

Synopsis of Itinerary

Wednesday evening, May 29th.
Assemble at Newton. Registration at Cochran House.

Lv.	Thursday, May 30th. Cochran House at 8:00 A.M.		8:00 A.M.
Stop 1.	Via State Highway S-31 and Sunrise Mountain Road in Stokes State Forest to Shelter House on top of Kittatinny Mountain. Basal Silurian Quartzite and Physiography. Leaders: M.E. Johnson and H. Woodward	Ar.	8:50 A.M.
		Lv.	9:20 A.M.
Stop 2.	Via North Shore Road to north of Beemerville. Libertyville Volcanic plug. Leaders: A.F. Buddington and H.H. Hess	Ar.	9:45 A.M.
		Lv.	10:15 A.M.
Stop 3.	Libertyville, Sussox and Hamburg. Turn left at Hamburg to McAfee and left fork to quarry. McAfee Quarry in Franklin limestone, Metamorphism; mineral hunting. Leaders: E. Sampson, A.F. Buddington and H.H. Hess	Ar.	10:50 A.M.
	Lunch	Lv.	12:30
Stop 4.	Return via Hamburg and straight through to road cut 1 mile west. Kittatinny limestone, Oolites Cryptozoa, etc. Leader: H. Woodward	Ar.	12:45 P.M.
		Lv.	1:15 P.M.
Stop 5.	Continue on same road 1-1/2 miles to North Church Delta. Brief stop for Glacial Geology. Leader: M.E. Johnson	Ar.	1:25 P.M.
		Lv.	1:55 P.M.
Stop 6.	Via Franklin and Route 23 to top of Hamburg Mountain. Pre-Cambrian Gneiss complex. Leaders: E. Sampson and A.F. Buddington	Ar.	2:15 P.M.
		Lv.	2:35 P.M.
Stop 7.	Via Route 23 to Newfoundland. Turn right on Rockaway Road and south to southeast face of Copperas Mountain, Green Pond (Silurian) Conglomerate overlying Pre-Cambrian Gneiss. Interesting mineral locality. Leaders: Bradford Willard and E. Sampson	Ar.	3:00 P.M.
		Lv.	4:00 P.M.
	Return to Newton via New Russia and Sparta.		
	Dinner between		6:00 and 8:00 P.M.

Explanation of Geology of Franklin and Ogdensburg deposits by Allon Pinger, Geologist. New Jersey Zinc Company.

Brief explanation by Paul MacClintock of Alternate trip on May 31st to Study Physiography, Glaciation and Soils.

Friday, May 31st. Group I.

Economic Geology and Mineralogy trip.

Lv. Cochran House, Newton at 8:30 A.M. 8:30 A.M.

Stop 1. Via Sparta and Ogdensburg to New Jersey Zinc Company office at Franklin. Party will divide into three groups lead by Geologists of Company to
Ar. 9:00 A.M.
(1) Inspect Minerals.
(2) See Contact of Cambrian Qtzite in Pro-Cambrian Gneiss
(3) Inspect open cuts.

Buffet lunch 12:00-12:45

Stop 2. Via Sparta and Woodport to Bershine Valley. Turn right and follow road south to Route 46. Sharp left and 3/4 mile further turn left to Scrub Oak mine, Alan Wood Steel Company. Trip through mill to see modern magnetic and gravity separation of magnetite and martite 30% ore.
Ar. 1:45 P.M.
Leaders: M.E. Johnson and Company Staff Lv. 2:45 P.M.

Stop 3. South, across Route 6 to Canfield Phosphate Mine, 1-1/4 miles. Relations of Magnetite ore body to country rock. Mineralogy.
Ar. 3:00 P.M.
Leader: A.O. Hayes Lv. 4:00 P.M.

Via tarred road south and southwest to Chester. Left on Route 31 and south to Route 29 and east to Plainfield.

Park Hotel on West 7th Street

Annual Meeting - Park Hotel 8:00 P.M.

Friday, May 31st. Group II.

Physiography, Glaciation and Soils.
Leaders: L.L. Lee and Paul MacClintock.

Lv. Newton at 8:00 A.M. 8:00 A.M.

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| Stop 1. | Route 206 to Branchville thence north-east to Beemerville. Beemerville soil conservation experiment station. | Ar. 8:30 A.M. |
| | | Lv. 10:30 A.M. |
| Stop 2. | Route 206 to Newton and 31 south three miles. Three miles south of Newton on Route 31. Fox soil on glacial outwash. | Ar. 11:00 A.M. |
| | | Lv. 11:30 A.M. |
| Stop 3. | Continue south on Route 31 to Netcong turn right on Route 6. Note terminal moraine. 2 Miles west Budd Lake on top of type locality of the Schooley peneplain. Illinoian till, Washington soil. (Including 30 minutes for lunch in the field). | Ar. 12:00 |
| | | Lv. 1:30 P.M. |
| Stop 4. | Continue west on Route 6. Great Meadows, Ancient glacial lake. Muck soil | Ar. 2:00 P.M. |
| | | Lv. 2:30 P.M. |
| Stop 5. | Continue on Route 6 almost to Buttzville. Buttzville, 1/2 mile east. Cut of fresh Wisconsin till. | Ar. 2:35 P.M. |
| | | Lv. 3:00 P.M. |
| Stop 6. | Turn south on Route 30. Almost to Washington. Washington, 2 miles north. Illinoian till and Washington soil. | Ar. 3:00 P.M. |
| | | Lv. 3:30 P.M. |
| Stop 7. | Continue south on Route 30 almost to Clinton point. Clinton Point, 1/2 mile North Hagerstown soil on Beekmantown limestone. | Ar. 3:30 P.M. |
| | | Lv. 4:00 P.M. |
| Stop 8. | Continue south on Route 30 at 3 miles south. Note the Berks soil on Martinsburg Shale. 3 miles north of Flemington. Penn soil on Brunswick shale. | Ar. 4:00 P.M. |
| | | Lv. 4:30 P.M. |
| Stop 9. | South to Flemington and west to Croton. Croton, Schooley peneplain cut on tilted Lockatong Argillite: Croton soil. | Ar. 4:30 P.M. |
| | | Lv. 5:00 P.M. |
| Stop 10. | Back to Flemington, northeast through Flemington Junction to Whitehouse, thence east on Route 28 (U.S.22) almost to North Branch. 2 miles west to North Branch. Somerville Peneplain, Kansan till, Washington soil | Ar. 5:00 P.M. |
| | | Lv. 5:30 P.M. |
| | Continue east on Route 29 to Plainfield. | |
| | Annual Meeting at Park Hotel | 8:00 P.M. |

Saturday, June 1st.

Geology of the Coastal Plain.

Leaders: A.O.Hayes, E.Dorf and H.Johnson

- Lv. Park Hotel at 8:00 A.M. 8:00 A.M.
- Stop 1. Via 7th Street to Dunellen and New Market, Ar. 8:30 A.M.
turn left to Stolton and Piscataway, then
left crossing Mill Brook to top of hill.
Unconformity between Triassic and
Cretaceous. Lv. 9:00 A.M.
- Stop 2. Via Nixon and Perth Amboy to Route 4 Ar. 9:45 A.M.
and south across Raritan River to
Route 35 and left on Route 35 to
Cliffwood. Left to Cliffwood Beach.
Magothy formation overlain by
Merchantville Clay. Pyrite, Lignite
and Fossils. Lv. 10:30 A.M.
- Stop 3. Return to Route 35, turn left and south- Ar. 10:55 A.M.
east 2 miles to Hazlett Road. Turn right
and south 2 miles to top of Beers Hill,
Hornerstown, Tinton and Red Bank Vivianite, Glauconite
formations Fossils. Lv. 12:00
- Stop 4. Follow same road 1/2 mile south to Ar. 12:10 P.M.
Crawford's Corner. Navesink formation.
Fossils. Lv. 12:40 P.M.
- Stop 5. Take first turn left to Middletown and Ar. 1:15 P.M.
straight through to Chapel Hill, Navesink
and Route 36 to Scenic Highway, Monmouth
County, Route 8. Turn left to top of
Hill and Log Cabin Inn.

Lunch - \$.75

Alternative trips to Sandy Hook and near-by exposures of Cretaceous and Tertiary formations will be outlined after lunch.

Note:

A brief outline of the Geology of New Jersey will be given to all registrants. A small registration fee will be charged.

Morodith E. Johnson, Chairman,
Local Committee .

Helgi Johnson,
Secretary, Local Committee,
Rutgers University,
New Brunswick, N. J.