

Lot 48, Kelly Hollow

With Dave Turan
5/5/10

acquired 1853

270-86

| Site | P | Δp | Δe | e calc | e map | time | R |
|-----------------------------|-------|------------|------------|--------|-------|----------|--|
| (A) Mill Brook Road pass | 28-72 | 0.90" | | | 2600 | | $R_1 = \frac{2600 - 1760'}{29.62'' - 28.72''} = \frac{840'}{0.90''} = 0.933$ |
| (B) Kelly Hollow, W end | 29-62 | 0.00" | 0 | | 1760 | ±10:15 | |
| (C) Lot 48 corner | 29-51 | 0.11 | 103 | 1863 | 1840 | e-p #600 | |
| (D) dry stream bed, locally | 29-37 | 0.25 | 233 | 1993 | | | |
| (E) defoliation acre | 29-30 | 0.32 | 299 | 2059 | | | |
| (F) healthy beech clump | 29-17 | 0.45 | 420 | 2180 | | e-p #601 | |
| (G) gentle ASH terrace | 29-12 | 0.50 | 467 | 2227 | | | |
| (H) ASH few; defol. SUB | 28-94 | 0.68 | 634 | 2394 | | e-p #602 | |
| (I) nil defoliation: lunch | 28-82 | 0.80 | 746 | 2506 | | 12:30 | |
| (J) SUB still dom | 28-60 | 1.02 | 952 | 2712 | | 1:00 | |
| (K) begin descent in ravine | 28-57 | 1.05 | 980 | 2740 | | | $R_2 = \frac{2600 - 1760'}{29.58'' - 28.62''} = \frac{840'}{0.96''} = 0.875$ |
| (K) dry | | | | | | | |
| (L) puddle in ravine | 28-70 | 0.92 | 859 | 2618 | | | |
| (M) confluence | 28-80 | 0.82 | 765 | 2525 | | | |
| (N) falls & cascades | 28-87 | 0.75 | 700 | 2460 | | | |
| (O) tall ASH | 29-06 | 0.56 | 522 | 2282 | | 1:40 | |
| (P) highest elev NEM | 29-25 | 0.37 | 345 | 2105 | | 1:55 | |
| (Q) NEM understory east | 29-30 | 0.32 | 299 | 2059 | | | |
| (C) Lot 48 Corner | 29-45 | 0.17 | 159 | 1914 | 1840 | 2:15 | |
| (B) Kelly Hollow, W end | 29-58 | 0.00" | 0 | error | 1760 | ±2:30 | |
| (A) Mill Brook Rd-pass | 28-62 | 0.96" | | | 2600 | | |
| (O) 2870, 10AM | 29-95 | | | | 1500 | 10AM | $R_2 = 0.875$ |
| (O) 2870, 3PM | 29-80 | | | | 1500 | 3PM | |

Use R1 for all

R2 NOT USED

Tree ages by ring counts

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AA) SUB broken branch from 50' up, growing 2mm/y on a 20" diam log. Heart rot. Age estimate at (G).

2mm/y in a 20" diam = 10" radius is $10 \times \frac{25.4}{2} = 127y$.

Add 50' up $\approx \frac{12''}{8''} \times 50' = 75$ more y.

$\therefore 127 + 75 = \underline{202y}$.

Full dbh not recorded, probably in the 30" range.

BB) ASH broken 7' up. 18" diameter. Heart rot. $> 125y$ at (G).

[Why wasn't growth rate noted for not rotted portion?]

Tree #41

CC) SUB betw. (G) & (N) 115y fullcort, 22" dbh, broken only 2' up.

Tree diameters

SUG: (E) 31", 34"; (I) 28"; (I to J) 34"; (L) 30"; (O) six 30" SUBS in view at once; (CC) 22"

RM: (E to F) 22" shaggy

MO: (N) 10"; (O to P) 10"; (J to J) locally dense but small.

B: 22" healthy clump, near smaller diseased B

ASH: (G) 33"; (K to L) 12"; (O) 26" x ± 130' tall, two of them; (O to P) 34" *

BASS: (G) ± 24", ± 24"; (I) much rotted broken stump not measured but > 24" 115y

YB: (K) 24"; (M) 30"

BC: (G) 24"; (I to J) 24"

KEM: (F) 38", 37"

Estimated ages from regression curves

22" SUB: 145y
34" SUB: 220y

135y

155y

175y to 220y
155y

285y

* Fast-growing ASH at 33" to 34" will be ± 115y; median growth ± 25y

Forest Description

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below (C) Sugarbush on Lot 38. A few BB, but no oak.

(D) two scattered ASH

(E) about 1 acre defol. by forest tent caterpillar ca-2007 or 2008. Dead SUB to 34".

(F) Hemlock grove. Max-37" & 38" but most smaller & all-aged. No bank roads on steep bank. 22" RM Shaggy + a clump of healthy 22" beech.

(G) ASH common, to 33", most smaller, suggesting a disturbance here about 125 y ago. Trees AA BB CC.
Could have been wind, ice, snow or defoliation.
No roads. BASS + OST.

(H) No ASH. SUBs dom't defoliated, the last few years. Some dead.

(I) A few scat. ASH. OST.
Lunch by a big BASS broken old stump. SUB repro. abun.
Low ledge above with dense MO.
Then drier, bouldery, with B-KB-BC locally common.

(J) Return to SUB dom. LL, 1 ASH.

(K) Begin descent. Highest point of hike. More BC, VA, AA, CB. Understory more boreal.

(L) One 30" SUB

(M) locally few trees > 18", a few widely-

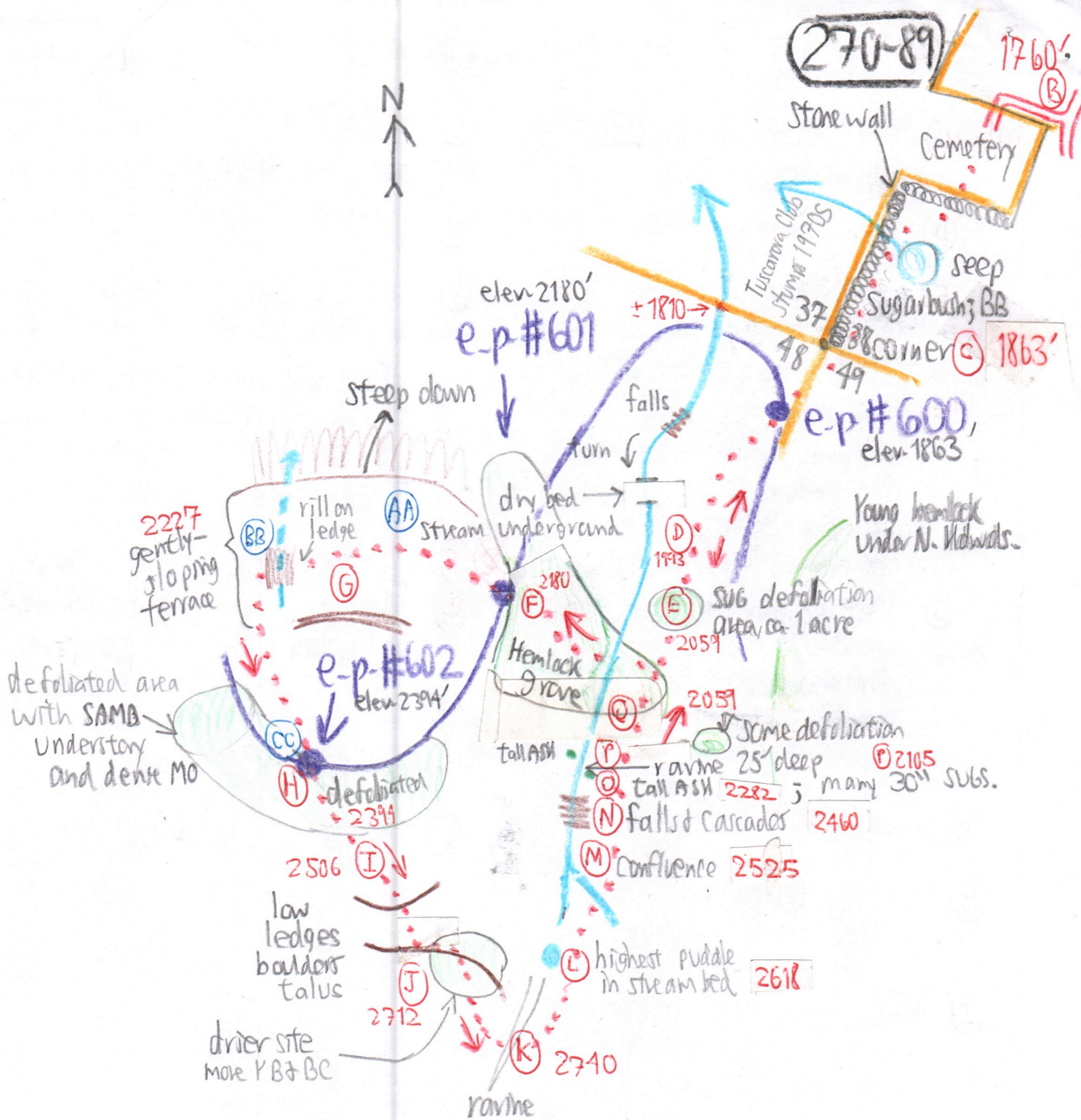
(N) scat. MO to 10"

(O) Two tall ASH, plus several more but shorter, to 34". The ASH estimated to be 120, maybe 130 ft tall x 26", one on E side of stream.

Six 30" SUBs in view at one time on E bank & above. BASS

(P) Scattered NEM on top of grove,

(Q) then more abun. below. SAMB & RA M defol. areas, ca 2007-2008 of SUB by forest tent caterpillar



1^o added is about 0.5 square mile.