

PLOT 500

LOCATION: 53 m from western edge of Grid Square #: 500

DATE SAMPLED: 6/12/84

SITE VARIABLES:

SLOPE: 0° ASPECT: 190° POSITION: ridgetop

SURFACE WATER: none

LITTER DEPTH: 2.50 cm EXPOSED BEDROCK: yes

SOIL SERIES (mapped):

SOIL pH:

VISUAL EVIDENCE OF: LOGGING: no
GRAZING: yes
STONE WALLS: no
FIRE: no
RECENT WINDTHROW: no
MOUNDS & PITS: no

AGES OF DOMINANT TREES: 38.9 cm Quercus alba : years

CANOPY HEIGHT: 24.8 m % SKY VISIBLE: 9.0

COMMENTS:

HYDROLOGY:

Site is well drained.

SOILS:

Soils are fairly deep (10 to 20 cm) and stony.

HISTORY:

No major recent disturbances.

STAND CONDITION:

Several trees have dieback of upper branches. No defoliation. Dieback may be due to water stress.

ADDITIONAL COMMENTS ON THE SITE:

Plot is located on a rock knob. Slope and aspect determined from ridge. Ridge slopes away to the east and west.

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
Quercus prinus	120	3.300	0	0.000	0	0.000	120	3.300
Betula lenta	80	2.119	0	0.000	0	0.000	80	2.119
Quercus velutina	120	3.287	0	0.000	0	0.000	120	3.287
Acer rubrum	40	0.734	40	0.536	0	0.000	80	1.270
Quercus alba	100	4.831	0	0.000	0	0.000	100	4.831
Carya glabra	0	0.000	40	0.519	0	0.000	40	0.519
Acer saccharum	0	0.000	20	0.160	0	0.000	20	0.160
TOTALS:	DENSITY / HA		100		0		560	
	BASAL AREA (M2) / HA		14.2713		1.2145		0.0000	
							15.4858	

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 VALUE
	%D	%BA	%D	%BA	%D	%BA	%D	%BA	
Quercus prinus	26	23	0	0	0	0	21	21	21.37
Betula lenta	17	15	0	0	0	0	14	14	13.98
Quercus velutina	26	23	0	0	0	0	21	21	21.33
Acer rubrum	9	5	40	44	0	0	14	8	11.24
Quercus alba	22	34	0	0	0	0	18	31	24.53
Carya glabra	0	0	40	43	0	0	7	3	5.25
Acer saccharum	0	0	20	13	0	0	4	1	2.30

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
Quercus prinus	2	1	3	0	0	0	0	0	
Betula lenta	1	2	1	0	0	0	0	0	
Quercus velutina	1	4	1	0	0	0	0	0	
Acer rubrum	3	1	0	0	0	0	0	0	
Quercus alba	0	3	0	1	0	1	0	0	
Carya glabra	2	0	0	0	0	0	0	0	
Acer saccharum	1	0	0	0	0	0	0	0	
TOTALS	10	11	5	1	0	1	0	0	0

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
Quercus prinus	40.0	33.33	20.0	16.67
Betula lenta	0.0	0.00	0.0	0.00
Quercus velutina	0.0	0.00	0.0	0.00
Acer rubrum	20.0	25.00	40.0	50.00
Quercus alba	0.0	0.00	20.0	20.00
Carya glabra	0.0	0.00	0.0	0.00
Acer saccharum	0.0	0.00	0.0	0.00
TOTALS:	60.0	10.71	80.0	14.29

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	
Hammamelis virginiana	160	0	0	0	0	160
Acer rubrum	40	240	80	80	0	440
Carya glabra	0	0	0	40	0	40
Betula lenta	0	0	0	0	40	40
TOTALS:	200	240	80	120	40	680

SEEDLINGS: Densities (per m^2) of stems < 1 m tall.

SPECIES	DENSITY ($\#/m^2$)
Acer rubrum	1.500
TOTAL:	1.500

SHRUBS: Percent cover of shrub species within the stand.

SPECIES	% COVER
Viburnum acerifolium	2.457
Vaccinium angustifolium	1.268
Galussacia baccata	0.119
TOTAL:	3.845

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

	% COVER
Litter layer	47.375
Exposed soil	4.622
Exposed rock	1.872
Bryophytes	1.624
Lichens	+
Dead wood	4.999
Unknown seedlings	+
Tree boles	7.500
Carex caryophyllea	5.999
Galium sp.	+
Maianthemum canadense	1.125
Lyimachia quadrifolia	+