

# Light intensity on forest floor

Measured with old Weston light meter held horizontally while walking the trails. Held vertically <sup>up</sup> would yield bright skylight. Held vertically down would yield only reflected, not incidental, light. Horizontally is an average. Time of day & % cloudiness are causes of variation.

# of observations

Lower elev with SUG:

Upper elev without SUG:

YB dom

BC dom

FIR dom

total # obs. =

Tallying: Instead of finding medians for each site, tally up ALL values for each sp. & find the median.

Combine with 6/23/04 Willowena Headwaters data.  
6/8/04 Kalcott Mtn. from Elk Hollow data.

## General comments:

(102) Full sun is 6 1/2 except on Mill Brook Rd where <sup>highway</sup> surface reflects light & raises reading to 7.

Vertical list of circled numbers: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102

SUGAR MAPLE SITES

Light

Site of light meter readings in red.

FE-025

Time (Sun angle is important)	Location (See map)	Minimum	Maximum	Median
Daylight Saving Time suggests				
Lower AM Sun angle than E.S.T.				
8:30 to 8:45 AM (1021) <sup>on p. 260-37</sup>	(A) 1022	2, mostly 3	5	
9:00	(B) 1023	2, mostly 3	6 sun	
about 9:35	(G) 1028	3	5	
about 9:50	(H) seeps 1029	2	6 sun	
10:00	(I) 1030	3	5 (6 sun)	
Photos 10:05 open, ice damaged	(J) 1031	—	6 1/2 sun	
10:10	(K) 1032	4	6	
11:15 to NOON Springs 3500'	(L) 1033	4	6 1/2	
1:45 3600' seep	(S) 1039	3	5 1/2 } bright cloudy	
1:45		4	6 1/2 } sun clear	
3:10	(X) 1043	3 1/2	5 1/2	
3:30	(Y) 1044	2 1/2	5 1/2	
3:39	(Z) 1045	—	7 on road	
11:00 MORE (U)	(L) 1033	3 1/2	6	

There are <sup>CAMP</sup> few \$-DP glades in SUB-dom or B dom forests. Most fem glades are in BC & YB forests.

More timetable

10:50 to 10:55 new lean to

Median All SUB sites.

BLACK CHERRY-SITES

9:10	(C) 1024	1	2	
9:15 MO+MM	(D) 1025	1 in beech spruce	4 outside beech spruce	
10:30 BC-B-YB dom, some SUB	(AA) 1046	3 1/2	5 1/2	
12:05 BC-SUB-B-DP-1st FIR	(M) 1034	4 in forest	6	BC YB
± 2:45	(W) 1042	4.5	6.5	
YB SITES 9:30	(F) 1027	4	5	
± 9:25	(E) 1026	2 to 5	6 full sun	
12:06±	(N) 1035	5 in fem glades	7	
FIR sites 12:15±	(O) 1036	3.5	5.5	
12:35	(P) near summit 1037	4	6 1/2	
	(Q) 1038	1 or 2 deep shade	6 sun	
1:15	(T) 1040	4.5	6	
2:20	(U) 1041	5	5.5	6.5 full sun (1041) (1041)

In SUB forest at lower elevs at (V) instead of continuous boreal ground cover, there is some bare litter, some tree fern + \$  
Taller canopy creates a multi-storied understory & more shade.

DOMINANT	LOCATION	100% of sample is how long on ground?	% Stoniness	mean %
SUG dom.	<p>(C) (I) (L) (X)</p> <p>(A) (B) (C) (D) (E) (F) (G) (H) (I) (J) (K) (L) (M) (N) (O) (P) (Q) (R) (S) (T) (U) (V) (W) (X) (Y) (Z)</p>	<p>81 T inches</p> <p>Small 2ft exposure, 1 inch units, 24 inches</p> <p>42 T inches</p> <p>100 T inches</p>	<p>13/81 = 16%</p> <p>5/24 to 12/24 = 21% to 50%</p> <p>13/42 = 31%</p> <p>19/100 = 19%</p>	<p>n=5</p> <p>Σ=137</p> <p><u>x̄ = 27.4%</u></p>
BC { include sites with some SUG, but mostly BC, some Y&B	<p>YB BC-B-SUG</p> <p>(BB) (AA)</p>	<p>100 T inches</p> <p>100 T inches</p>	<p>26/100 = 26%</p> <p>20/100 = 20%</p>	<p>Some gravel hidden by litter not counted = 20%</p> <p>n=3</p> <p>Σ=76</p> <p><u>x̄ = 25.3%</u></p>
	<p>On 6/25/04 near willawemoc Cr. on a windthrow</p>		<p>25% to 35% estimate</p>	<p>= 30%</p>
YB, fir absent	<p>(CC) (E)</p> <p>SURB, B, BC</p> <p>YB, B, MM, 1 SUG</p>	<p>100 T inches</p> <p>5ft m<sup>1</sup>/100ft units</p>	<p>47/100 = 47%</p> <p>18/50 = 36%</p>	<p>n=2</p> <p>Σ=83</p> <p><u>x̄ = 42%</u></p>
FIR, present to dominant	<p>(O) (P) (Q) (R)</p> <p>Fir-DR-BC-YB</p> <p>Fir-YB-PM-SURB</p>	<p>100 T inches</p> <p>100 T inches</p> <p>100 T inches</p> <p>100 T inches</p>	<p>26/100 = 26%</p> <p>23/100 = 23%</p> <p>34/100 partly ledge = 34%</p> <p>58/100 some ledge = 58%</p>	<p>n=4</p> <p>Σ=141</p> <p><u>x̄ = 35%</u></p>

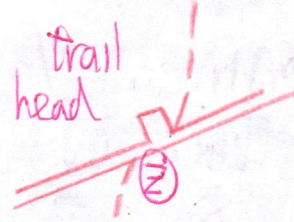
What about low elev fir stands, e.g. Fir Brook?

See } 6/23/04 willawemoc headwaters excursion has a % stoniness value in a windthrow \*  
 also } Any others? - Scattered among 2003 + 2002 field notes also, e.g. Belleayre, Flinn's village, Graham Mtn., Balsam Mtn.

PE-025  
↑

# Map of Sites

Mail Brook Rd. 260-40



register  
A Y

wet soil

X // till cut

B BB

Spring ledges  
C

W Porcupine Jc.

1/2 way rock  
D

Trail summit  
drowned fir before 5/17/04

DD wet spot with Cx brunneus  
& interior (photo)

rill  
fat fir  
E

Trail to Graham Mtn  
F

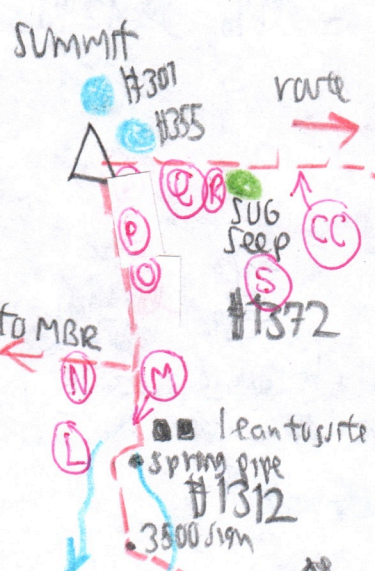
TUV  
fir grave on  
low ledge  
HEM

Furrow  
SMA  
G

H  
seeps

ice damage lookout across Black Brook  
to B/Kill Range  
I  
J

to Balsam Lake (Lake)  
K  
AA  
CC



to MBR  
N

new lean to

AA  
CC

K

route

route

route

Spring #1312 at above Leanto.

[New Leanto's oldest graffiti is from 10/12/00 and "Bill & Dee 2000" (= Fiedler?)]

SUB	AFF	CHELONE ASTER PUN. THALIC in fl. BLEPHILIA (?), a mint POLEMONIUM m.fl. CHELONE LAP, IMP, HERACLEUM	CX SCAB GLYCERIA (coll) VV MILIUM
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Non-ferpers:

SAMB	RCHNOS
SRUG	CX INTU CX DEB CNC

Seep along east trail, 3600': HERACLEUM-LAP-HYDRO-R PUB-CXINTU-NYF glade  
Seep veg. best developed on slope between the flat & the ledge base.

#1372 FIR-YB forest abruptly enters above the seep. No flowing water observed & soil is no longer saturated.  
On trail at seep 3600' are Cx brunni, deb & crinita.

1st CB at (M) with 1st fir on ascent from S

Photos:

Carex interior & brunni <sup>in Sphagnum</sup> together at (DD)

Sorbus fls. at (S)

Three from (I) looking to B'kill Range 3377

Two: Boreal grand carex at (TUV) mol- CB & SM.  
OX in flower profuse.

Two: seep on S slope, with view over Mongaup Mtn.

Two: of seep itself.

Two: Polemonium in flower.

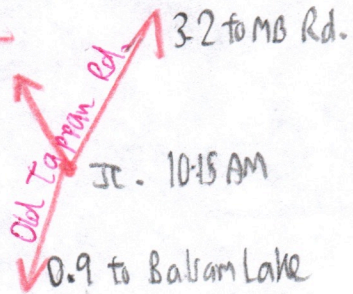
One: Seed cones looking down at a fir from fire tower.

More Veg. Ilex montana at (K)

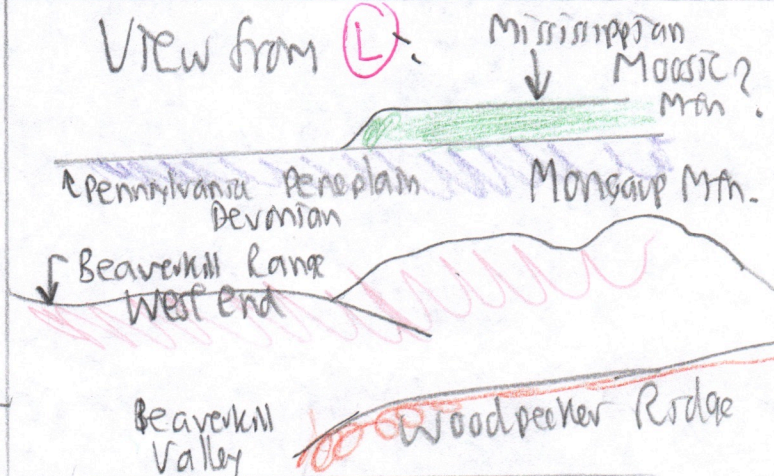
Polemonium is pollinated by 2 spp of bumble bees - mel. tiger swallowtail and small orange ones < 1" across

Trail distances

MB Road 3-85  
Summit 0.85  
Leanto 0.50



View from (L)



From BL Tower, the Moasic Mtn left end is over Walnut Mtn.

MOSS More Vegetation:

26042

Bog 355 (see file) has an outlet, not flowing on 6/20/04 but with puddles in a ravine 3' deep in fill. Head east. Bog is 100 paces long from W (water hole) to E (outlet) along the trail.

W  
E

(10)

(2)

(1)

(10)

(1)

(1)