

PLOT 555

LOCATION: 54 m from western edge of Grid Square #: 555
DATE SAMPLED: 6/21/84

SITE VARIABLES:

SLOPE: 22° ASPECT: 225° POSITION: midslope
SURFACE WATER: none
LITTER DEPTH: 6.00 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: 47.0 cm Quercus rubra : years

CANOPY HEIGHT: 27.3 m % SKY VISIBLE: 9.0

COMMENTS:

HYDROLOGY:

Site is well drained and relatively dry.

SOILS:

Soils variable in depth, with thick organic horizons. Soils are coarsely grained and stony.

HISTORY:

Lots of blowdown trees in plot, but not recently. May have been pastured.

STAND CONDITION:

Many oaks have dieback of upper branches. Sugar maples are doing well.

ADDITIONAL COMMENTS ON THE SITE:

A deer trail through the plot is evident and there is an animal (woodchuck) hole in the plot. Mound and pit topography. A large basswood is just out of the plot. Canopy was fairly open and there was a dense shrub layer along the slope. The plot center is at the base of a micro-slope (above was a steep slope, below was a flattened area). Soil depths differ greatly and ranged between bedrock at surface to fairly deep.

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	40	1.519	40	0.753	140	2.284	220	4.555
Quercus velutina	20	2.013	0	0.000	0	0.000	20	2.013
Quercus prinus	180	13.071	0	0.000	0	0.000	180	13.071
Quercus rubra	40	5.679	20	0.845	0	0.000	60	6.524
Amelanchier sp.	0	0.000	0	0.000	20	0.215	20	0.215
TOTALS:								
DENSITY / HA	280		60		160		500	
BASAL AREA (M2) / HA		22.2811		1.5986		2.4987		26.3784

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	
Acer saccharum	14	7	67	47	88	91	44	17	30.63
Quercus velutina	7	9	0	0	0	0	4	8	5.82
Quercus prinus	64	59	0	0	0	0	36	50	42.78
Quercus rubra	14	25	33	53	0	0	12	25	18.37
Amelanchier sp.	0	0	0	0	13	9	4	1	2.41

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	3	2	0	0	0	0	0	
Quercus velutina	0	0	0	0	0	1	0	0	
Quercus prinus	0	1	0	2	5	1	0	0	
Quercus rubra	0	0	1	0	0	1	0	1	
Amelanchier sp.	1	0	0	0	0	0	0	0	
TOTALS	7	4	3	2	5	3	0	1	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
Acer saccharum	0.0	0.00	0.0	0.00
Quercus velutina	0.0	0.00	20.0	100.00
Quercus prinus	80.0	44.44	100.0	55.56
Quercus rubra	0.0	0.00	40.0	66.67
Amelanchier sp.	0.0	0.00	20.0	100.00
TOTALS:	80.0	16.00	180.0	36.00

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	240	0	120	40	0	400
Ostrya virginiana	120	0	0	0	0	120
Hammamelis virginiana	80	0	0	0	0	80
Amelanchier sp.	40	200	0	0	0	240
Acer rubrum	0	0	0	0	40	40
TOTALS:	480	200	120	40	40	880

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

SPECIES	DENSITY ($\#/m^2$)
Acer saccharum	2.000
Fraxinus americana	0.500
Prunus serotina	1.500
TOTAL:	4.000

SHRUBS: Percent cover of shrub species within the stand.

SPECIES	% COVER
Viburnum acerifolium	16.528
TOTAL:	16.528

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

	% COVER
Litter layer	75.375
Exposed soil	1.497
Exposed rock	1.124
Bryophytes	+
Lichens	+
Dead wood	6.750
Unknown seedlings	11.996
Tree boles	2.250
Live root	1.625
Lysimachia quadrifolia	+
Specularia perfoliata	+
Eupatorium rugosum	+
Solidago caesia	+
Carex sp.	+