35.5 Turn right on U. S. route 9-W.
35.9 Traffic circle; go three-fourths of the way around and take Mid-Hudson bridge to Poughkeepsie. Toll of 25¢ per car is paid at far end of bridge.

At bridge plaza at east end of bridge fork on left side of Mobilgas station. Follow this street (Union) to its dead end. Turn right on Market St. one-half block to Nelson House. To Hotels Campbell and Kings Court, go past Nelson House and turn left at next corner, proceeding one block.

To Mrs. Lynch's (The Farm) or to hotels in Pleasant Valley; continue past Nelson House 1½ blocks to traffic light on Church St. Turn left there, and follow U. S. Route 44 straight out to 42.2 miles (The Farm, on left) and 46.2 miles (Pleasant Valley).

To reach Vassar College from downtown hotels: go one block north to Main Street, then 1.6 miles out Main St. to Raymond Avenue, where the old car tracks turn right. Turn right and go 0.7 miles to college entrance through archway in building. Ahead as you enter campus is the Main Building of Vassar College. Geology is located in Ely Hall, at the left rear of the Main Building, in the brick building with arched porch.

8.00 P. M. Discussion, election of new officers, and inspection of Geology Museum, Ely Hall, Vassar College.

Silurian Section along Rondout Creek at High Falls *

	Feet
Cobleskill limestone: Dark-gray fine-textured massive conchoidally fracturing limestone forming the top of the falls; fossils abundant; Halysites sp. and Stromatopora constellata Hall common	10
Rosendale waterlime: Dark-gray to black fine-textured thick-bedded conchoidally fracturing limestone extending almost to the base of the falls; apparently non-fossiliferous	15
Wilbur limestone: Black, yellow-weathering impure limestone in reentrant at the base of the falls; fossiliferous; Halysites sp., Favosites cf. F. niagarensis Hall, Enterolasma caliculum (Hall), and Atrypa sp. common	3
Binnewater sandstone: Upper beds of white ripple-marked and cross-bedded quartzitic sandstone grading downward to alternating beds of buff, gray, and greenish fine sandstones and shales, exposed along the road to the power house and beneath the falls; about . .	25
High Falls formation:	
Dark-gray and greenish quartzose shales, with reddish shales at the base	27
Dark-colored calcareous sandstone and impure gray limestone, forming ledges in stream north of grist mill and exposed at power house	13
Reddish and greenish shales and fine sandstones, mostly concealed	45
Total thickness of High Falls	85
Shawangunk conglomerate: White, well-cemented, resistant quartz sandstone and conglomerate, forming ledge in Rondout Creek above old canal bridge; thickness in borings	270

* After Chadwick and Kay, Guidebook 9A XVI International Geological Congress.

NEW YORK STATE GEOLOGICAL ASSOCIATION

18th Field Meeting, Ulster-Dutchess Counties, 1946

Geologic Section

Devonian
- Mount Marion sandstone and siltstone - - - - - - - - - 800'
- Bakoven black shale - - - - - - - - - - - - - - - - - - 250'
- Onondaga limestone - - - - - - - - - - - - - - - - - - 200'
- Schoharie-Carlisle Center-Esopus shales - - - - - - - 800'
- Orishany beds (Connelly ss., Glenerie cherty ls.) - 70'
- Port Ewen impure limestone - - - - - - - - - - - - - - 150'
- Alsen limestone - - - - - - - - - - - - - - - - - - - 25'
- Becraft limestone - - - - - - - - - - - - - - - - - - 30'
- New Scotland limestone
  - Upper shaly limestone member - - - - - - - - - - - 100'
  - Cherty (Kalkberg) member - - - - - - - - - - - - - 20'
- Coeymans limestone - - - - - - - - - - - - - - - - - - 25'

*Silurian
- Manlius limestone - - - - - - - - - - - - - - - - - - 55'
- Rondout waterlime - - - - - - - - - - - - - - - - - - 15'
- Cobleskill limestone - - - - - - - - - - - - - - - - - 12'
- Rosendale waterlime - - - - - - - - - - - - - - - - - 15'
- Binnewater sandstone - - - - - - - - - - - - - - - - - 30'
- High Falls shale - - - - - - - - - - - - - - - - - - - 70'
- Shawangunk conglomerate - - - - - - - - - - - - - - - - 100'

Ordovician
- "Hudson River Formation"
  - Snake Hill shales - - - - - - - - - - - - - - - - -2000'
  - Normanskill formation
    - Austin Glen grit and shale - - - - - - - - - - -1200'
    - Mount Merino cherty slates - - - - - - - - - - -1000'

Cambro-Ordovician
- Wappinger group: limestone and dolomite ranging from Middle Ord. down to Lower Cambrian age. - - -1800'

Cambrian
- Poughquag quartzite - - - - - - - - - - - - - - - - - 300'

Pre-Cambrian gneisses and granites

Formations from the Port Ewen down to the Wappinger will be seen at first hand; the others will be visible only in the distance.

*In Ulster County the Silurian formations disappear northward, beginning at the base. At the Vlightberg in Kingston the oldest Silurian beds are of Cobleskill age; at Catskill they are of Rondout age.

Catskill redbeds — 5000'
Kiskatom redbeds —
Ashokan flagstones — 300'

Park on Raymond Avenue between Main St. and Vassar College, headed toward the college, in time to pick up lunches and leave at 8.45 A. M., Daylight time.

0.0 Left on Collegeview Avenue, left at next corner, then right after 3 blocks onto N. Y. 55.
2.8 New Haven Railway underpass.
3.2 Fork right on Noxon Road.
6.6 SLOW. Curves and grade.
7.2 Keep left on tar road.
7.7 STOP 1. Here and also at 7.9 miles are fine exposures of a green slate crumpled in small folds, with fracture cleavage parallel to axial planes of folds. Resembles Nassau (L. Cambrian) of Albany district; if Nassau identity is proven, this is either (a) a bed concealed by overlap where the normal stratigraphic sequence is exposed; (b) a thrust sheet of considerable movement.
8.6 SLOW. Left turn on tar road.
9.0 Taconic Parkway underpass. Note stalactites hanging from 6-year old arch.
10.3 SLOW. Two sharp corners.
10.7 Arterial highway stop. Keep straight ahead on tar road.
12.3 Turn right on Route 55. Watch for road construction.
12.9 STOP 2. Delta beds in temporary glacial lake at 680' elev.
13.4 STOP 3. Black graphitic and highly pyritic phyllite of probable Black River or Lower Trenton age. Pyrite crystals may be collected here.
14.0 STOP 4. Black calcareous, fossiliferous marble of Mohawkian age, and underlying calcareous and dolomitic marbles of the Wappinger group. Low-rank marbles.
14.7 At foot of hill turn left off route 55 on tar road.
15.8 Note contact on hill at right between junipers growing on marble and hardwoods on schist.
17.1 Turn right up long hill on tar road.
18.1 Chloritoid schist band crosses road here. No stop.
19.5 STOP, BUT STAY IN CARS. Observe to the SW. the even summits of the Highlands of the Hudson, developed on Pre-Cambrian gneisses at about 1500'. The relatively level area where you are now parked at 1200' may represent an inheritance from the same erosion surface, here at lower elevation because softer rocks are involved.
20.0 Steep hill and hairpin curve. Use second gear until 20.7 mi.
21.2 SLOW. Park on left for STOP 6. The rock is a garnet-staurolite schist. Much introduced and original quartz gives it the general appearance of a gneiss. Lunch.
21.8 Narrow road in bad shape, and 2 one-way bridges in the next two miles.
23.2 Note light gray marble outcrops in fields on right.
24.1 Caution. N. Y. Central Ry. grade crossing.
24.4 and 24.5 Two Arterial Highway stop signs. Go straight ahead at the first, and turn left at the second, on to route 55.
25.0 Route 55 turns right on concrete. Our road from this point depends on size of party and weather conditions, so follow leader. In next ten miles will be seen: quarry in highly crystalline dolomitic marble; "pegmatitic" masses in marble.