

PLOT 506

LOCATION: 77 m from western edge of Grid Square #: 506  
DATE SAMPLED: 6/26/84

SITE VARIABLES:

SLOPE: 2° ASPECT: 40° POSITION: midslope  
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: yes

AGES OF DOMINANT TREES: 56.6 cm Liriodendron tulipifera : years

CANOPY HEIGHT: 31.3 m % SKY VISIBLE: 4.0

COMMENTS:

HYDROLOGY:

Site is moderately well drained.

SOILS:

HISTORY:

STAND CONDITION:

There are a few dead Betula populifolia in plot.

ADDITIONAL COMMENTS ON THE SITE:

Plot center offset by 28m west (to 77) due to road. Plot has a dense shrub layer (Rubus thicket). Pinus strobus and Juniperus virginiana just off plot.

## 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	220	14.594	180	3.806	140	1.783	540	20.184
Betula populifolia	0	0.000	0	0.000	0	0.000	0	0.000
Betula lenta	20	1.680	0	0.000	0	0.000	20	1.680
Liriodendron tulipifera	20	5.032	20	0.628	20	0.245	60	5.906
TOTALS:	DENSITY / HA		260		200		160	
	BASAL AREA (M2) / HA		21.3062		4.4347		2.0286	
							620	
							27.7695	

**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 rubrum	85	68	90	86	88	88	87	73	79.89	
Betula populifolia	0	0	0	0	0	0	0	0	0.00	
Betula lenta	8	8	0	0	0	0	3	6	4.64	
Liriodendron tulipifera	8	24	10	14	13	12	10	21	15.47	

**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	9	8	3	4	1	1	1	0		
Betula populifolia	0	0	0	0	0	0	0	0		
Betula lenta	0	0	0	0	1	0	0	0		
Liriodendron tulipifera	1	0	1	0	0	0	0	0	57	
TOTALS	10	8	4	4	2	1	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	40.0	7.41	160.0	29.63
Betula populifolia	60.0	999.00	0.0	0.00
Betula lenta	0.0	0.00	0.0	0.00
Liriodendron tulipifera	0.0	0.00	0.0	0.00
TOTALS:	100.0	16.13	160.0	25.81

**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	
Prunus serotina	80	0	0	0	0	80
Quercus rubra	40	0	0	0	0	40
Fraxinus americana	40	0	0	0	0	40
Betula lenta	200	0	0	0	0	200
Cornus florida	240	0	0	0	0	240
Castanea dentata	40	0	0	0	0	40
Amelanchier sp.	40	0	0	0	0	40
Carya glabra	40	0	0	0	0	40
TOTALS:	720	0	0	0	0	720

**SEEDLINGS:** Densities (per m<sup>2</sup>) of stems < 1 m tall.

SPECIES	DENSITY (#/m <sup>2</sup> )
Quercus alba	0.250
Acer rubrum	0.750
Quercus velutina	0.250
Fraxinus americana	0.500
Cornus florida	2.000
Prunus serotina	0.250
Rhamnus cathartica	0.250
Carya glabra	0.250
TOTAL:	4.500

SHRUBS: Percent cover of shrub species within the stand.

SPECIES	% COVER
Rubus sp.	4.518
Lindera benzoin	0.713
Parthenocissus quinquefolia	1.704
Cornus racemosa	2.061
Vaccinium angustifolium	1.467
TOTAL:	10.464

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

	% COVER
Litter layer	75.750
Exposed soil	2.621
Exposed rock	+
Bryophytes	+
Lichens	+
Dead wood	11.375
Unknown seedlings	+
Tree boles	+
Lycopodium complanatum	20.750
Arisaema triphyllum	1.749
Fragaria virginiana	+