

PLOT 89

LOCATION: 34 m from western edge of Grid Square #: 89
DATE SAMPLED: 7/30/84

SITE VARIABLES:

SLOPE: 12° ASPECT: 132° POSITION: foot of slope
SURFACE WATER: perennial pond
LITTER DEPTH: 2.38 cm EXPOSED BEDROCK: no
SOIL SERIES (mapped):
SOIL pH:

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

AGES OF DOMINANT TREES: 50.6 cm Quercus velutina : years

CANOPY HEIGHT: 33.2 m % SKY VISIBLE: 2.0

COMMENTS:

HYDROLOGY:

Wet in local depression, drier on slopes.

SOILS:

Soils are deep, moderately stony, very red and fairly fine textured. They are moderately well drained.

HISTORY:

A stone wall suggests pasturing.

STAND CONDITION:

The canopy is dense and in good condition and is sparser in the swampy area.

ADDITIONAL COMMENTS ON THE SITE:

Wet area on east side of plot. Dry on slopes. Deer trail through plot, old road to the west. Water table is about 4 in below the surface as seen in water of blowdown pit.

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 rubrum	0	0.000	20	0.330	40	0.368	60	0.698
Quercus velutina	60	8.964	20	2.292	0	0.000	80	11.256
Carya ovata	0	0.000	20	0.622	0	0.000	20	0.622
Acer saccharum	0	0.000	60	0.851	0	0.000	60	0.851
Amelanchier sp.	0	0.000	20	0.392	0	0.000	20	0.392
Betula lenta	0	0.000	80	1.126	40	0.480	120	1.606
TOTALS:	DENSITY / HA	60		220		80		360
	BASAL AREA (M2) / HA		8.9635		5.6136		0.8476	15.4247

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 rubrum	0	0	9	6	50	43	17	5	10.60
Quercus velutina	100	100	9	41	0	0	22	73	47.60
Carya ovata	0	0	9	11	0	0	6	4	4.79
Acer saccharum	0	0	27	15	0	0	17	6	11.09
Amelanchier sp.	0	0	9	7	0	0	6	3	4.05
Betula lenta	0	0	36	20	50	57	33	10	21.87

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
	15	20	25	30	35	40	45	50	
Acer rubrum	3	0	0	0	0	0	0	0	
Quercus velutina	0	0	0	0	0	2	1	0	51
Carya ovata	0	1	0	0	0	0	0	0	
Acer saccharum	3	0	0	0	0	0	0	0	
Amelanchier sp.	0	1	0	0	0	0	0	0	
Betula lenta	4	2	0	0	0	0	0	0	
TOTALS	10	4	0	0	0	2	1	0	1

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 rubrum	0.0	0.00	0.0	0.00
Quercus velutina	20.0	25.00	60.0	75.00
Carya ovata	0.0	0.00	0.0	0.00
Acer saccharum	0.0	0.00	0.0	0.00
Amelanchier sp.	0.0	0.00	0.0	0.00
Betula lenta	0.0	0.00	0.0	0.00
TOTALS:	20.0	5.56	60.0	16.67

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	800	0	0	0	0	800
Fraxinus americana	160	40	0	0	0	200
Acer saccharum	360	40	80	80	0	560
Betula lenta	120	0	40	160	40	360
Fraxinus sp.	120	0	0	0	0	120
Acer rubrum	0	40	0	0	0	40
Ostrya virginiana	40	0	0	0	0	40
Cornus florida	0	80	40	40	0	160
TOTALS:	1600	200	160	280	40	2280

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

SPECIES	DENSITY ($\#/m^2$)
Hammamelis virginiana	1.250
Fraxinus americana	1.250
Acer saccharum	0.250
TOTAL:	2.750

SHRUBS: Percent cover of shrub species within the stand.

SPECIES	% COVER
Rubus sp.	2.616
Parthenocissus quinquefolia	7.174
Viburnum rafinesquianum	1.189
Sambucus racemosa	0.159
Lindera benzoin	7.729
TOTAL:	18.866

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

	% COVER
Litter layer	0.000
Exposed soil	+
Exposed rock	8.750
Bryophytes	3.125
Lichens	2.000
Dead wood	4.997
Unknown seedlings	76.750
Tree boles	1.624
Solidago caesia	+
Dead wood over	+
Tree root	1.500
Arisaema triphyllum	+