DISCLAIMER

Before visiting any of the sites described in the New England Intercollegiate Geological Conference guidebooks, you must obtain permission from the current landowners.

Landowners only granted permission to visit these sites to the organizers of the original trips for the designated dates of the conference. It is your responsibility to obtain permission for your visit. Be aware that this permission may not be granted.

Especially when using older guidebooks in this collection, note that locations may have changed drastically. Likewise, geological interpretations may differ from current understandings.

Please respect any trip stops designated as “no hammers”, “no collecting” or the like.

Consider possible hazards and use appropriate caution and safety equipment.

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Mt Holyoke

35th NEW ENGLAND INTERCOLLEGIATE GEOLOGICAL EXCURSION

Host College-TRINITY COLLEGE, Hartford, Connecticut
assisted by Wesleyan and Yale Universities
October 20, 21, 22, 1939

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Schedules

Friday afternoon, October 20.-Registration at College Lounge.
2.30 field trip afoot from Campus. Trap and sandstone outcrops, faults, vein minerals, igneous contacts; glacial scratches and loess.
3.45 by cars to quarries: pillow structures, spatter cones, and evidence of faulting.

Friday evening:-Get-to-gether at Commons, 6.30; (dinner, 45 to 75¢); visit to museum; college chapel; conferences.

Saturday, October 21:-
Trip A.-Glacial:-Dr. Flint. Leaves college 8.30, returns 3.
Trip B.-East Wall of Triassic:-Dr. Longwell. Triassic and pre-Triassic structure and sedimentation.
EVENING MEETING.- Group dinner at Commons, $1 per person
Business meeting, discussion, and conferences-Auditorium.

Sunday, October 22:-
Trip C.-The Eastern Highlands:-Dr. Peoples. Leaving time to be announced. Crystallines between Bolton Notch and Portland, including visits to pegmatite quarries.
TRip D.- West wall of Triassic:-Professor Wheeler

Complete data and logs of trips to be supplied at meetings. More complete details than those above will be mailed each member of group by Dr. Edward L. Troxell in several days.

HOTEL RESERVATIONS

	Bond Hotel	Bond Annex	Garde Hotel*	Heublein Hotel
Single, no bath	-------	--------	$2 - $2.50	$2 - $2.50
Single with bath	$3 -3.50	$2.50-3	$2.50-3.50	$3 - $4.50
Double no bath	-------	--------	$3.50	$3 - $4.00
Double with bath	$4.50-5	$4.-4.50	$4.00-6.00	$4 - $7.00

*Dr. Troxell states Hotel Garde rate is with breakfast
Write direct to hotel clerks for reservations.

IMPORTANT:-Geology students whose names are not included on our regular mailing lists are invited to attend excursions without further notice.

Secretary:-Lloyd W. Fisher
Bates College
Lewiston, Maine

PLEASE POST ON BULLETIN BOARD

NEW ENGLAND GEOLOGICAL EXCURSION

Trinity College, Hartford; October 20, 1939.

Friday Afternoon, Oct. 20

2:30 o'clock. Visit geological evidences on Campus and Rocky Ridge Park: Triassic outcrops, faults, veins, contact, glacial scratches and loess.

3:30. By car via. Summit St. and Route 6A to:

	Distance in miles	Minutes, Travel,	Talk.
Newington Quarry. - - -	2½	7	15
Back to highway, 6A.- -	1	4	
New Britain Cut-off, minerals pillow structure, contact.- -	8	15	20
Back to intersection.- - - -	2	4	
Farmington Quarry, spatter cone, (1½ mi. E. of Farmington)	3	5	15
Return to Trinity College, (Keep south of Congested areas)- -	8	20	
	Total	55	50

The hour: 5:15 o'clock. Time elapsed: 1 hr. 45 mins.

Friday Evening,
6:30. Supper served at the Commons (50¢ to 75¢)

7:15. A welcome to Trinity College by President Remsen B. Ogilby. Visits to the College Chapel, the Museum, Chemistry Laboratory, etc. Greet old friends, meet new ones.
9:30. Refreshments in the Grille.

Announcements:

Saturday: Longwell trip, meet at Portland Bridge, at 8:30 A.M.

Flint trip, meet at the College " " "

Group dinner at 7:00 P.M. the Trinity Commons.

Business meeting and discussion, the Auditorium " 8:00 P.M.

Sunday: Peoples trip, meet at Church Corners, East Hartford, at 8:30 A.M.

Lougee trip, not formerly announced, meet at Trinity College at ~~9:00~~ 8:00 A.M. Glacial geology near Farmington.

New England Intercollegiate Field Conference 1939
TRINITY COLLEGE, HARTFORD, CONN.

Field excursion "A": Glacial Geology of Hartford-Middletown Region
Saturday, October 21. Leaving Trinity College 8.30 A.M.

Itinerary

Mileage	
0.0	Trinity College Campus; Cor. Summit St. & College Terrace
0.1	L on Zion St.
0.2	R on Flatbush Ave. - (Dissected plain underl. by Hartford clay)
1.0	Cross Park River
13.0	R on New Park Ave.
1.5	Fork L on Prospect Ave.
2.0	L into Michael Kane clay pit (Hartford clay) Top el. ± 75'
	STOP 1
2.0	do. (Reset odometer)
2.4	Bear R on New Park Ave.) (clay plain)
3.6	L on New Britain Ave.)
4.3	R on Montrose St.
4.5	L on Stanwood St.
4.6	Cor. Stanwood & Nepaug Sts. (Top of clay, el. ± 70')
4.7	R on Newington Ave. - (Dissected clay plain)
5.8	Cor. Newington Ave. and Garvan St. - (Red-gravel knoll surrounded by Hartford clay).
	STOP 2
6.2	Intersec. Stoddard Ave. & Main St., Newington; traffic circle. Expo. behind Tydol filling sta: (Tough red clayey silt with stones in upper part. El. ± 85').
	STOP 3
7.1	Newington Ctr. R on Rte 175 (Red silt, till, bedrock)
8.5-8.8	New Britain channel, N end
8.9	Blue Danube Inn. Walk 0.2 mi. N along Barbour Rd to exposure of (gravel on tough red silt).
	STOP 4
9.1	Fork L on East St. Exposures, R, of reddish ice-contact sand and gravel
9.6	Fork L with East St, across RR tracks
10.8	L on Dwight St.
11.2	R on Linden St. (Floor of New Britain channel, L)
11.4	L on Belden St. to Cremo Brewery; then
	STOP 5
11.6	Back westward on Belden St.
12.1	L on East St. (Red gravel and till)
12.7	L on Ellis St.
12.9	R on Rocky Hill Ave.
13.3	L on South St.
13.8-14.0	(Floor of New Britain channel; at R underlain by red silt & clay; beyond, bedrock outcrop R.)
14.3	Fork R on Church St.; (deep kettle, R. Beyond, L, lamin. sand exposed high in ice-contact knoll)
15.3	L at "T" (Continuous knolls of "kame" type)
15.4	R on US 5.

Mileage	
	STOP 5 (contd.)
16.2	Fork R (Red-gravel knolls, R)
16.3	Sharp L; then R on Berlin cutoff
17.3	L on Rte 72.
18.1	Fork R with Rte 72.
20.9	Fork R with Rte 72
21.6	Entrance, R, to Tuttle No. 4 clay pit (tough red varved silt & clay with stones in upper part)
22.9	Michael Kane Newfield pit, L. (do) (clay plain with undul. surface).
	STOP 6
24.4	L on Washington St., Middletown
24.8	L on Main St.
	[Stop 45 min. for lunch.]
25.1	Bear L on bridge approach
26.1	Portland. Straight ahead on Rte 15
28.1	Gildersleeve) (Connecticut R. floodplain)
29.1	R with Rte 15)
29.4	Pit, R, exposing red kame-terrace sand and gravel, with eolian sand veneer.
	STOP 7
29.7	(View of river-cut face of kame terrace ahead, L.)
30.4	Mobilgas filling sta., L. (View W to red kame-terrace mass across Conn. River)
	STOP 8
31.9	(View L over broad top of kame terrace) (Road follows inner
32.3	White school, L. (Kettle complex in kame terrace) (margin of kame (terrace.
	STOP 9
33.1	(Summit (head) of kame terrace (el. ± 200'); constructional slopes, L.)
33.5	Exposure, R (kame-terrace stratified drift)
33.7	South Glastonbury; cross Roaring Brook
34.7	(Knolls of red stratified drift, R)
37.1	Glastonbury, R on Hebron Ave. (Rte 94) (Conn. River terrace)
37.5	L on House St.
37.8	Salmon Brook. Walk 1/4 mi. W to exposure of (sand & gravel on eroded Hartford clay [local contaminated phase])
	STOP 10
38.1	L on Spring St.
38.6	R on Rte 15
40.2	L on Wadsworth St., Hockanum
40.4	R at "T"
40.6	Exposure, R, of (parallel-bedded dune sand at crest of stream-terrace scarp).
	STOP 11
40.9	Bear L into Rte 15
42.1	Silver Lane; bear L with Rte 15
42.4	Hockanum River embankment, East Hartford. End of trip.

TRIP B
NEIGE 1939

Guide of trip to eastern border of Triassic Lowland, Oct. 21, 1939. Purpose: to study evidence on nature of great boundary fault, as recorded in sediments and structure of Triassic strata, in features of Triassic igneous rocks, and in structure of pre-Triassic rocks.

Assemble at east (Portland) end of Middletown bridge across Connecticut River (Route 15) at 8:30 A.M. (Those who start from Trinity College should allow at least half an hour for reaching the bridge — the distance is about 15 miles.) Bring lunch.

	Odometer reading	Time
Station 1. Old brownstone quarry in Portland	0 mi.	8.40
Brief preview of trip. Distribution of maps. Discuss lithology and structure of strata in quarry.		9.00
Southeast on Route 14. Stop at sandstone outcrop on slope below railroad (2).	1.4 mi.	
Station 2. Note increase in eastward dip.		9.10
Continue on Route 14 to good exposure of sandstone on new highway (3).	1.6	
Station 3. Note further increase in dip.		9.25
Continue eastward to outcrops of fanglomerate near fault (4).	2.0	
Station 4. Discussion of the structure-section and its significance.		9.45
East to first road, north to outcrop of schist (5).	2.4	
Station 5. Examination of schist. Note westward dip of schistosity.		10.00
North to large exposure of fanglomerate (6)	3.2	
Turn cars at crossroads beyond.	3.5	
Station 6. Examination of coarse fanglomerate near fault.		10.20
Return to crossroads, turn right to exposures of fanglomerate (7).	4.3	
Station 7. Brief examination of fanglomerate.		10.30
Return by Route 14 to Portland, south on Route 15 to Durham, left on Route 77 to fanglomerate exposure (8).	15.5	11.00
Station 8. Examination of fanglomerate near fault.		11.20
Continue on Route 77 to "Foye Volcano" (9).	16.3	
Station 9. Brief examination of igneous rock near fault.		11.30
Continue on Route 77 to Bluff Head (10).	19.5	
Station 10. Study of trap-schist contact.		11.50
Continue to Lake Quonnipaug. Lunch.		
Continue to old trap quarry (11).	20.7	
Station 11. Study of sedimentary breccia near upper lava flow.		12.55
Continue southward to foot of lake. South on country road to trap dike east of fault (12).	22.4	

	Odometer reading	Time
Station 12. Note westward dip of dike; parallelism with fault. Return to Route 77. South to junction with Route 80. West to exposure of trap dike (13).	24.7 mi.	1.15
Station 13. Brief examination of dike - its strike and dip. Continue west to exposure of Triassic rocks near North Branford (14).	27.1	1.35
Station 14. Examination of sandstone and breccia above middle lava flow. Note angularity of larger fragments. Continue to North Branford, south to Post Road, west to junction near Mobilgas station, north on country road to fault valley (15).	32.0	2.00
Station 15. Sheared gneiss near fault; fault trench. Continue north to first road right; east to vicinity of "Boulder Ridges" (16).	33.6	2.20
Station 16. Examination of coarse fan deposit and feather-edge of upper lava flow. Return to Post Road. Continue to junction with Alps Road. South to exposure of gneiss (17).	37.3	3.00
Station 17. Discussion of slickensides in gneiss. Continue to Short Beach, west across Stony River bridge, north on first road to Beacon Hill (18).	39.6	3.20
Station 18. Examination of middle lava sheet, fan deposits, and structure in gneiss. Return to paved road, west to first road left, south to exposures of gneiss (19).	40.7	3.50
Station 19. Discussion of regional structure in gneiss. Continue to East Haven, east on Post Road to new road-cut near Lake Saltonstall (20).	42.9	4.10
Station 20. Discussion of change in grain size away from fault zone. North on short road to railroad (21).	43.2	4.30
Station 21. Further evidence on change in grain size. General discussion.		4.46

End of trip. Return to Hartford (about 40 miles).

TRIP C
NEIGE 1939

CRYSTALLINES OF THE EASTERN HIGHLANDS

Leaders: Peoples and Keppel

Bring Lunch

Starting point: East Hartford. Time: 8:30 A.M.

Mileage	
0	Cross the bridge to East Hartford on U. S. 44. Set speedometer to 0 at east end of bridge.
1	Turn right on U. S. 44, Conn. 15 and 2 and stop at curb. The trip will start from here at 8:30. Follow Conn. 2 and 15 to Glastonbury.
5.6	Turn left at rotary traffic circle on Conn. 2.
8.6	Climb hill at edge of Eastern Highlands passing outcrops of Glastonbury gneiss.
8.9	Stop #1. Time: _:50. Tower Hill Granite Quarry. Leave: 9:20. Continue on Conn. 2.
9.4	Leave Conn. 2, turning right on macadam road and follow sign to Rocky Hill Ferry.
10.	Stop #2. Old Curtis or East Glastonbury quarries at road intersection. Stop for 30 minutes. Leave 10 A.M. Continue on macadam to west.
12.9	Turn left on Conn. 15, cross bridge over Roaring Brook and park.
13.1	Stop #3. Roaring Brook. Time: 1 hour. Leave 11:10. Continue south on Conn. 15.
14.3	Pass outcrops of Maromas gneiss.
15.2	Portland town line. Pegmatite on left.
15.4	Turn left south of Hale Creek on dirt road.
15.6	Turn right through gate. Stop #4. Hale Quarry. Time for lunch and stop: 2 hours. Leave 1:15 P.M.
15.8	Turn left on highway Conn. 15.
18.0	At four corners continue straight on Conn. 15 alternate.
18.9	Left at cemetery.
19.5	Stop at foot of Collins Hill. Stop #5. Collins Hill. This is the last stop.

The purpose of this trip is to show the lithology and structures of some of the crystalline rocks bordering the Triassic on the east between East Hartford and Portland. It will be seen that the boundary between the Triassic and the crystallines is parallel to the structural lines of the crystalline rocks. A number of pegmatite bodies and the contrast in their form of intrusion will be noted. There will be opportunity to collect from the dumps at the Strickland Quarry.

Stop 1. Tower Hill Granite Quarry

This quarry is in the Glastonbury granite which is here quarried chiefly for curbstones and to a lesser extent for other building purposes. The stone is a much lighter colored phase of the Glastonbury granite than will be seen on Stops 2, 3, and 4. A foliation gently dipping to the northwest is to be noted.

There is a series of quarries on the Eight Mile Hill, a few of which are still operating even though the demand for curbing has declined. Small pegmatite dikes are common in these quarries.

Stop 2. The East Glastonbury or Curtis Quarries

2½ miles northeast of South Glastonbury. Two quarries in pegmatite dikes. Both dikes are almost vertical and strike northeast. They cut the Glastonbury granite (or granodiorite). The walls are sharp and in the dumps of the larger quarry. There are many specimens showing the contact of the pegmatite and the wall rock. The strikes of the two dikes are almost parallel to the border of the Triassic.

Stop 3. Roaring Brook

Park south of Roaring Brook and walk up old road by the stream. About 1200 feet west of the highway is an exposure of Triassic conglomerate dipping east about 40°. The fault is covered by glaciofluvial deposits but presumably it lies somewhere just east of the highway.

The first outcrop on the road south of the creek is in an old road metal quarry where a dark greenish, much sheared and fractured rock is exposed. There are lenses in it of pink feldspar. The darker phases contain chlorite and hornblende. It is cut by shear zones and locally badly fractured. There is some doubt as to just what this rock is but it seems to have been affected by the movement along the Boundary Fault.

The next place of interest is an exposure near the barn where a pegmatite intrudes a much shattered rock. Further up the road exposures of typical Bolton schist will be seen and the contact of the schist with a schistose phase of the Glastonbury granite gneiss.

Opposite the old mill is exposed an almost vertical pegmatite dike. In the stream bed are some good exposures of Glastonbury granite with inclusions or schlieren. Upstream many other pegmatite dikes may be seen.

An old feldspar quarry in a pegmatite lens intruding the Bolton will be seen on the hill slope.

Stop 4. Hale Quarry and Vicinity

In the town of Portland 2½ miles south of South Glastonbury, follow dirt road at Hale Creek and turn into first gate on the south side of the road.

At this stop an old abandoned feldspar quarry and one now operated by the Eureka Mining and Milling Co. will be visited as well as outcrops of the Bolton and Glastonbury in the vicinity. The small quarry is now pretty much overgrown but in it are to be seen some excellent crystals of feldspar in the wall.

Farther up the hill is the quarry now being worked. The pegmatite makes a ridge which can be traced over one thousand feet to the south and in many places the pegmatite is at least 150 feet wide with neither wall exposed. The pegmatite consists in part of graphic granite of varying coarseness and in part of irregular intergrowths of quartz and feldspar. Bastin has published an analysis of the graphic granite (1).

The pegmatite has been quarried at three openings, one (4a) on the north end of the ridge and on the east side (4b) and on the west side (4c). At 4a (see sketch map), the main operation, the general character of the pegmatite, and the occurrence of quartz may be seen. At 4b the sharp contact between the Glastonbury orthogneiss and the pegmatite may be seen. At 4c a very interesting banded aplite forming the western border of the pegmatite is found. To the west there is a pegmatite sill in the Bolton schist.

The following minerals have been reported for this general locality: uraninite (the specimen from the analysis of which Hillebrand first established the Devonian age for the pegmatites), apatite, autunite, columbite, monazite, orthoclase, rose quartz, tourmaline, torbenite, and manganese dioxide dendrites. Torbenite

and manganese dioxide dendrites may be seen on the present dumps. The columbite is to be found in the old dump by the brook. Few minerals other than quartz and the feldspars are found in the present operation.

Stop 5. Collins Hill (Stop at foot of hill)

Visit old quarry in Maromas gneiss and climb hill passing outcrops of cyanite schist of the Bolton formation. Pegmatites will be seen on the hill slope and at the top of the hill the Strickland Quarry, long famous for its minerals. A partial list of these minerals is appended: Microcline, perthite, quartz, albite, muscovite, tourmaline, biotite, lepidolite, spodumene, beryl, garnet, apatite, cookeite, pyrite, calcite, fluorite, uraninite, columbite, pinite, lithiophilite, amblygonite, zircon, monazite, etc.

The sketch map shows the location of the pegmatites on the hill and it will be seen that they are quite abundant in the schist zone.

Geologic Work in the Area

Percival (8) mapped the geology of Connecticut in 1835-1842. About 1896 Westgate (11) began mapping of the crystalline rocks of the Middletown Quadrangle. His map was to be used in the Farmington Folio of the U. S. Geological Survey. The manuscript was never published, but excerpts were quoted by Gregory and Robinson in Bull. 6 of the Conn. Geol. and Nat. Hist. Survey and his map was used in compiling the Preliminary Geological Map of Connecticut published in 1907.

W. G. Foye spent a number of years studying the crystalline rocks of the Eastern Highland and published two papers (3, 4). Just before his death he completed a manuscript on the Geology of Eastern Connecticut which is to be published by the Conn. Geol. and Nat. Hist. Survey.

A number of geologists have written on the minerals of Eastern Connecticut: Bastin (1), Jenks (7), Schairer (10), et al.

In 1938 Peoples, Keppel, and Russell began work on the crystalline belt across the river from Middletown.

Formations of the Eastern Highlands

Bolton Schist

The Bolton schist was named by Percival (8). It is typically exposed at Bolton Notch. It outcrops as a narrow belt on the east side of the Glastonbury granite gneiss massif and from the south end as far as South Glastonbury on the west side of the massif. E. T. Russell reports Bolton schist near Conn. Highway #2 at the edge of the Highlands. In this latter belt of the Bolton the width of outcrop varies from about a quarter of a mile to half a mile. Several lithologic varieties have been described:

1. Mica schist which may contain both biotite and muscovite.
2. Quartzitic phase at Bolton Notch and at Great Hill, and also lenses of quartzite or quartz schist found between Portland and South Glastonbury.
3. Garnet and staurolite schist.
4. Cyanite schist found on Collins Hill.
5. Gneissic phases.
6. Lenses of limestone and amphibolite.
7. A crushed and silicified phase found near the Boundary Fault.

Most of the pegmatites which have furnished the feldspar production of Connecticut are intruded either into the Bolton schist or at or near the contact of it and the Glastonbury granite gneiss.

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3. Foye, W. G., Mineral localities in the vicinity of Middletown, Connecticut, Am. Mineralogist, vol. 7, pp. 4-12, 1922.

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5. Foye, W. G., Geology of eastern Connecticut, Unpublished manuscript.

6. Hillebrand, W. F., On the occurrence of nitrogen in uraninite and on the composition of uraninite in general, U. S. Geol. Surv., Bull. 78, pp. 43-79, 1891.

7. Jenks, W. F., Pegmatites at Collins Hill, Portland, Connecticut, Am. J. Sci. (5th ser.), vol. 30, pp. 177-197, 1935.

8. Percival, J. G., Report on the geology of the state of Connecticut, 1842.

9. Russell, Robert, Geology of the pegmatites at Glastonbury, Connecticut, Unpublished Master's thesis, Northwestern University.

10. Schairer, J. F., Minerals of Connecticut, Conn. Geol. and Nat. Hist. Survey, Bull. 51, 1931.

11. Westgate, L. G., A granite-gneiss in central Connecticut, Jour. Geol., vol. 7, pp. 638-654, 1899.

Age and Correlation of the Bolton

Earlier authors suggested a Carboniferous age for the Bolton, but the late Devonian age of the pegmatites as pointed out by Foye and Lane (4) indicates that the Bolton schist must be pre-Late Devonian in age. In his unpublished paper on the Geology of Eastern Connecticut the late Dr. Foye used the name Brimfield and dropped the use of Bolton and Scotland as synonyms.

Glastonbury Granite Gneiss

This was named by Westgate for its occurrence in the town of Glastonbury. The Glastonbury granite outcrops in a long belt 2 to 5 miles wide from Great Hill north into Massachusetts where it is called the Wilbraham or Monson gneiss. Westgate described two phases:

1. An almost massive granitic eastern phase, and
2. A more gneissoid and dark colored western phase.

Westgate specifically referred to the "schistose" "augen gneiss" occurring on Roaring Brook. Many varieties of the Glastonbury contain epidote.

On this trip a light pink phase of the Glastonbury will be seen at the Tower Hill Quarry and the gray "schistose" variety will be seen on Roaring Brook. The minerals commonly found in the Glastonbury are quartz (up to 50%), microperthite, microcline, oligoclase, biotite, epidote, and hornblende especially near the contact with the Bolton.

Age and Correlation

Foye considered the Glastonbury equivalent to the Haddam and Monson gneisses. He used the name Monson for rocks mapped previously under all three names. The age is considered as Late Devonian.

Maromas Granite Gneiss

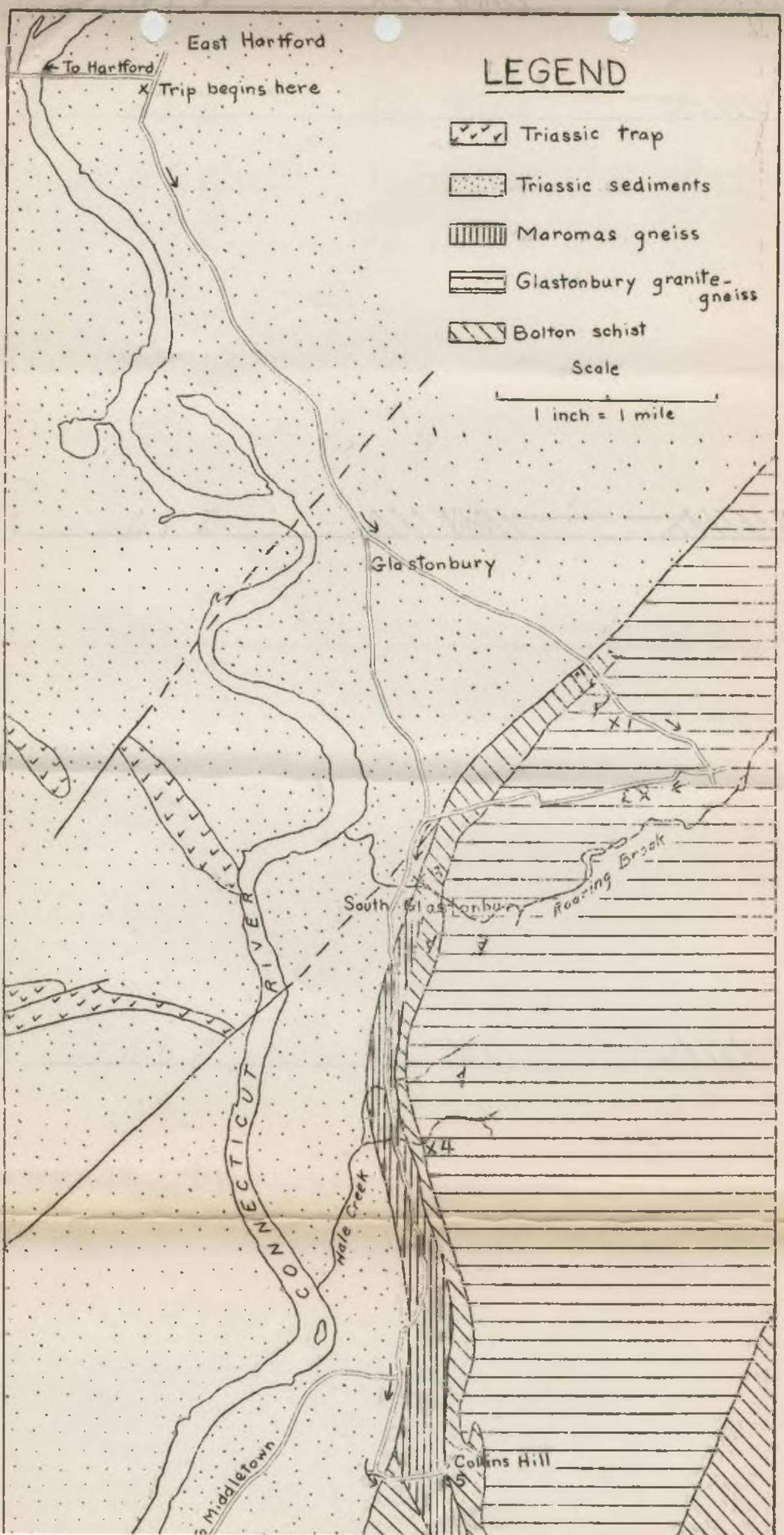
This rock, named by L. F. Westgate for its occurrence at Maromas, Connecticut, was described by him in 1899 (11) as a granite intrusive into the Bolton schist. The rock is a biotite gneiss with a marked foliation which in the belt from Collins Hill to South Glastonbury dips to the west. As shown on the index map, from Collins Hill to about the latitude of South Glastonbury Westgate has mapped a narrow belt of Maromas. The highway follows this belt and many exposures are to be seen on the road side. The rock here seems to be composed of biotite and hornblende gneiss injected by granite. Pegmatites inject this granite as well as the schist. All the rocks near the Eastern Boundary Fault are sheared and crushed at places. The Maromas is no exception.

The age is not certain but it is younger than the Bolton which it intrudes.

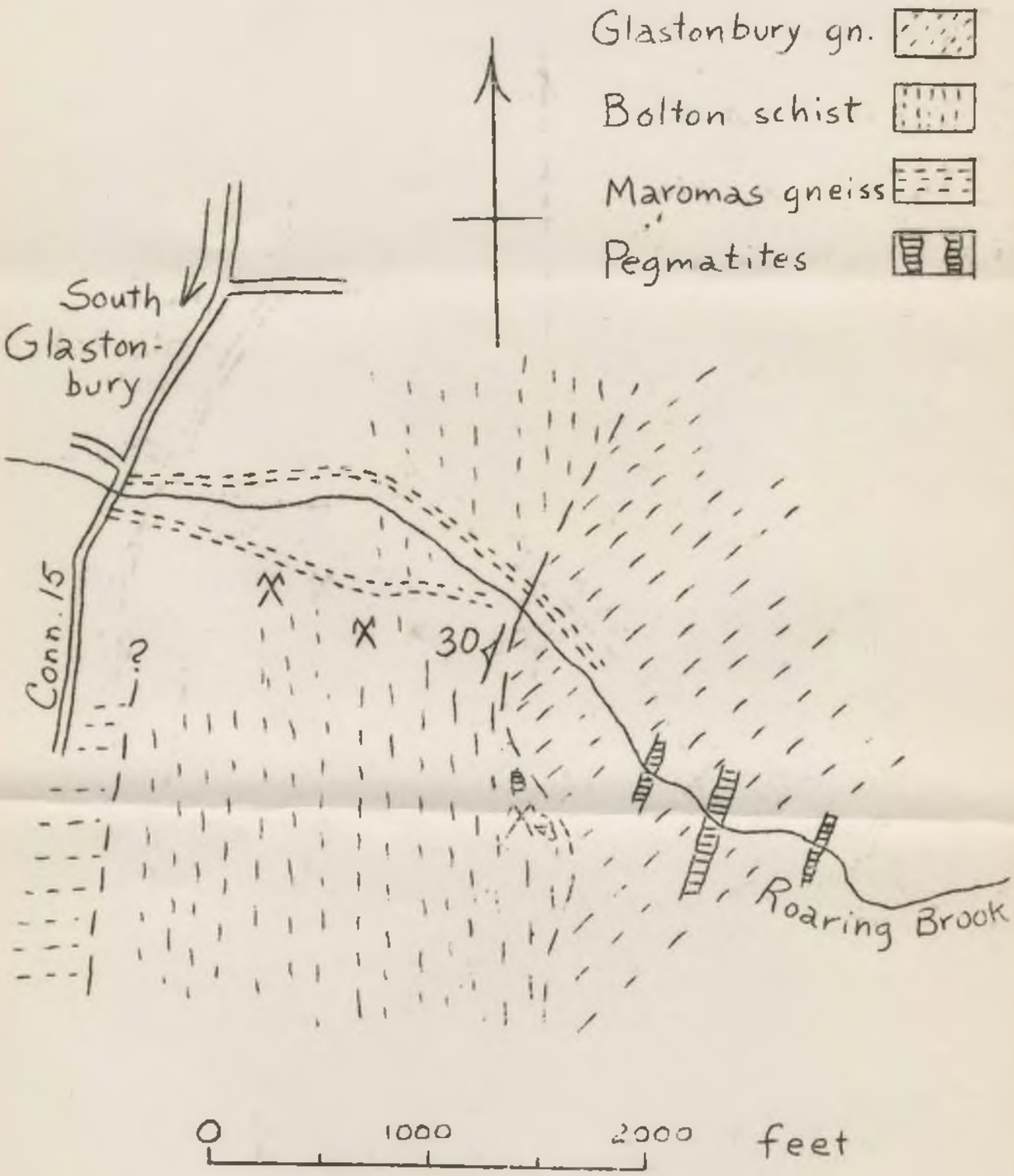
Pegmatites

Pegmatites are very common intruding the narrow belt of Bolton schist between Portland and South Glastonbury. Other pegmatites are found in the adjacent Maromas and Glastonbury areas. In the schist the pegmatites are usually lenses parallel to the foliation of the schist. They seem to be arranged in en echelon pattern. The pegmatites cutting the Glastonbury are more commonly dikes with very sharp walls as will be seen at Stop #2. But in both cases the larger bodies are commonly parallel or make a small angle with the strike of the rock they intrude. The change in strike northeast of South Glastonbury parallel with the Triassic border is noteworthy.

A number of quarries have been worked for their feldspar and mica content and the Hale Quarry is operating now. The famous Strickland Quarry is not now operating but a mine across the road is. The age of the pegmatites is Late Devonian as shown by a number of determination of radioactive minerals. (4)


East Hartford
To Hartford
Trip begins here
LEGEND
Triassic trap
Triassic sediments
Maromas gneiss
Glastonbury granite-gneiss
Bolton schist
Scale
1 inch = 1 mile
Glastonbury
X1
South Glastonbury
Roaring Brook
CONNECTICUT RIVER
X4
Hale Creek
Middletown
Collins Hill

Roaring Brook Locality



Outcrop Map of Hale Quarry and Vicinity

Pegmatite

Glastonbury

Maromas

Bolton schist

Approximate Scale in Feet

0 200 400 600 800

LEGEND

Glastonbury gneiss

Bolton schist

Maromas gniess

Pegmatite

Dumps

0 400 800 1200 feet

Approximate Scale in feet

Reprinted from SCIENCE, December 22, 1939, Vol. 90, No. 2347, page 594.

THE NEW ENGLAND INTERCOLLEGIATE FIELD GEOLOGISTS CONFERENCE

THE thirty-fifth annual conference of the New England Field Geologists was held in Hartford, Conn., on October 20, 21 and 22. Dr. Edward L. Troxell, of Trinity College, was in charge of local arrangements, and was assisted by geologists from Wesleyan and Yale Universities. More than 150 geologists attended the field trips and the discussion meetings at the College Lounge. Dr. Remsen Ogilby, president of Trinity College, welcomed the visitors.

The Friday afternoon field trip was led by Dr. Troxell. This trip included the relations between the lava flows and Triassic sandstones on the Trinity Campus, the pillow structure and mineral content of the flows near New Britain, and a spatter cone in a trap rock quarry near Farmington.

Dr. Chester R. Longwell, of Yale University, conducted a trip on Saturday to the eastern border of the Triassic Lowland. The geologists studied the evidence of the great eastern boundary fault, as recorded in sediments and structure of Triassic strata, in features of Triassic igneous rocks and in structure of pre-Triassic rocks. The distribution of fan-glomerate and increase of grain size away from the fault were emphasized.

The glacial geology of the Hartford-Middletown region was studied under the direction of Dr. Richard F. Flint, of Yale University. The features of the dissected clay plain, red gravel knolls, continuous knolls of "kame" type, ice-contacts, varved silt and clay, kettle complex in kame terraces and parallel-bedded dunes were discussed.

Dr. Joe Webb Peoples and Dr. Dave Keppel, of Wesleyan University, conducted an excursion on Sunday to show the lithology and structures of some of the crystalline rocks bordering the Triassic on the east between East Hartford and Portland. Parallelism between the structural lines of the crystalline Glastonbury gneiss, Bolton schist, Maromas gneiss and pegmatites with the Triassic was illustrated at numerous places. The trip was concluded at the Strickland quarry.

An excursion for glacial geologists was made to the Quinnipiac-Farmington lowland on Sunday under the leadership of Dr. Richard J. Lougee, of Colby College. A glacial delta with an attached esker was studied.

It was voted at the annual business meeting to meet at Dartmouth College, Hanover, N. H., in 1940, under the leadership of Dr. J. W. Goldthwait.

LLOYD W. FISHER,
Permanent Secretary

BATES COLLEGE