

see p 1615ff

TSUGA TOP =  
**BAZZANIA BUMP**  
 with Roger Wall 11/13/10

to date the hemlocks

166-27

$R_1 = 0.830$

site	p	$\Delta p$	$\Delta e$	e calc	e map	time	R
(A) Trailhead	29.53	0.00			2160'	9:35 AM	$\frac{3040' - 2160'}{29.53' - 21.47''} = \frac{880'}{1.06''} = 0.830 = R_1$
(B) Trail junction	28.86	0.67	556	2706	2750'	10:15	
(C) 1st Scampyl	28.77	0.76	631	2791			
(D) Hem-grave begins	28.59	0.94	780	2940			
(E) lunch N opening	28.49	1.04	863	3023		11:10 to 11:30	
(F) Summit	28.47	1.06	880	3040	3040'	12:07	
	28.47	0.94	880	3040			
(G) Col	28.49	0.92	861	3021	2980'	1:45	$\frac{3040' - 2160'}{29.41' - 21.47''} = \frac{880'}{0.994''} = 0.936 = R_2$
(H) on log road	28.58	0.83	777	2939		1:52	
(I) ? Botrychium discretum	28.77???	0.64±	599	2759±			
(J) on old turnpike	28.80	0.61	571	2731	±2700'	2:13	
(K) Trail junction	28.76	0.65	608	2768	2750'	2:20	
(L) highest stump	28.93	0.48	449	2609		2:30	
(M) top of log road	29.19	0.22	206	2366			
(N) Trailhead	29.41	0.00	0	-	2160'	3:00	

18.7 miles from 2810

$R_2 = 0.936$

\*28.83 was recorded.  
 28.77 is more likely correct.

Do not re-name "Bazzania Bump" to "Ancient Arbor".  
 The hemlocks are not old enough. Why not "Tsuga Top?"

Flora of Tsuga Top:

Bazzania, *Xylocomium splendens*, *Brotherella* (at lunch rock?)  
*Pleurozom*, PB several WITHOUT spruce or fir!! (*B. cordata*)  
 RM, PB

Note: Winnissock Club is running a sugarbush on S side of (47)  
 between the hairpin turn trailhead and the log deck site.  
 Tubers string connecting SUBs. Elev. ca. 2000'.

Hemlock #	dbh	Tree with ring counts	full radius at level of ring count	portion of radius counted	years	height of break	trunk length on ground	Total tree ht.	
Not summit	1	24.2"	-	-	-	-	-	-	
	2	12"	✓	6"	70	12' up	-	-	
	3	22.75"	-	-	-	-	-	-	
	4	25.7"	✓	±12" at eye level	50	-	-	45 ft.	
* 6	16.2"	✓	7"	7"	70	10' up	32 ft.	42 ft.	
S of summit	7	25.1"	south of 3040' summit ✓	-	-	-	-	-	
	8	31.5"		11.5"	11.5"	200	20' up	-	-
	9	23.8"		-	-	-	-	-	-
	10	27.5"	-	-	-	-	-	-	
	11	28.4"	✓	14.2"	10.7"	235, 240	5' up	44 ft.	49 ft.
12	21"	blazed	-	-	-	-	-	-	
13	26"	✓	13"	9"	125	-	-	-	

\* On E side of highest point

Height growth on young trees remaining openings or at edge of hemlock grove: 6"/year.

Age projection calculations:

✓ Tree #2: 12" diam break is 12' up. Add 20y for height. 70+20 = 90y  
 70y in 6" of radius with a phenomenally fast growth rate initially at 7mm/y for 1st 10 years. Then a slow down.

✓ Tree #4: dbh 25.7". Break at eye level (5' up). Hollow. Outer 2 1/2" of 25.7/2 = 12.85" full radius shows 50y.  
 Projection  $\frac{50y}{2 1/2"} = \frac{?y}{12.85"} \Rightarrow ? = 257y + 10y \text{ to reach } 5' \text{ up} = 267y$

Tree #5: 40' tree length measured on ground or break 40' up? Unclear!!  
 Broken 8" tree at 1mm/y would be  $25.4 \times \frac{8" \text{ diam}}{2 \text{ for radius}} = 102y$

✓ Tree #6 fast growing hem at edge of sunny P/B opening.  
 Add 8y for height. 14" diam tree broken 4' up with full count of 65 to 70y. 67+8 = 75  
 33' tall measured 1y on ground. 2 to 3mm/ring.

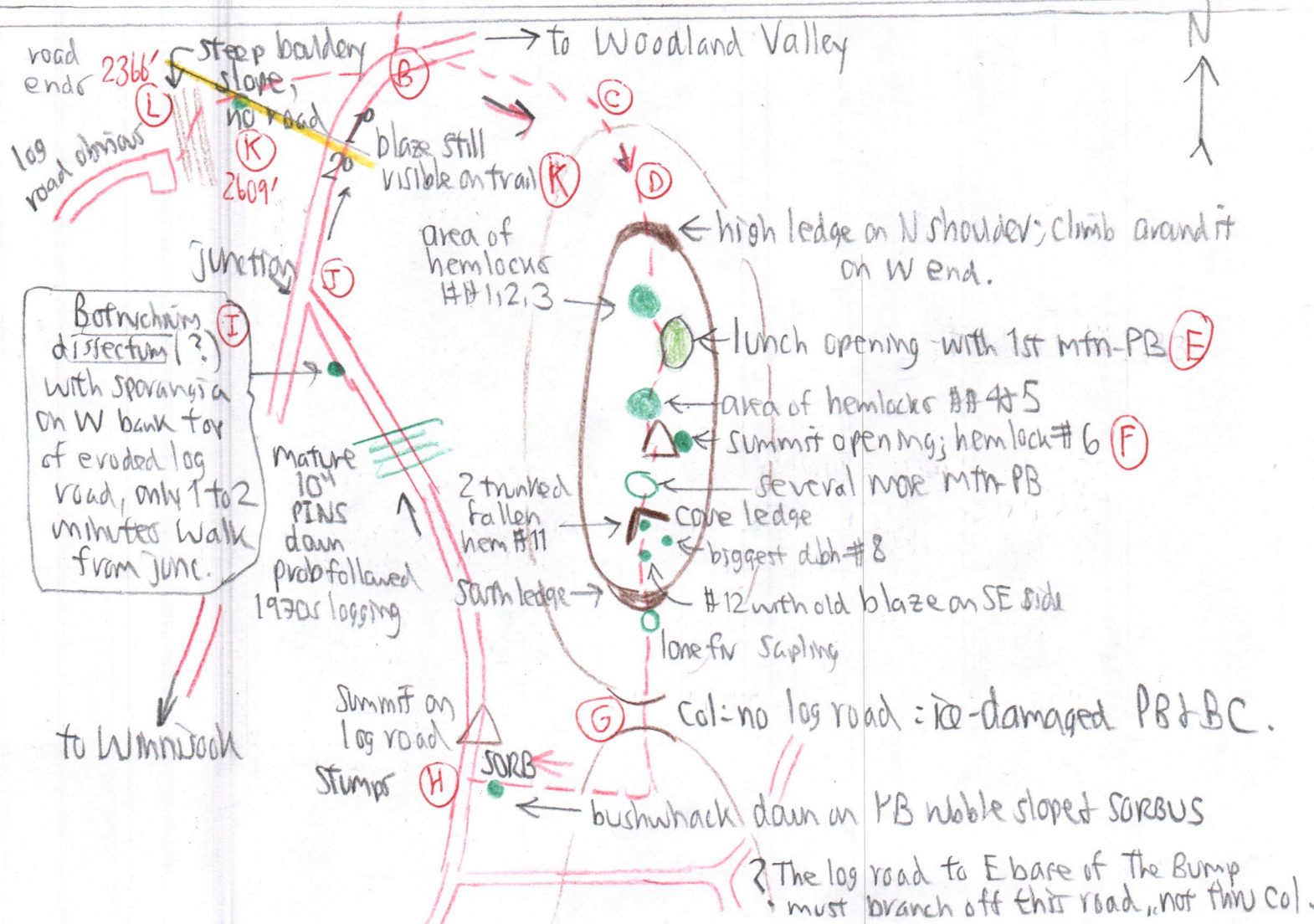
Tree #8: Break 20' up on tree with diameter of broken trunk on ground of 23". 200y cant.  
 Add 40y to reach 20' height. 200 + 40 = 240y  
 Full dbh 31.5", the largest tree.

Tree #11: Fell as 2 trunks in opposite directions in a small bedrock cove SW of summit. Break cant at 5' up. 28.4" diameter = 14.2" radius. (44' lying on ground + 5' <sup>still</sup> standing = 49' tall tree.)  
 Cant except interior 3' to 4" diam. heart rot.

Tree #13: 125y in 9" radius <sup>anted.</sup> Full diameter 26".  
 Full radius 13". ∴  $\frac{125y}{9"} = \frac{?y}{13"} :$  181y.

14.2" radius total  
 - 1.75" radius missing  
 = 12.45 radius canted  
 ? = 271y.

1.14  $\frac{238y \text{ cant}}{12.45" \text{ radius canted}} = \frac{?y \text{ projection}}{14.2" \text{ radius full}}$



*Botrychium dissectum* (?)  
 with sporangia on W bank top of eroded log road, only 1 to 2 minutes walk from June.

mature 10" PINS down prob followed 1970s logging

to Winniehook