Report to VINS on the 1995 Mansfield Vegetation study by Charles Cogbill

This report summarizes the vegetation on two vegetation plots sampled on Mount Mansfield in the September and October 1995. The work was done on the permanent 20 ha (500X400m) gri

Camel's Hump and Jay), NH, and NY place the Mansfield sites within the middle of things with the Nose Dive being toward the wet-mesic end of things and Ranch Brook being toward a slightly higher elevation affinity. Interestingly a classification (TWINSPAN) of these sites places both sites together with many of Siccama's sites in the Green Mountains-particularly on Bolton--just over the hill and the nearest geographically. Ranch Brook was joined with the Abraham site at 3400' while the Nose Dive site stood alone but close to lower elevation sites such as sites on Bolton at 3200 & 3400, Camel's Hump at 3000' and Jay at 3200'. Thus the understory flora seems routine for the Green Mountains and at the expected position --that is mid subalpine-- on an elevation gradient. Ranch Brook seems to be tending to a higher lee slope snowbanky system while the Nose Dive seems to be more lower slope mesic.

Summary grid characteristics Nose Dive 20 ha Grid, Ranch Brook 20 ha Grid, Mount Mansfield State Forest

Table 4. Basal area (in  $m^2$ /ha of trees >5 cm dbh) in 30-100 $m^2$  sample plots on the 20 ha grid at the Ranch Brook area Mt. Mansfield, VT

Basal Area	Balsam Fir	Mt. Birch	Spruce	Mt. Ash	Pin Cherry	m²/ha
1A	24.7	3.4	1		3	27.9
1C	29.1	10.1				39.2
1E	26.4	3.1				29.5
1G	11.1	.3	.3			11.7
1I	11.2	1.6	2.0			14.7
1K	34.2	2.0	1.8			37.9
3A	41.5	3.5	1.8			46.7
3C	26.2					26.2
3E	8.1	1.0				9.1
3G	33.8	3.2	.8			37.8
3I	36.7	5.0				41.7
3K	16.1	3.6				19.7
5A	9.0	3.3	.3			12.7
5C	1.7	.6				2.4
5E	13.9	4.9				18.8
5G	11.9		15.6			27.6
5I	6.3	2.3	3.0			11.6
5K	4.4	4.5				8.9
7A	15.0	8.1		.9		24.0
7C	12.6	10.6		.3		23.5
7E	29.2	7.8		.4		37.4
7G	9.3	4.7	2.0	.4		16.3
7I	17.9	.5	.4	.2	1.3	20.3
7K	12.4	6.9	5.6			24.9
9A	8.2	7.4	3.1	5.4		24.2
9C	9.4	29.9	3.9			43.2
9E	18.1	2.9	1.2			22.1
9G	7.2	5.3	1.5	3.5	.5	18.0
9I	13.7	6.3	2.8	.8		23.6
9K	4.7		5.5			10.3
all 30 fore78 14	4					

all 30 fore 78 14

Medeola virginiana	p		
Monotropa uniflora	p	p	p
Nemopanthus mucronata		p	p
Oxalis montana	p	p	p
Osmumda cinnamonea	p		
Osmunda claytoniana	p	p	
Picea rubens	p	p	p
Picea mariana			