

PLOT 636

LOCATION: 62 m from western edge of Grid Square #: 636  
DATE SAMPLED: 7/10/84

SITE VARIABLES:

SLOPE: 2° ASPECT: 345° POSITION: local depression  
SURFACE WATER: ephemeral stream  
LITTER DEPTH: 1.00 cm EXPOSED BEDROCK: yes  
SOIL SERIES (mapped):  
SOIL pH:

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

AGES OF DOMINANT TREES: 56.3 cm Quercus rubra : 77 years

CANOPY HEIGHT: 25.9 m % SKY VISIBLE: 12.0

COMMENTS:

HYDROLOGY:

High water events are frequent in this plot.

SOILS:

Soils are deep, moderately well drained and composed of flood deposited sediments. Clay content of soil is high and soil is underlain by bedrock.

HISTORY:

There are some windthrown trees in the plot. Water washes through the plot (litter layer was left disturbed).

STAND CONDITION:

There is some mortality of oaks and hemlock. Canopy is open in one corner of the plot.

ADDITIONAL COMMENTS ON THE SITE:

Very old stone wall and possibly an old road is present in the plot. There is a high diversity of herbs and saplings in this plot.

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## 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
<i>Ostrya virginiana</i>	0	0.000	0	0.000	20	0.176	20	0.176
<i>Carya glabra</i>	0	0.000	20	0.176	40	0.912	60	1.089
<i>Acer saccharum</i>	20	0.998	60	1.291	80	1.009	160	3.298
<i>Quercus prinus</i>	40	2.866	20	0.726	0	0.000	60	3.592
<i>Quercus alba</i>	100	6.741	0	0.000	20	0.905	120	7.646
<i>Tsuga canadensis</i>	0	0.000	0	0.000	0	0.000	0	0.000
<i>Quercus rubra</i>	40	6.469	0	0.000	0	0.000	40	6.469
TOTALS:	DENSITY / HA	200	100	160	460			
	BASAL AREA (M2) / HA	17.0733	2.1940	3.0025	22.2697			

**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
<i>Ostrya virginiana</i>	0	0	0	0	13	6	4	1	2.57
<i>Carya glabra</i>	0	0	20	8	25	30	13	5	8.97
<i>Acer saccharum</i>	10	6	60	59	50	34	35	15	24.80
<i>Quercus prinus</i>	20	17	20	33	0	0	13	16	14.59
<i>Quercus alba</i>	50	39	0	0	13	30	26	34	30.21
<i>Tsuga canadensis</i>	0	0	0	0	0	0	0	0	0.00
<i>Quercus rubra</i>	20	38	0	0	0	0	9	29	18.87

**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	
<i>Ostrya virginiana</i>	1	0	0	0	0	0	0	0	
<i>Carya glabra</i>	1	2	0	0	0	0	0	0	
<i>Acer saccharum</i>	4	3	0	1	0	0	0	0	
<i>Quercus prinus</i>	0	0	1	1	1	0	0	0	
<i>Quercus alba</i>	0	1	1	1	2	1	0	0	
<i>Tsuga canadensis</i>	0	0	0	0	0	0	0	0	
<i>Quercus rubra</i>	0	0	0	0	1	0	0	0	56
TOTALS	6	6	2	3	4	1	0	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
<i>Ostrya virginiana</i>	0.0	0.00	0.0	0.00
<i>Carya glabra</i>	20.0	33.33	0.0	0.00
<i>Acer saccharum</i>	0.0	0.00	0.0	0.00
<i>Quercus prinus</i>	0.0	0.00	40.0	66.67
<i>Quercus alba</i>	40.0	33.33	20.0	16.67
<i>Tsuga canadensis</i>	20.0	999.00	0.0	0.00
<i>Quercus rubra</i>	0.0	0.00	40.0	100.00
TOTALS:	80.0	17.39	100.0	21.74

**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	
<i>Fraxinus americana</i>	120	40	40	0	0	200
<i>Ostrya virginiana</i>	800	80	40	0	0	920
<i>Cornus florida</i>	200	0	40	40	0	280
<i>Acer saccharum</i>	80	120	80	40	0	320
<i>Hammamelis virginiana</i>	40	0	0	0	0	40
<i>Amelanchier</i> sp.	80	0	0	0	0	80
<i>Acer pennsylvanicum</i>	80	0	0	0	0	80
TOTALS:	1400	240	200	80	0	1920

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

SPECIES	DENSITY ( $\#/m^2$ )
<i>Acer rubrum</i>	0.500
<i>Betula lenta</i>	0.250
<i>Cornus florida</i>	0.750
<i>Fraxinus americana</i>	1.500
<i>Amelanchier</i> sp.	0.500
TOTAL:	3.500

SHRUBS: Percent cover of shrub species within the stand.

SPECIES	% COVER
Parthenocissus quinquefolia	0.357
Viburnum acerifolium	0.515
TOTAL:	0.872

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

	% COVER
Litter layer	85.375
Exposed soil	+
Exposed rock	12.000
Bryophytes	1.619
Lichens	1.372
Dead wood	2.997
Unknown seedlings	+
Tree boles	+
Arailia nudicaulis	1.875
Solidago caesia	+
Dead wood over	1.000
Carex spp.	+