Mount Pleasant South Spur

with Jonathan Levine
Sept. 14, 2007
(Jay)

121-6

0.931

site	P	Δp	Δe	e calc	e map	t	R
(A) Oak(es) Mtn. Farm	30.90	0.00	—	—	750'	11:00??	
(B) Ch. oak on terrace; new clearing	30.76	0.14	130	880			
(C) 2nd terrace; Tulip	30.65	0.25	233	983			
(D) Ch. oak #2	30.53	0.37	344	1094			
(E) Lunch terrace	30.47	0.43	400	1150			
(F) On spur crest	30.22	0.68	633	1383	1420'	12:30	
(G) Knob	30.17	0.73	680	1430		12:50	
(H) begin Klat 1st thicket	30.03	0.87	810	1560			
(I) Grassy area, cross blaze	29.88	1.02	950	1700		1:20	
(J) base of steepest pitch	29.68	1.22	1136	1886			
(K) Summit 2100'	29.45	1.45	1350	2100	2100'	1:55 am	
	29.48	1.30	1350	1.038		2:15 lv	
(J) base of steepest pitch	29.70	1.08	1121	1871		2:40	
(I)	29.88	0.90	934	1684		2:55	
(L) Nyssa grove	29.92	0.86	893	1643			
(M) base of 2nd Klat thicket	30.01	0.77	799	1549		3:09	
(N) DEP blaze on spur	30.14	0.64	664	1414			
(F) On crest on ascent	30.16	0.62	644	1394	1420	3:30	
(O) DEP corner, upper	30.23	0.55	571	1321			
(P) DEP corner, lower	30.30	0.48	498	1248			
(Q) end of Sun Mtn Rd.	30.38	0.40	415	1165			
(R) switchback on "	30.41	0.37	384	1134			
(S) Sun Mtn & Travell. Rds.	30.65	0.13	135	885		4:00	
(T) Travell & Kolb Rds.	30.67	0.11	114	864	880	4:02	
(A) Oak(es) Mtn. Farm	30.78	0.00	—	—	750	4:15	

$$R_1 = \frac{2100' - 750'}{30.90'' - 29.45''} = \frac{1350'}{1.45''} = 0.931$$

$$R_2 = \frac{2100' - 750'}{30.78'' - 29.48''} = \frac{1350'}{1.30''} = 1.038$$

Vegetation

121-7

More on (F) on next page →

(U) 730' (A) 750' Oak(es) Mtn. Farm

Hemlocks at grave (U) with moderate woolly adelgid & sparse foliage. Healthy further up at (E) in understory.

Siltstone collected

One 33" SNAG dead in old field west of (U) with broken limb on ground. Limb broke off 8"d, about 2 ft from trunk (3y? add) and limb attached to trunk at 17' up (add 25y?). 50 rings on limb + 17yr 3y = 70 y old tree at 17'? Add many decades more to reach top of tree.

Quarry is SSE of (U) & till gravel off below

(B) 880' 1 chestnut oak (a taste of things to come at (F)).

Bittersnut at 910'. Scattered PB & SNAG

N-red oak abundant

(C) 983' Tulip 18" 5½

(D) 1094' 2nd chestnut oak. 6½ A few TB are all that's left of boreal forest.

(E) to (F) →

(F) 1383, 1394 (Phoenicia Quad says 1400) Open Chestnut oak forest; Scrubby Canopy only 20 to 30'. Several N-red oak. Vacc ang & vacc both. Agrostis? COLLECTED 12

Leucobryum, Cladonia. Dry, shallow-soiled & burned over.

Jay says that it looked the same in 1968 & 1978. Euh pine seedling, prob from (P) below Ampl, HEM & few Choak seedlings, otherwise no tree repro.

(G) 1430' Red Spruce sapling, prob from Samuels Point. Gaultheria procumbens, the 1st of many up the spur.

7.5 1st KLAT Ilex montana.

(G) to (H) 1430' to 1560'. Tree taller, prob less severely burned & water-stressed, 40 to 50'.

(N red?) OAK down 105y in 6" of radius. Total full radius 12" in a 24" dbh tree with heart rot. #3

Aster div., MD, Solid bicolor, local Gaultheria, Hieracium paniculatum? 8½

(H) 1560' Begin 1st major KLAT thicket

(I) 1694' OAKS ½ defoliated, both spp. Canopy ± 50' to 40' canopy.

(E) to (F) Base of ledges at (E), also at (C) & (D): Areas of nil humus with much bare till & oak litter. Understory shifts from B to SyB to HEM locally under the oaks. In sunnier spots; DP, DMarg, EUP, OST. Scattered SNAG. 2 per charcoal. SUGS healthy. ASH, herb Robert, Asplenium trichomanes? (fronds only ± 1 dm long)

(F) continued: Castanea 2" x 10', RM, abundant Gaultheria Hamam, PB, [illegible]

No boreal ground cover spp. Seen all day except a few TB at (D) [and some PB trees] + some MC at (K)

ASCENT

(I) continued. Grassy opening between KLAT thickets. Canopy 50'

(J) Canopy 50'. 2nd Tulip seedling (seed must have blown up from far below). PBs in upper grassy area

(K) Summit 2100'.
N red oak dom to 40'
KLAT ← → dom understory
Ch Oak, RM sapl, MO, 2 PB, Gaultheria, Vacc ang, Adm EUP, Vib acer, Holl
Few Amelanchier, A macro m fl.
Solid bicolor, Ilex mont
Rcymos

Scattered Ilex mont in bright red fruit betw (K) & (J)

DESCENT

(I) 1684' Oaks ½ defoliated, some of birch species. 50' tall.

(L) Nyssa 1643' (11) poplin in understory, above a dozen trees averaging 4" dbh. Ilex mont.

(M) Amel "parifolia" with small lvs. Few RM. Few white pine 12". Open oak stand

(P) & White pine above. 1248'

(R) SMAG 1134'

27.3 miles to Oak(es) Mtn-Farm.
54.5 round trip.
43 minutes one way.

Future visit:

(1) Look at map on wall of house, not barn: 1858 Ulster Co. publ by J.H. French with Taintor Dawson & Co., Philadelphia 517 → 521 Minor Street
Bring flashlight & stepladder

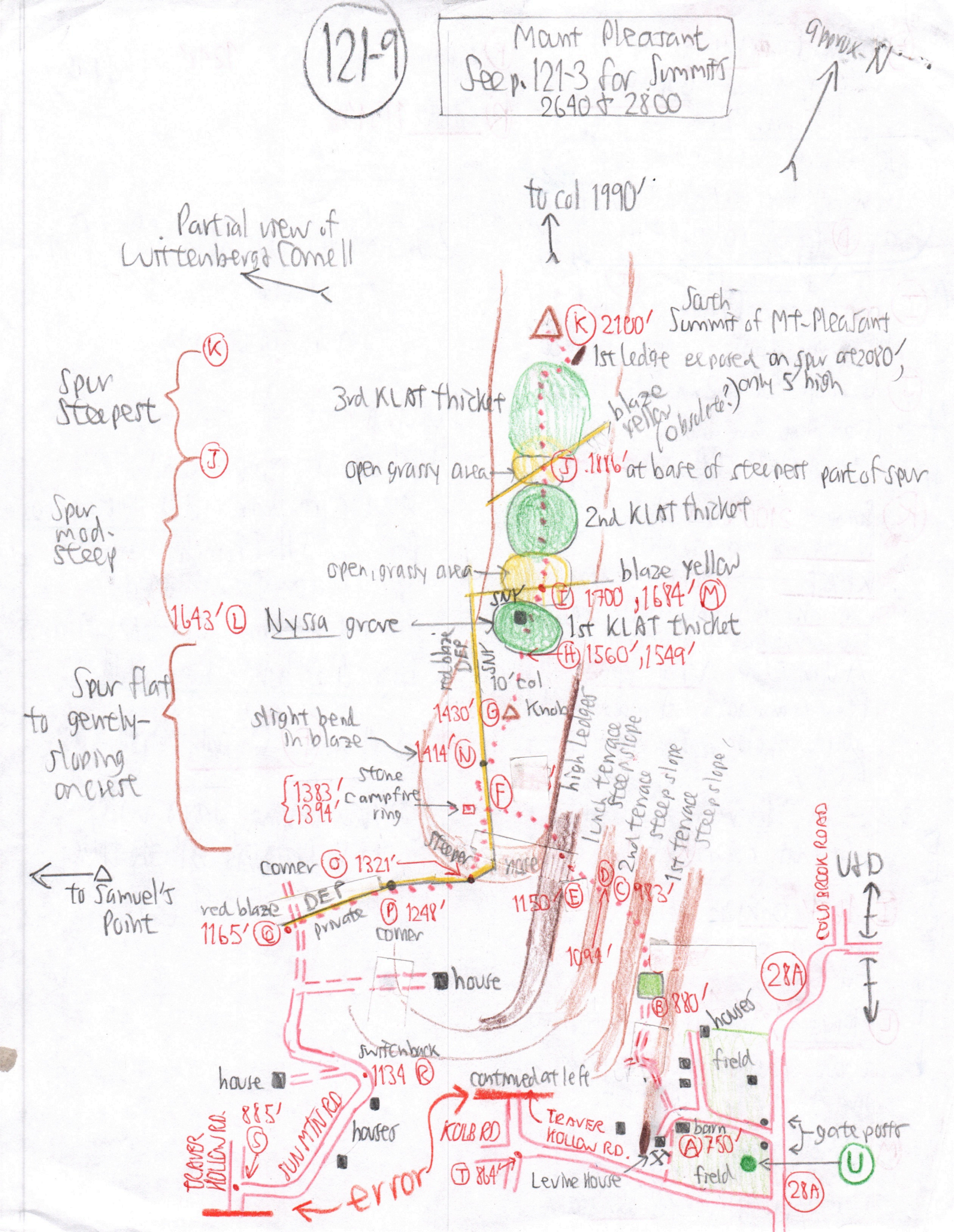
(2) Photo (F) Ch-oak burned faces

(3) Joan Levine, Jay's wife, is in Bozeman all the time at 657-7000 (?).

121-9

Mount Pleasant

See p. 121-3 for summits 2640 & 2800



Make a copy of this sheet for the file on measurements.

121-13

Friday 9/14/07 hike up the 2100-foot south summit of Mount Pleasant

Air pressure was falling all day because of an approaching cold front and the arrival of clouds from an extra-tropical low passing by off the coast to the south. Rain did not begin until well after midnight & barely 0.1 inch through Saturday morning.

The R_2 on Mt. Pleasant descent exceeded 1; in fact it was 1.038, a elevation rise/fall 1.038 feet for each 1 inch of mercury. Average is 920 feet for 1 inch of mercury.

Is this expected? (Yes) A descent as fronts and/or storms approach would tend to partly negate the pressure rise because of elevation only. Pressure would be rising because of decreased elevation, but falling because of the front or storm approach.

Average is 920 ft descent for each 1.0 inch of pressure rise.

With a front or storm approaching, there is ±1000 ft of descent for each 1.0 inch of pressure rise.

Conversely, on other days with pressure rising as a high moves in, the rate of pressure rise with descent should be enhanced.

Recap/calc: For each 1000 ft decrease in elevation, pressure should rise $\frac{100}{92}$ = 1.1 inch on the avg. When a front or storm approaches, for each 1000 ft, pressure will rise less: $\frac{100}{100}$ = 1.0 inch.

7/21/08 # Mount Pleasant, South Spur (121-14)

p. 121-6 continued from 9/14/07. This time with Jay Levine, son Casey Levine (age 15) and neighbors Tom Russo (furniture maker) & Mark Stetler (photographer).

Purpose: To photograph the burned Chestnut oak stand (about a dozen taken)

Ages of oaks on crest of ridge, elev. 1400':

N. red oak. 70y in 4" of 6" radius. Growing eventually 1mm/y radially Projected age: $\frac{70}{4}=\frac{?}{6}$ · 105y #4

Most broken trees & limbs with heart rot.

Ch-oak (?) Projected age: $\frac{70}{3}=\frac{?}{4}$ 93y 70y in 3" of radius in 8" broken (trunk) diam.?

#1* Full cant Ch-oak broken 4 ft up, 12" diam. 115y to 125y Add ± 6y to reach 4 ft height ≈ 120 to 130y

Full cant 60y in 5" diam trunk (Ch-oak?)

4" branch estimate 70y (Ch-oak?)

#5 N red oak 80y at 12" diam.

#2* 125y Ch-oak 16" dbh full cant

70y red oak (What diameter?)

Jay says forest looked much the same in 1968. Note oaks are of different ages, not all regenerating at once after the last severe burn →

Shagbark Hickory on Jay's farm, dead & standing in 2007, now cut. 28" on the stump and about 140y. About a few hundred feet S of barn/house. #1 ✓

Flora

Ch-oak dom.
N red oak
2 White oak
RM
Vacc ang
Vacc vac (abundant in fruit maturing)
Melampyrum
Gaultheria procumbens
Leucobryum
Klat

Ch oak - a few seedlings.
E white pine - ditto.
Mature pines lower down on L/W slope.

* Last severe fire which destroyed trees must have taken place about 1880.