

6/25/10

Wittenberg Tunnel + Terrace Mtn. 150-42

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$R=0.927$

6/25/10

Site	p	Δp	Δe	e calc	e map	R	time
(A) Woodland Valley Camp-ground Day Use P.A.	30-08	0.00	—	—	1360	$R_1 = 0.927 = \frac{2556' - 1360'}{30-08 - 28-79} = \frac{1196'}{1-29'} =$	10:40 AM
(B) Leave trail	30-02	0.06	56	1416			
(C) on bark road	30-04	0.08	74	1434			
(D) old Jeep	30-09	-0.01	-9	1351			
(E) SM blaze	30-01	0.07	65	1425			< 11:15
(F) lower end of island	29-93	0.15	139	1499			11:45
(G) bark road eroded	29-88	0.20	185	1545			11:53
(H) rock pile; shanty site?	29-84	0.24	222	1582			12:15 to 12:25
(I) tv-Tunnel at confl.	29-84	0.24	222	1582			12:30
(J) cross bark road	29-77	0.31	287	1647			
(K) 1st ledge, base	29-75	0.33	306	1666			
(L) forest	29-35	0.73	677	2037			
(M) 1st gentle terrace	29-22	0.84	779	2139			
(N) 1st flat terrace	29-18	0.88	816	2176			
(O) ramp up ledge	29-04	1.04	964	2324			
(P) on trail	29-03	1.05	973	2333			
(Q) Terrace Lean-To	29-03	1.05	973	2333	2350		1:45 to 2:20
(R) Norway Spruce plant.	29-05	1.03	955	2315			3:00 LV.
(S) enter forested burn	28-90	1.18	1094	2454			
(T) enter ^{lower} open burn	28-88	1.20	1112	2472			
(TT) BM "Trail" 2556	28-79	1.29	1196	2556	BM 2556 "Trail"		3:50
(FE) Confluence	29-98	0.10	93	1453			
(NN) KEM grove	29-14	0.94	871	2231			
(Q) Terrace Lean-to, return	—	—	—	—	2350		± 3:15
(P) on trail earlier, return 29-00	—	—	—	—	—		3:25
(HH) 2nd open burn, Upper (near BM 2556)	28-82	1.26	1168	2528			3:43 to 4:00

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R

	Site	P	Δp	Δe	e calc	e map	Time
(TT)	BM "Trail" 2556	28.79	1.26	1196	2556	2556	±3:50
(U)	Trail turns W	28.72	1.33	1262	2622	<u>2649</u>	4:15
(V)	trail junction	28.70	1.35	1281	2641	2680*	4:18
(W)	enter 1° <u>e-p 102</u>	21.76	1.29	1224	2584		4:30
(X)	Summit on trail	28.70	1.35	1281	2641		4:40
(Y)	possible 2°	28.98	1.07	1015	2375		4:58
(Z)	lookout	29.14	0.91	864	2224		5:05
(AA)	definite 2° <u>e-p 101</u>	29.20	0.85	807	2167		5:16
(BB)	bark road junc.	29.28	0.77	731	2091		5:19
(CC)	1st orchid	29.22	0.83	788	2148		5:25
(DD)	"The Rock"	29.25 to 29.21	0.82	778	2138	#	5:58 - 7:00
(EE)	bark road junc.	29.50	0.55	522	1882		7:21
(FF)	Birch	29.74					
(GG)	SNY blaze	29.74	0.31	294	1654		7:30
	below Misko Cabin at Woodland Valley Park					1430	7:45
(A)	Woodland Valley Campground	30.05	0.00			1360	7:55

$2556 - 1360 = 1196$
 $30.05 - 28.79 = 1.26$
 $1196 / 1.26 = 0.949$
 $\approx R2$

* 2680 from earlier calculations, not USGS.
 # 21 from earlier calculations, not USGS

↑
 More times on Map p. 150-44

(A) Two ASH around the day-use parking area may be $> 100'$ tall. Perhaps $110'$? Estimate $7 \times 13' = 91'$ at W end of lot. $110'$ est. at staircase base.

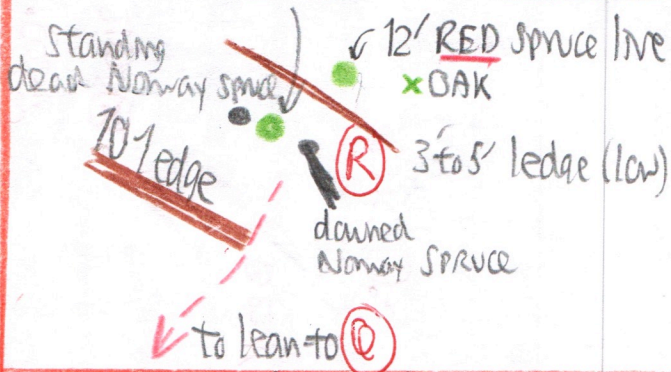
(B) to (C): RB-R-YB-PM-HEM. Stump $\pm 30y$ on Private Land preceded the

(D) John Burroughs ~~is said to have used the~~ stone fireplace for camping instead of nearby Larkin's Farm. Spring nearby. Not examined. Fireplace built later!

BURNED 1901 PLANTATION

DETAIL Norway Spruce
2 1/2' tall live

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The Wittenberg Tunnel & the disintegrating hemlock stand

The Wittenberg Tunnel "name goes back to at least Simpson in the late 19th Century. It refers to the short, wide amphitheatre-like valley W of Terrace Mtn.

The Tunnel is perhaps the best current example of a disintegrating mature hemlock stand in the Catskills. (The similar stand in the Eagle-Big Indian Col is much less extensive). The dead & dying hemlocks are best seen from Lookout (Z); they emerge from most of the intermixed hardwoods.

From within the Tunnel stand, many hemlocks exceed 30 inches d.b.h., with some 33" & 36" beginning at (E). None is in the $> 40''$ range, but heights are well over 100 feet.

Mature hemlocks are scattered in the hardwoods, not in pure groves.

Between (EE) & (F), a flood channel

— not the main channel — eroded its bank causing several mature hemlocks to fall to the west. One broke, revealing a growth rate of 6, 10, 12, to 20 rings/inch. If the median growth rate is 13 rings/inch, then a 36" dbh HEM is $\frac{36}{2} \times 13 = 234$ years old, or estab. in 1770s.

When Simpson was banking ca. 1851, these HEMs would have been about 75 y old, barely \rightarrow large enough for harvesting, & not barked!

Now they are mature to senescent, some live, some with partly-dead crowns, & others fully dead.

There is nil reproduction of HEM. YB thickets follow tree falls with some 2" YBs atop a "pancake" HEM upturned root mass. This suggests the 1996 flood. Also, beech sprouts are plentiful.

Paul Misko has pointed out that some bark roads in Woodland Valley end in all-hardwood stands. He suggested that after banking HEM did not reproduce. This is what is happening now in the Tunnel. \rightarrow

Such stands today are rare in the Catskills, but they do occur. Far more abundantly in the W Catskills, hemlock stands are replacing hardwood stands, e.g. in the Dry Brook Valley.

Woolly adelgid is NOT a factor in The Tunnel.

Hardwoods in the Tunnel:

22" BB at (EE), 24" RM.

26" YB broken stump with sections cut at by Paul for ring counts, above (EE).

This tree had partitioned itself off from disease by creating false rings nearly an inch apart. 11:15 AM
SUGs to 28". ASH to 28" at (E), but most 12" to 24". 3

At (H), SUB 36". Another SUB 28" with 10 rings/inch broken.

Age estimated $\frac{28}{2} \times 10 = 140$ y.

Three BBs 12".

(J) This suggests that Hardwoods in the tunnel have never been cut, but bark roads make it old growth, not 1st growth.

SNY acquisition for Lots

West slope of Terrace

Mtn.:

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Bark road at (J) heading up to SE. No more seen until Trail (P), yet forest is all clearly 2^o and quite dry: B-BB-a few OAK. One smooth-barked healthy beech with bear claw marks. Ilex montana HEM saplings scattered with no adelgid, culminating in groves at (NN) + (HH). Grove at (NN) has max dbh 15".

(L) Max dbh on W slope is a 3-trunk OAK with stems 20" dbh. B dom, with a few RM+YB.

(M) Lyco obs large popln. PREN.

(N) OAK fallen root max "pancake" 24" thick. Danthonia in small opening. YBs 12 ft tall on oak's "pancake."

(O) Several SUB to 34" at base of 25' ledge with possible bark road up obliquely from NE to SW?

(P) On trail. 3 ft of till eroded down to red shale ledge. HEM+YB+RM to 28" between (P) + (Q): no bum here.

(E) Clearing around lean-to remains mainly open for decades, but no goldenrod. DP, Danthonia, RS + some mustard in fruit instead.

(R) Transsect #44 bum area with Norway Spruce Plantation.

Two ^{older} Norway spruce remain, both dead, ca. 8" dbh, one standing + one down. One broiled (burnt) stump. One 2 1/2 ft tall sapling (over)

Terrace Mountain

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(HH) to (U) = No burnt logs, stumps or charcoal. No fire-seared trees - all too young.

(Y) Possible re-entry into 2°. A few ASK & fewer old trees. Still could be 1°.

(Z) Wittenberg Tunnel dead mature hemlock clearly visible.

(AA) Paul says that branch back road ends here, only 3 minutes' walk from (BB). Definitely 1° below here. E-P #101.

(DD) Diervilla in fl. at The Rock
Monotropa, 1st flower (in June!) 7:05, 2 minutes after leaving The Rock.

Paul says that Simpson had lumber delivered to Terrace Mtn. to build a hotel in 1876, but the building was never constructed. This is 6 years after tannery closed & RR arrived.

Brook is on E side of Tunnel between (EE) & (F).

Geology notes. When the mature HEMs fell over because of a flood above (FE) the root mass "pancakes" included many rounded cobbles at least 20 feet above the stream channel. Is there much alluvium in this valley? Is the tunnel really a low-elevation cirque? Is there a local glacier recessional moraine mit?

(R) The 12' tall spruce a little below is RED.
Surrounding forest is OAK, B, C, M, O.
TU in fruit.

6" diam.
Norway spruce broken, stump was about 55 years old when it died, i.e., ca. 1960.

(S) Forest changes abruptly from non-burn area at (P): Red spruce & PB enter, with Vaccang & Rhodo roseum.

(T) The 1st opening has Nemo, KLAT in flower, SPR, HEM, RM, PB, GB, Rhodo roseum, Ptendium, Ilex mont, & Kam.

(HK) The 2nd, larger, opening has HEM & SPR abundance > 10:1. A few SOB. This is a spruce-only - NO-fire site, one of the few in the Catskills. Another is Man's Glen.

Vaccang some fruits ripe & eaten.
Paul says Wittenberg Summit was visible from here in 1970s, but now forest on the south, mostly RM, block the view.

(TT) The blue benchmark is about 60 horizontal feet NW of the big rock cairn which sits near the edge of the east-facing cliff. BM "Trail" dates to 1942 at elev. 2556'. Cairn is a little higher. Is it possible that these openings are not fire-caused & have always been this way by lack of till? Are any trees > 110 years?