

R + Hunt

[Eastern Group] Field conference

Friends of Pleistocene Glacial Geology
Field meeting, Ayer, Mass., quadrangle
and adjacent areas
May 23 - 24, 1953.

Itinerary

Mileage:
Between Total

Time:

At triangle Littleton Common, (Westford quad.)		0.0
Leave on Route 119, N.W.		
Cross outwash plain (op) lowest part of S (sequence) 6.	0.4	0.4
To right in valley, two small hills (270, and 240) belong to earlier sequences		
Cross west end of till hill	0.7	1.1
Back on outwash plain (S6)	0.3	1.4
Composition of op, med: to fine gr.; kettles, and ice contact edge on right; merging into a kame plain (kp), (Enter Ayer quad.)	0.4	1.8
ic slope, on left (S6)	0.4	2.2
Left on Hartwell Road	0.1	2.3
(ic slope around depression).		
Turn right	0.2	2.5
Till hill from left to road, S6 to right.	0.3	2.8
Kame topography of S4	0.4	3.2
On left S4, on right S5; both have irregular topog. (Kames, ice channel fillings).		
Left on main road, Route 2A	0.6	4.0
(Follow boundary between S4 and S5)		
Turn left up New Estate Road, onto kp	0.7	4.7
(Note composition of pits; very coarse gr top of kp)		
Stop 1 -- on top of kp	0.8	5.5
Leave stop 1.		
Right on Route 2A (Westford quad.)	0.4	5.9
(About 0.5 mile, 3 sequences)		
Stop 2 (25 minutes) pit cut through kp. Note bedding, texture, morphology.	1.7	7.6
Leave stop 2.		
Right onto Route 2A.		
View of drumlins; on left across R.R. is scarp between terraces of different sequences.	0.2	7.8
Stop 3 kettles in lower terrace (S6); ic slope on S5 (10 minutes)	0.2	8.0
Leave stop 3; right at Cozy Corner,	0.2	8.2
Small area of S8	0.3	8.5
<u>Caution - 2 bad R.R. crossings ahead!</u>		
Right turn at schoolhouse.	0.3	8.8
Continue on S8, cross scarp onto S6.		

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Stop 4 (On Sandy Pond Road) 30 minutes		
Leave stop 4	0.6	9.4
(Follow Sandy Pond Road)		
Angular, coarse material at head of S6		
Sharp left in main road; immediate right by sign	1.0	10.4
"Lake lots for sale".	0.3	10.7
(From S7 to S9)		
Many ic forms; coarse cobble gr. in pit on right of road.	0.4	11.1
Small till hill, large boulders, (Topog. throughout this	0.3	11.4
stretch of road is ic, typical of stagnant,		
channelled ice blocks).		
Take right fork down hill		
Up steep hill, sharp left, Knops Pond on left.	0.8	12.2
Cut in till, on right; on left is terrace of S9.	0.7	12.9
Bear left on Route 40	1.0	13.9
(Rough ic topography)	0.2	14.1
Sharp right on School Road		
(On S9; view of composite drumlins on left).	0.6	14.7
Sharp left; kt of S9 on left for 0.3 mile - this is		
approximately head of S9; cross through drumlin	0.5	15.2
group).		
Left and up hill on gravel road (between drumlins)		
Caution! sharp left on to highway. Notice ice channel	0.6	15.8
features blocking the valley, on right.	0.3	16.1
Stop 5 (15 minutes) two tills. Also note kame terraces		
of S9 to east and south.	0.4	16.5
Leave stop 5.		
Sharp right turn, on Gay Road		
(on boundary of broad kt on right)	0.3	16.8
(about 6 miles, beginning of S7, kames, etc.)		
Bear left on highway Route 119 - BM 321.		
(Following S7 nearly to Fletcher Hill, about	1.0	17.8
1 1/2 miles; S6 begins just west of Fletcher Hill;		
note large kettle at base of Fletcher Hill, left		
of road; now on S6).		
Turn right at sign Brookdale Farm.		
(Again on S6).	2.8	20.6
Bear right at fork		
Slow. S6 on right in lowland, scarp of S4 is	0.7	21.3
across lowland.	0.5	21.8
(Into Westford quadrangle).		
Lunch stop, Hartwell ski tow area.		
(Lunch and discussion 45 minutes).	0.5	22.3
Leave Hartwell ski tow area		
Right on Route 2A		
(Into Ayer quadrangle)	0.5	22.8
Left toward Littleton R.R. station		
Caution R.R.	0.9	23.7
(On S6; up scarp of S5. Altitudes: S5, 240; S6, 230).		
Bear left at fork. Note large kettle on left in S5.	0.3	24.0
Right on Whitcomb Avenue. (On kame area of S5).	0.3	24.3
Stop 6. 20 minutes. Three sequences (S4, 5, 6).	0.1	24.4

Time:	Mileage:	
	Between	Total

Leave stop 6. On left in valley various forms of several sequences.		
Right at fork up hill	2.5	26.9
Bear left at fork	0.2	27.1
Right turn; to Poor Farm	0.5	27.6
Across intersection to	0.5	28.1
Stop 7. 25 minutes. Till exposure		
Leave stop 7. Northeast on Littleton-Harvard Road.		
Stop 8. 30 minutes. Abandoned water-fall and gorge	2.5	30.6
Leave stop 8.		
(Littleton R.R. station)	1.0	31.6
Follow Taylor Street.		
Take right at fork.	1.9	33.5
Left at fork on Picnic Street.	1.2	34.7
Sharp right on Middle Street.	0.7	35.4
Cross V-shaped pre-glacial valley - filled with <u>till</u> , no fluvial material in front; bedrock with striation in center of valley. (The apparent "fan" is till and bedrock).		
Ascend hill, sharp left on top.	0.3	35.7
Follow Hill Road		
Bear right on Sherry Road	0.4	36.1
Stop 9. Gravel pit. 20 minutes.	0.3	36.4
Leave stop 9. Continue on Sherry Road (on left note ice-block hole with marked slump topography all around).		
Turn sharp left on Route 111.	1.2	37.6
Descent onto kame terrace (S1 or S2 ?)	0.2	37.8
Stop 10. 10 minutes. Pitted outwash plain.	0.4	38.2
Leave stop 10. Follow Route 111.		
Turn sharp left into schoolyard.	1.2	39.4
Kame terrace around base of drumlin (beginning of a sequence). Esker to west is graded higher than the kame terrace. (Esker probably belongs to an earlier sequence).		

Wash rooms in schoolhouse will be available.

Supper will be held in Boxboro Congregational Church 0.4 mile west on Route 111. Park in front of Grange Hall or the Church. Supper approximately at 6:00 P. M. Assembly follows.

Sunday, May 24, 1953.

Time:	Mileage:	
	Between	Total
Homestead Restaurant, opposite Howard Johnson's, Cambridge, junction Route 2 and Concord Avenue.	0.0	
Breakfast at 8:00 A.M. Leave at 8:45. (Note traffic circle 0.6 mile, left around circle, follow Route 2 toward Concord up fault-line escarpment bordering Boston Basin. Scarp of volcanics and Marlboro ? formation).		
Stop 1. 15 minutes. Good exposure of "upper" till	3.6	3.6
Leave stop 1. Continue on Route 2.		
Turn left with Route 2. (Ascend large sand-gravel plain. Note kettles and size of Walden Pond kettle on map.	6.7	10.3
At 1.6 from this turn, cross R.R. and down scarp to low sandy "outwash" plain; cross Sudbury River 1.3 from R.R., on right pit shows current bedding, direction of flow was east.		
West Concord Circle (at Concord Reformatory)	4.7	15.0
Follow Route 2, new major highway (do not confuse with Route 2A). (About 0.5 from circle, note high hill on left - a delta of Lake Sudbury. Cross R.R. and ascend 2 kt levels. Over morainal hill and cross kt, in which a large pit shows cross bedded fluvial and rippled lacustrine deposits.		
Take left fork on Route 111 (toward Harvard)	2.6	17.6
(Kame terraces, considerably slumped, on both sides of Route 2)		
Kelly Corner stoplight. Continue straight through. (Cross several kame terraces).	0.5	18.1
West Acton village. Traffic caution. (Over south end of drumlin, cross "valley train" outwash, on left a higher outwash sequence with ice slopes; several ice channel fillings right and left, to	1.1	19.2
Stop 2. 10 minutes. Section of esker showing coarse material characteristic of upper parts of sequences.	0.9	20.1
Sharp left turn on South Acton Road.	0.2	20.3
Left on Summer Street.	0.3	20.6
Stop 3. 30 minutes. Left into gravel pit. Head of a sequence. Note truncation of sand by gravel, slumped bedding, kettle fillings, eskers from north into the terrace.	0.1	20.7
Leave stop 3. Turn left - caution, blind corner. Esker to south of pit.		

Time:

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South on Willow Street (also called West Acton Road).	1.2	21.9
Stop 4. Orientation stop. 10 minutes.	2.0	23.9
Leave stop 4.		
Sharp left on South Acton Road. (approximately 3 miles to South Acton), (Stow-Acton town line 1.7 mile from above sharp left turn)	0.5	24.4
Right on South Main Street (Route 27) and immediately left at foot of hill on High Street. (Now heading east; follow High Street east and south).	2.8	27.2
Intersection - go through on High Street	1.3	28.5
Left on Powder Mill Road	0.7	29.2
Left (NW) on dirt road (Eastern States Farmers Exchange sign at turn)	0.3	29.5
Stop 5. 35 minutes. Kame delta + kame terrace	0.2	29.7
Leave stop 5. (Go back to Powder Mill Road) 0.2 mile turn right (southwest).		
Traffic light in Maynard. Through on Parker Street (Route 27).	1.6	31.3
Right on Route 117 (Great Road) (Continue on 117 through Stow Center)	0.7	32.0
Stop 6. Orientation. 10 minutes. (Just west of fork Route 117 and Great Road, and east of fork of Route 117 and Old Bolton Road). Two outwash sequences to south, scarp between.	4.9	36.9
Leave stop 6, continue on Route 117.		
South on Hudson Road (Route 85).	3.0	39.9
Right (west) on Mill Road (also Bolton Road)	1.0	40.9
Right on Wataquadock Road.	2.6	43.5
Right (east) on Route 117 (Main Street).	0.3	43.8
Left (north) on Sugar Road.	0.9	44.7
Right, following Sugar Road (Bear right about 0.5 mile)	1.0	45.7
Left (north) on East End Road (or Stow Road).	1.9	47.1
Stop 7. 10 minutes. At East Bolton. Orientation. Good ice contact topography.	0.1	47.2
Very sharp right on Finns Road (red house on left), gravel road. (Ice channel fillings and terrace en route; 2 sequences, lowest on east).	1.2	48.4
Left (north) on Garner Road (at fork 0.2 bear left).	1.0	49.4
Sharp right on Wolf Swamp Road (two-tone green house). Follow this road.	0.8	50.2
Sharp right on Burrows Road (bear left at first fork about 0.8 mile).	1.3	51.5

Time:	Mileage:	
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At Old South Cemetery; near head of relatively high sequence; pitted kame terrace. Through (east) bearing right at Y (about 0.6 mile).	1.1	52.6
Sharp left on South Acton Road.	1.0	53.6
Stop 2, end of trip. Turn right 0.3 mile at Massachusetts Avenue. Follow east through West Acton to junction with Route 2. This is main route to Boston (east) or Greenfield and Mohawk Trail (west).		