Gill Gully to Belleayre – Balsam Col

202-67

with Jennifer Benusis 4/28/09 (a very warm day)

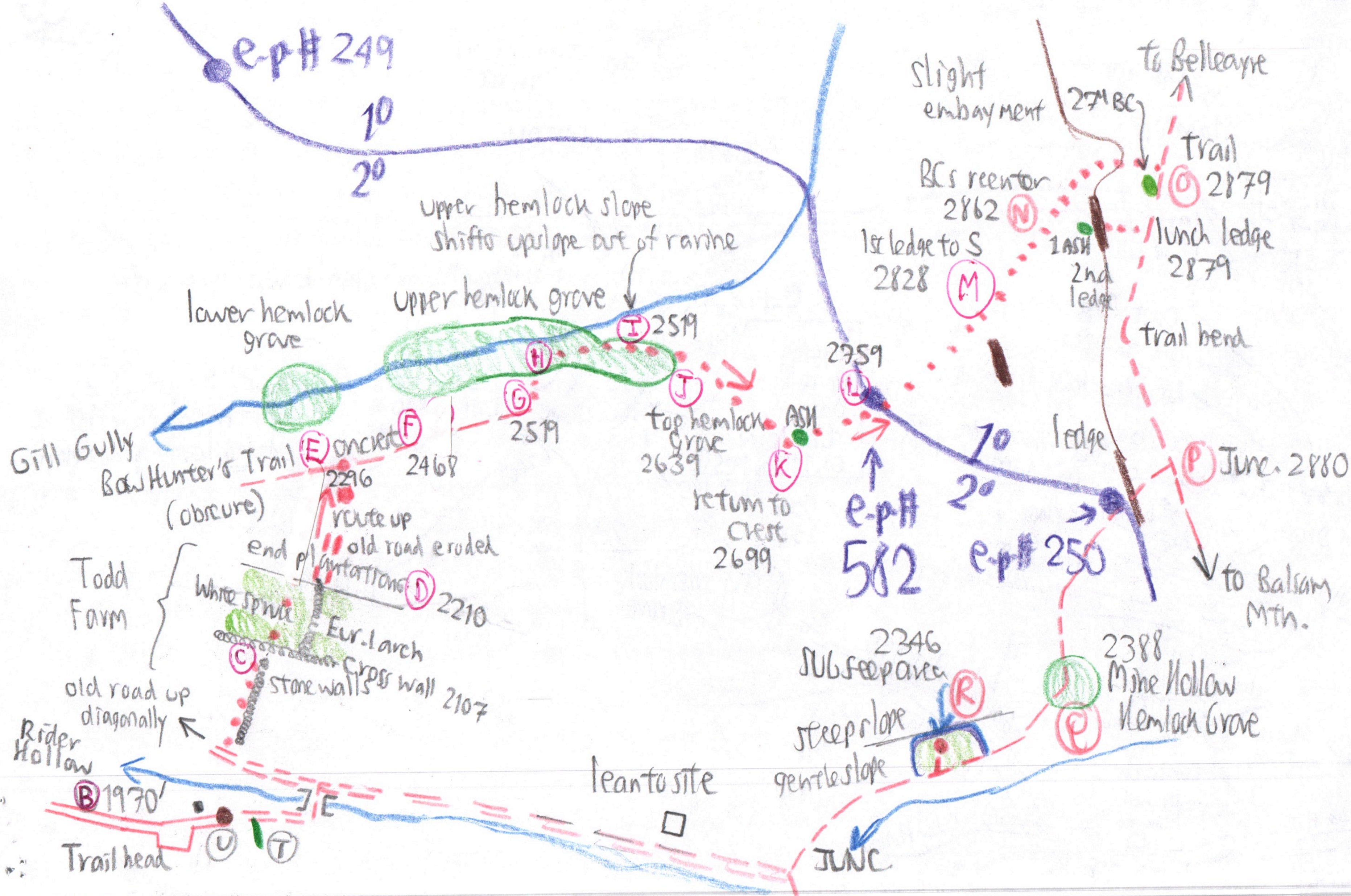
Location	P	Δp	Δe	e calc (0.858)	e map	time	R
(A) 2810	—	—	—	—	1500	7:45	
(B) Rider Hollow Trail Head	29.70	0.00	—	—	1970	±8:15	
(C) Cross wall	29.54	0.16	137	2107			
(D) Top plantations	29.42	0.28	240	2210			
(E) On crest: Bow Hunters Trail	29.32	0.38	326	2296			
(F) on crest: lower end of Upper HEM grove	29.12	0.58	498	2468			
(G) descend into HEM grove	29.06	0.64	549	2519			
(H) –	—						
(I) Gill Gully in hdwds.	29.06	0.64	549	2519			
(J) Top Hem grove on ridge	28.92	0.78	669	2639			
(K) Last ASH on ascent turn up ridge	28.85	0.85	729	2699		10:40	
(L) enter 1°	28.78	0.92	789	2759		10:50	
(M) on level with 1st ledge	28.70	1.00	858	2828			
(N) BCs reenter	28.66	1.04	892	2862		1:12	
(O) On trail LUNCH.	28.64	1.06	909	2879		1:18 1:55	
(P) Trail Junc. Mine H.	28.64	1.06	910	2880	2880'	12:02	
		0.87	910	1.046			
(Q) Mine Hollow HEMS	29.11	0.40	418	2388		12:20	
(R) SUG seep BASS ASH	29.15	0.36	376	2346			
(B) Rider Hollow Trail Head	29.51	0.00	—	—	1970	1:20	
(A) 2810	30.08	−0.57	−596	1374?!	1500	1:50	±1.046

$K_{1\,ascent} = \frac{2880' - 1970'}{29.70 - 28.64} = \frac{910'}{1.06''} \sim 0.858$

Barometric pressure falling rapidly as cold front approaches

$K_{2\,descent} = \frac{2880' - 1970'}{29.51 - 28.64} = \frac{910'}{0.87''} \sim 1.046$

202-68


e-p# 249
1°
2°
upper hemlock slope
shifts upslope out of ravine
upper hemlock grove
lower hemlock grove
Gill Gully
I 2519
H
G 2519
J
F 2468
E ancient
Bow Hunter's Trail
(obscure)
2296
route up
old road eroded
end plantations
D 2210
Todd Farm
White spruce
Eur. larch
Cross wall 2107
stone walls
C
old road up
diagonally
Rider Hollow
B 1970'
Trailhead
U
T
leanto site
top hemlock grove
2639
ASH
K
return to crest
2699
2759
L
e-p#
582
1°
2°
e-p# 250
Slight embayment
274 BC
to Belleayre
Trail
O 2879
BCs reentor
2862 N
1 ASH
lunch ledge
2879
1st ledge to S
2828
M
2nd ledge
trail bend
ledge
P Junc. 2880
to Balsam Mtn.
2346
SUB seep area
R
steep slope
gentle slope
2388
Q
Mine Hollow
Hemlock Grove
JUNC

Flora

202-69

Ⓓ Beech stand above plantations.

Ⓔ LL patch

Ⓕ ASM to 15"
BC to 22" common
SUG to 28"
YB-RM-B

Ⓖ leave crest are large boulders with a few YBs on top with straddling roots. Rock fully hidden under litter & humus.
RMs to 16" ± nearby
Hardwoods age prob not over ca 100 y.

Ⓗ Dic-can. in fl.
Dent-di. in fl-bud
30" BC

Ⓘ & Ⓙ see next page for ring counts

Ⓚ Last 24" ASM on wide, wide spur crest

Ⓛ e-p # 582 2781
see next page for ring count. NO BCs or YBs
Two 30" YBs near ledges.
SUGS 28"

Ⓝ SUG still dom, but BCs re-enter RG on ledges with Lonicera can., common

Ⓞ 1 ASM below lunch ledge in 10.
East of trail & along it, BCs are dom. to 70'.
Much ice damage to B sprouts, some RA from defoliation.

Ⓡ See next page for ring counts

Ⓢ Rich seep site.
SUGS dom, ASM, BASS, OST.
Mitella m fl.
VC "
VPAP ? ← Cuculata
Dic. cuc. "
Hydro. —
Caulo "
Allium. —

Ⓣ White spruce cut— see next page

Ⓤ Breccia balder? Piece collected.

Some SUGS below Ⓛ are almost as big, but lack the broken tops & old age look. Also, below Ⓛ large SUGS >24" are widely scattered. Above Ⓛ, SUGS >24" are common.

Tree ages and forest history

202-70

Hemlocks in Upper Grove:

(#1) 30" diameter tree, snag dead down. 15" radius. 20y/inch in outer part, but hollow. Probably nowhere near 20x15 = 300y.

(#2) 38" hemlock, live. Most hemlocks have healthy tops, not damaged like 300y trees.

(#3) 25.2" diam. broken off ±28 ft up.
HEM. 30.2" at breast height.
#15 120y at 28' level. 4mm/y when young to 1.5mm/y radius older. If height growth is 8"/y, then 28' more feet would be about 42y.
∴ Age total 120+42 = 162y
Following bark peeling in 1847?

(#4) 30" dbh tree

(#5) 31" broken tree 6' up.
#16 150 to 160y plus ± 9y to reach 6'. Σ 165y.
4mm/y at youth radial growth

(#6) 36" dbh
(#7) 30" dbh

(#8) several 30" trees
(#9) 34" broken top
(#10)(#11) fallen together. 150 to 160y with full counts? dbh??

Compare with Upper Birch Creek Grove, on p. 402-17 : large, but young 41" tree = 195y by increment borer.

Hemlocks are all about the same age, 160y, estab. ca. 1850s, prob. after tanning cut. Or, perhaps were saplings during tanbarking. Few live trees have, if any, broken aged tops like 300y trees.

SUGAR MAPLES.

Many scattered 28" to 30", ice-damaged at (J).

At (L), common to 70' or 80' in height. Begin 10 at e-p #

#27 One tree broken hollow. Outer 2½" of radius = 60y. Full diameter 28". Full radius = 14". $\frac{2.5"}{14"} = \frac{60y}{?y}$ or 336y?

Must be much younger with youthful growth faster

Mine Hollow Hemlock Grove:

#17 One tree broken 10' up, 22" d. On ground log hollow. Outer 9" radius counted = 140y. Inner 2" radius missing.

$\frac{140}{2} = \frac{9"}{11"} = 171y$ max, prob. younger

No dbh measured

(#) White spruce fell across trail just above register. 59y at 35 ft up, cut to clear trail. If 8"/y height growth add 35 x ½ = 52y to the 59y = 111y. No? Ed West put in plantation later?