

PLOT 82

LOCATION: 69 m from western edge of Grid Square #: 82

DATE SAMPLED: 8/1/84

SITE VARIABLES:

SLOPE: 1° ASPECT: 14° POSITION: midslope and foot of slope

SURFACE WATER: none

LITTER DEPTH: 2.63 cm EXPOSED BEDROCK: yes

SOIL SERIES (mapped):

SOIL pH:

VISUAL EVIDENCE OF: LOGGING: no

GRAZING: yes

STONE WALLS: no

FIRE: no

RECENT WINDTHROW: yes

MOUNDS & PITS: yes

AGES OF DOMINANT TREES: 41.7 cm Quercus rubra : years

CANOPY HEIGHT: 24.8 m % SKY VISIBLE: 9.0

COMMENTS:

HYDROLOGY:

Site is well drained.

SOILS:

Soils are deep, very well drained, and moderately stony.

HISTORY:

Some recent windthrown trees in plot. Left large mound and pit.

STAND CONDITION:

Canopy is dense except for windthrown area.

ADDITIONAL COMMENTS ON THE SITE:

Tilia americana saplings and tree to the north of plot. Center stake offset 2m to the south because center fell directly on bedrock. Dense shrub layer in light gap, sparse elsewhere. A bedrock knob located at the plot center is the high point in valley ledge floor. Plot slopes up to the south, west and east, and drops off lower to the north.

VEGETATION STRUCTURE AND COMPOSITION:

TREES: Absolute density and basal area of stems > 10 cm DBH, by canopy position.

SPECIES	CANOPY		SUB-CANOPY		UNDER-STORY		ALL STEMS	
	DENS	BA	DENS	BA	DENS	BA	DENS	BA
Acer saccharum	0	0.000	100	4.593	220	3.733	320	8.326
Acer rubrum	0	0.000	40	1.466	20	0.170	60	1.636
Quercus alba	20	10.382	40	9.327	0	0.000	60	19.709
Quercus rubra	40	5.944	40	3.818	0	0.000	80	9.762
Quercus prinus	20	1.957	0	0.000	0	0.000	20	1.957
TOTALS:	DENSITY / HA		220		240		540	
	BASAL AREA (M2) / HA		18.2836		19.2034		3.9027	
							41.3897	

TREES: Relative density and basal area of stems > 10 cm DBH, by canopy position; and overall species importance values (mean of overall %D and %BA).

SPECIES	CANOPY		SUB-CANOPY		UNDER-STORY		ALL STEMS		IMPORTANCE
	%D	%BA	%D	%BA	%D	%BA	%D	%BA	VALUE %
Acer saccharum	0	0	45	24	92	96	59	20	39.69
Acer rubrum	0	0	18	8	8	4	11	4	7.53
Quercus alba	25	57	18	49	0	0	11	48	29.36
Quercus rubra	50	33	18	20	0	0	15	24	19.20
Quercus prinus	25	11	0	0	0	0	4	5	4.22

TREES: Size class distribution of trees tallied in the 1/20 ha plot.

SPECIES	SIZE CLASS (cm)								
	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	> 50
Acer saccharum	6	6	2	1	1	0	0	0	
Acer rubrum	1	0	2	0	0	0	0	0	
Quercus alba	0	0	0	1	0	0	0	0	73 81
Quercus rubra	0	0	0	1	0	0	2	1	
Quercus prinus	0	0	0	0	0	1	0	0	
TOTALS	7	6	4	3	1	1	2	1	2

TREES: Absolute density (per ha) and relative density (as % of density of live trees) of standing dead trees and trees with upper branch dieback

(NOTE: "% OF LIVE" = 999 indicates no live trees of that species in the plot).

SPECIES	STANDING DEAD		BRANCH DIEBACK	
	DENSITY	% OF LIVE	DENSITY	% OF LIVE
Acer saccharum	0.0	0.00	20.0	6.25
Acer rubrum	0.0	0.00	0.0	0.00
Quercus alba	0.0	0.00	0.0	0.00
Quercus rubra	20.0	25.00	0.0	0.00
Quercus prinus	0.0	0.00	0.0	0.00
TOTALS:	20.0	3.70	20.0	3.70

SAPLINGS: Densities per hectare of all stems > 1 m height and < 10 cm DBH.

SPECIES	SIZE CLASSES (cm)					TOTAL
	0 - 2	2 - 4	4 - 6	6 - 8	8 - 10	
Acer saccharum	0	80	0	120	40	240
Acer rubrum	0	0	0	40	0	40
Ostrya virginiana	3440	40	0	0	0	3480
Fagus grandifolia	0	40	0	0	0	40
Amelanchier sp.	120	40	0	0	0	160
Carpinus caroliniana	240	0	0	0	0	240
Cornus florida	200	0	0	0	0	200
TOTALS:	4000	200	0	160	40	4400

SEEDLINGS: Densities (per m²) of stems < 1 m tall.

SPECIES	DENSITY (#/m ²)
Ostrya virginiana	1.500
Acer rubrum	1.250
Acer saccharum	0.250
Quercus rubra	0.750
Quercus alba	0.250
TOTAL:	4.000

SHRUBS: Percent cover of shrub species within the stand.

SPECIES	% COVER
Vaccinium angustifolium	2.299
Viburnum rafinesquianum	0.396
Viburnum acerifolium	6.262
Rosa sp.	0.357
TOTAL:	9.314

HERBACEOUS SPECIES AND THE FOREST FLOOR: Percent cover (note: + means < 1 %).

	% COVER
Litter layer	68.125
Exposed soil	4.370
Exposed rock	23.250
Bryophytes	21.374
Lichens	10.249
Dead wood	4.499
Unknown seedlings	+
Tree boles	+
Anemonella thalictroides	+
Prenanthes sp.	+
Maiathemum canadense	1.249
Galium sp.	+
Carex sp.	1.999
Aquilegia canadensis	+
Asplenium platyneuron	+
Viola sp.	+
Solidago caesia	+
Hepatica americana	+
Polygala paucifolia	1.250
Uvularia sessilifolia	+
Aster sp.	+
Polypodium virginiana	+