

Hemlock Groves in the Elk Bushkill

with Eric Rosen
 Basin 6/28/09
 Ascent

Location	p	Δp	Δe	e calc	e map	time	R
(A) Lasher Rd + Lost Clove Rds, lowest point	29-97	0-00	R₁ = 1.017 R ₂ = 0.949	Uke R ₃	adjusted = 1220	0.949	R ₁
(B) Burger's residence	29-38	0-59	560	1780	1820	9:45 AM	R ₂
(C) SMT along log road	29-23	0-74	702	1922	ep	10:00	R ₃
(D) Leave log road	29-22	0-75	712	1932		10:00	$\frac{1820 - 1220'}{29-97'' - 29-38''} = \frac{600'}{0.59''} = 1.017$
(E) Ford	29-23	0-74	702	1922		10:10	
(F) on bark road	29-18	0-79	750	1970		10:15	
(G) Slope steepens	29-05	0-92	873	2093			
(H) out of hemlocks	28-92	1-05	996	2216			
(I) ASH + BC	28-84	1-13	1072	2292			
(J) less steep	28-79	1-18	1120	2340			
(K) leave bark road	28-70	1-27	1205	2425		10:55	
(L) reenter HEM #595	28-48	1-49	1414	2634		11:20	
(M) HEM grove	28-40	1-57	1490	2710			
(N) lunch (1st)	28-38	1-59	1509	2729	11:35 to 11:55		
(O) scattered hemlock	28-10	1-87	1725	2995	12:30 to 12:35		
(P) 33.7'' HEM	28-04	1-93	1832	3052	12:40?		
(Q) Partial N lookat	27-97	2-00	1898	3118	12:53		
(R) end hike; 1st fir	27-85	2-12	2012	3232	1:07		

(Q) seemed eye-level with 3160' knob on trail N. of Eagle Col.
 Why not average all 4 projections (see over) → for (R)?

* midway betw.
 29-97 + 29-83

$$\frac{3376' + 3341' + 3170' + 3042'}{4} = 3232'$$

→ Average R would be

$$\frac{3232' - 1220'}{29-97'' - 27-85''} = \frac{2012'}{2.120''} = 0.949$$

adjusted

Use R_4 adjusted rate 1.016

230-56

Descent (locations in reverse)

~~$R_2 = 1.071$~~

Location	p	Δp	Δe	e Calc	e map	time	R_2
(A) Lasher Road + Lost Cove Rd.	29.83	0.00			1220		(A)
(B) Burger's residence	29.27	0.56	569	1789	1820	3:45 PM	(B)
(BB) Landing on log road	29.17	0.66	671	1891			
(DD) ford	29.11	0.72	732	1952	confluence 1870'	3:25	
(AA) Stumps?	29.15	0.68	691	1911			
(ZZ) wide terrace	29.03	0.80	813	2033			
(YY) low ledges	28.98	0.85	864	2084		3:07	
(XX) 4 hemlocks	28.88	0.95	965	2185			
(MM) narrow terrace	28.74	1.09	1107	2327	$\frac{3232-1220}{29.83-29.27} = 2092'$	2:30	
(SS) BASS + OST	28.62	1.21	1229	2449		2:20	
(UU) LAP. Defoliation	28.49	1.34	1361	2581			
(TT) big trees	28.45	1.38	1402	2622			
(FF) more big trees	28.42	1.41	1433	2653			
(SS) highest SUG	28.30	1.53	1554	2774			
(OO) highest SUG	28-20	1.63	1656	2876		1:52	
(OO) covered HEM	28-12	1.71	1737	2957		1:45	
(OO) partial lookat	28.97	1.86	1890	3110		1:35 after lunch #2	
(KK) End hike	27.85	1.98	2012	3232		1:07	

(A) to (B) only - $\frac{1820' - 1220'}{29.83 - 29.27} = \frac{600'}{0.56} = 1.071$

#596 e.p.

$\frac{3232-1220}{29.83-29.27} = 2092'$
 $\frac{2092}{1.98} = 1.016 = R_4$

R_3 adjusted (see over) = 0.981

Because end-hike elev. is unknown, only (A) to (B) could be used to find rate. Ascent projection to (B) is 3376 feet = R_1
 Descent projection to (B) is 3341 feet = R_2


R values, because known elevations were only 600 feet apart, are over 1.00 - very high. Suppose the average R long-term 0.92 value is used?

Too low, because
 Ascent projection to (B) = $\Delta p = 2.12'' \times 0.92 = 1950 + 1220' = 3170'$
 Descent projection to (B) = $\Delta p = 1.98'' \times 0.92 = 1822 + 1220' = 3042'$

(Q) seems to be on level with 3160' knob on Eagle.

Topomap shows a leveling off at 3220'. This elev. was not attained.

230-57

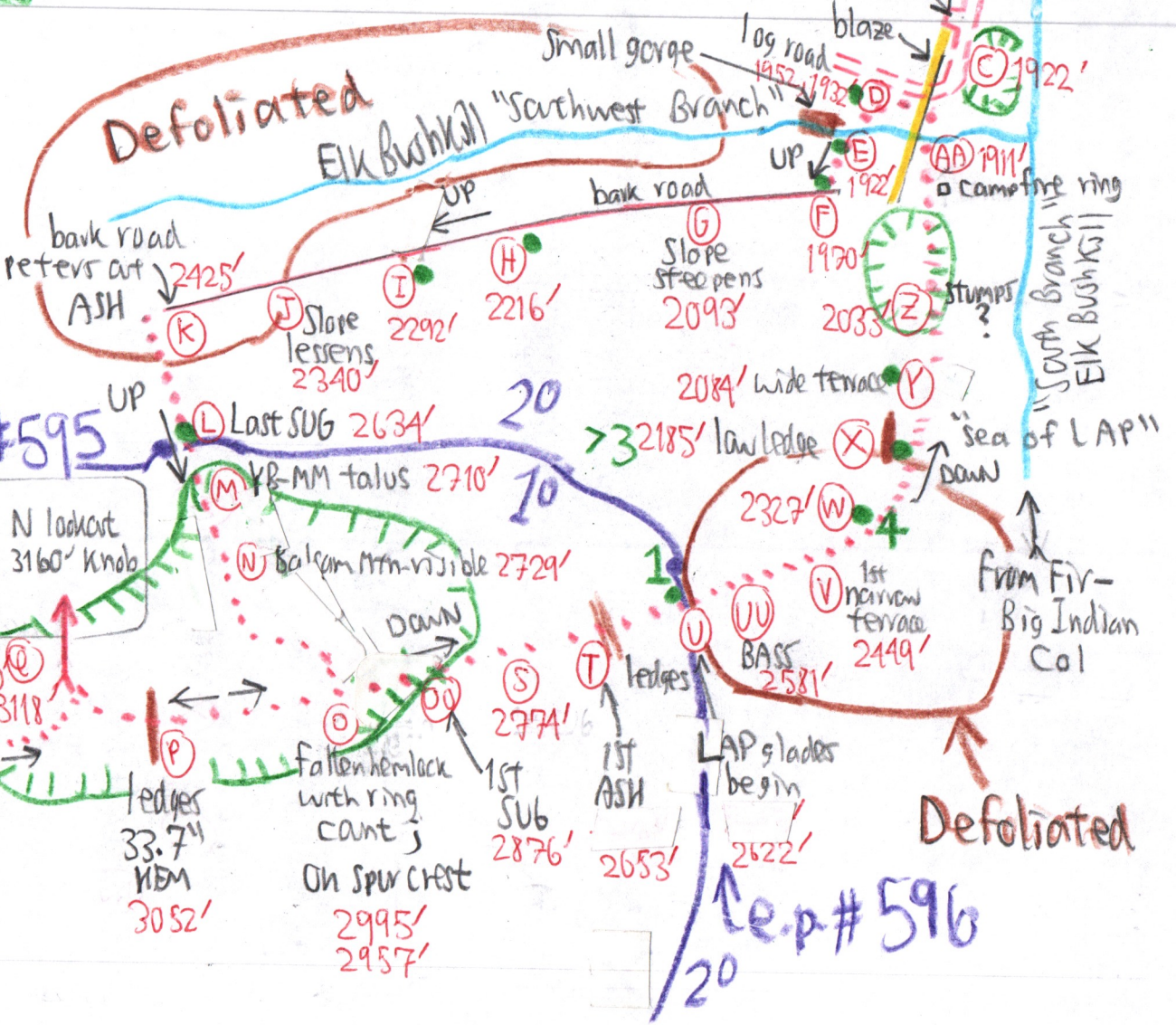
Green devoted to
 HEMLOCK-only
 grave → 
 scattered trees
 with # observed
 (see over)

BIG INDIAN PARK ASS'N.

From Eagle -
Big Indian
Col

"West Branch"
EIK Bushkill

Burnham Hollow
Rd.
 Dorothy Al
Burger (B) 1820'
 pond
 ?



SORB. partial N lookst
 ± on level with 3160' knob
 SE of Eagle

to Big Indian
Summit

end hike (R)
1st fir
3232'

ledges
33.7"
MEM
3052'

fallen hemlock
with ring
cant
On spur crest
2995'
2957'

1st
SUB
2876'

ledges
1st
ASH
2653'

LAP glades
begin
2622'

e-p# 596
20

Comparison of 10/28/07 notes, p. 230-49ff,
with these on HEMLOCK discon on this spur

Highest #4 grave of 2007, estimated to begin at 2955', actually begins at (00) 2876' [not bad estimate] and climbs to 3200'. It is all 1^o but trees are not any larger than lower-elev. 2^o groves
#3 grave, estimated from 2551 to 2740', was not obs. on 6/28/09 (this hike). All hardwoods at these elevs. Could hemlock grove be around SOUTH side of spur & not obs.?

#2 grave, estimated at 2229', could be the grave beginning at (Z) 2033' and continuing upward as scattering to (W) 2329' via (X) 2185' and (Y) 2084'

#1 grave could actually have been below the confluence at 1900' ??, and not above the confluence as obs in 2007 ??

#1 & #2 groves may be continuous & connected, on either side of Southwest Branch Elk Bushkill.

Hemlock & Memlock groves are the only items noted in green.

- (C) Hem grove below log rd. on east. BRSS Stumps. Log road follows SMY blaze.
- (D) Scat-NEM. Log road turns abruptly WNW & steepens. We leave the road & head SW down to ford the brook.
- (E) Ford brook in small bedrock gorge.
- (F) On bark road. HEMS to 24" mixed with hardwoods - not a pure NEM grove. ASH 33" max & 24" SOX SUBs to 24". Defoliated area comes into view to NW.
- (G) Bark road steepens. ASH common. Defoliation in ravine bottom below to N and up the far hillside. ASH common.
- (H) NO mature NEM, only a few saplings
- (I) NEM sapls only. Few BC to 24".
- (J) Enter defoliated area. Bark road less steep. 1st LAP seep.
- (K) Bark road becomes obscure, Brook still

- audible on N. ASH Common to 24". Turn South & head up N side of spur. 36" SUB is last. Seep.
- (L) Enter scattered NEM grove to 30". Bouldery ledge. YB dom. prob. Le-p #5950
- (M) NEM grove on narrow band of gentler slope. Max 24". None dead & old & fallen. YB-MM talus above.
- (N) 1st lunch. YB-MM-MO with NEM understory. No trees > 18". NO roads. View of Eagle's SE 3160' knob & Balsam Mtn.
- (O) On crest of spur & TOP of grove, NEM. VA & B repro. SOBS seedling. Most NEM max. 18"
1st damaged NEM, recent with green needles on branches still, 27" dbh.
- #20 Count 9' up with 6" of radius showing = 90y.
2mm/y rings.
Projection:
 $\frac{6''}{90y} = \frac{27/2 = 13.5'' \text{ radius}}{? y}$

- (P) 33.7" NEM. Big YBs ^{low} on ledges, to 24", some old & dead. B dom. CB
- (Q) Partial N look out atop high ledge. SOBUS. About equal elev with 3060' knob SE of Eagle. NEM & YBs 24" to 28", some old & broken. Also RM & B
- (R) End hike. No more NEM visible above, but a few below. 1st FIR, 5" dbh. Many 24" YBs old, B 18", scat. SOBUS.
- (Q), (P), & (O) = Seel ascent.
- (OO) NEM grove on NW, only hardwoods to SE. Max. 18". 1st SUB on descent. YBs to 24" & old.
- (S) 27" SUB & 27" YB.
- #29 SUB ring count 60y = 6" of exposed radius from 24" dbh
Tree broken at 2' up.
Projection = $\frac{6''}{60y} = \frac{24/2 = 12'' \text{ radius}}{120y}$.
- (T) One 24" ASH. SUBs & YBs to 24" on ledges.

(continued over) →

Mileage from 2810

Burger's	16.6
bridge	16.7
Tennis courts lodge	17.3
SNK parking area	17.4
2 wooden gate posts	
Rate (47)	18.0
Lost Cove Road	21.3
Pine Hill	24.5
2810	33.2

SNK Acquisition:

Lot 1, Division 2, Livingston Tract, G.L. 7
 Tract W of Burger's: 1986
 See field notes of 1990,
 pp. 230-3 ff

Tract S of Burger's up the
 spur to Big Indian Mtn.

(this hike):

Lot 1, Division 3, Livingston
 Tract, Great Lot 7. The
 line is just S of the confluence
 below (U) & (E). Acquired
 betw. 1899 & 1911.

Anchored betw. 1900 & 1905
 according to p. 272 of State
 Landlist. 1120 acres

Forest from (U) to (Z) has no
 roads, but structure
 suggests 2^o & accessibility

(U) Lone NEM 24". e.p. #596
 Defoliation begins &
 continues below.

(UU) BASS, OST. Small DP
 ASN Repr. glade

(V) Very few 30" SUB.
 NO NEM visible anywhere
 LAP glade on narrow
 terrace. Most trees sub
 < 16" & defoliated.
 One healthy 12" B.
 Two 24" ASN.

Observation on LAP
 glades under defolia-
 tion; The sheer
 density of LAP
 may prevent an
 "explosion" of RA,
 RS, Peilist, SAMS
 in defoliated
 areas.

LAP is deer-browed!
 One plant with white-
 variegated lvs.
 SUB dom. 12" to 16"

(W) 4 NEMS betw 12" &
 30". First obs since
 the lone at (U).

(#9) ASN not common,
 one down 115y at 15"
 radius full. 30" dbh.
 Broken 5 ft up.

(X) Low
 ledges above. 230-60
 Reynos in green fruit,
 3' tall -
 out of defoliated area
 which extends down to
 SE. LAP sea below
 widely-scat. NEM to 14"
 then 6" to 36", but not
 a grove.

(Y) NEMS scat. above.

(#10) ASN & sub to 28" but young.
 34" ASN fell & split in
 two longitudinally, the 2
 trunk halves falling in
 opposite directions.
 34" diam half-trunk
 was 150y.

(Z) NEM common. Possible
 few stumps ca. 40y??

(D) Enter log road only about
 15 ft above in elevation
 from the point where we
 left the log road in the
 morning.