

PLOT 859

LOCATION: 4 m from western edge of Grid Square #: 859  
DATE SAMPLED: 7/17/8

SITE VARIABLES:

SLOPE:  $10^0$  ASPECT:  $134^0$  POSITION: local depression  
SURFACE WATER: ephemeral stream  
LITTER DEPTH: 1.25 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: 51.5 cm Quercus rubra : years

CANOPY HEIGHT: 25.2 m % SKY VISIBLE: 12.0

COMMENTS:

HYDROLOGY:

Site is well drained except for the swale.

SOILS:

The soils are stony and shallow with a poorly developed organic layer.

HISTORY:

This is an extremely disturbed system. There is a stream and a lot of windthrow.

STAND CONDITION:

There are many windthrown trees, but the canopy is generally filling in and the canopy trees are in good condition.

ADDITIONAL COMMENTS ON THE SITE:

Mound and pit topography are prominent. An ephemeral stream is important in influencing the system. The stream is on bedrock for most of the way.

## 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 velutina	0	0.000	0	0.000	0	0.000	0	0.000
Quercus rubra	60	9.012	40	3.092	0	0.000	100	12.103
Acer saccharum	40	2.019	40	0.884	20	0.579	100	3.482
Ostrya virginiana	0	0.000	0	0.000	40	0.441	40	0.441
Acer rubrum	0	0.000	0	0.000	20	0.282	20	0.282
TOTALS:	DENSITY / HA		80		80		260	
	BASAL AREA (M2) / HA		11.0305		3.9756		1.3023	
							16.3084	

**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
Quercus velutina	0	0	0	0	0	0	0	0	0.00
Quercus rubra	60	82	50	78	0	0	38	74	56.34
Acer saccharum	40	18	50	22	25	44	38	21	29.91
Ostrya virginiana	0	0	0	0	50	34	15	3	9.05
Acer rubrum	0	0	0	0	25	22	8	2	4.71

**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	
Quercus velutina	0	0	0	0	0	0	0	0	
Quercus rubra	0	0	0	0	3	0	1	0	52
Acer saccharum	1	2	1	1	0	0	0	0	
Ostrya virginiana	2	0	0	0	0	0	0	0	
Acer rubrum	1	0	0	0	0	0	0	0	
TOTALS	4	2	1	1	3	0	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
<i>Quercus velutina</i>	20.0	999.00	0.0	0.00
<i>Quercus rubra</i>	0.0	0.00	40.0	40.00
<i>Acer saccharum</i>	0.0	0.00	0.0	0.00
<i>Ostrya virginiana</i>	0.0	0.00	0.0	0.00
<i>Acer rubrum</i>	0.0	0.00	0.0	0.00
TOTALS:	20.0	7.69	40.0	15.38

**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>Cornus florida</i>	80	40	0	0	0	120
<i>Fraxinus americana</i>	40	0	0	0	0	40
<i>Ostrya virginiana</i>	680	160	40	80	0	960
<i>Hammamelis virginiana</i>	80	0	0	0	0	80
<i>Acer saccharum</i>	0	40	0	40	0	80
<i>Amelanchier</i> sp.	80	0	0	0	0	80
TOTALS:	960	240	40	120	0	1360

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

SPECIES	DENSITY ( $\#/m^2$ )
<i>Sassafras albidum</i>	0.750
<i>Prunus serotina</i>	1.500
<i>Acer saccharum</i>	0.250
<i>Acer rubrum</i>	0.250
<i>Hammamelis virginiana</i>	1.000
TOTAL:	3.750

SHRUBS: Percent cover of shrub species within the stand.

SPECIES	% COVER
Parthenocissus quinquefolia	21.760
Viburnum acerifolium	10.226
Vitis sp.	0.595
Toxicodendron radicans	0.595
Lonicera tatarica	0.872
TOTAL:	34.047

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

	% COVER
Litter layer	31.375
Exposed soil	7.750
Exposed rock	10.747
Bryophytes	1.872
Lichens	1.242
Dead wood	4.872
Unknown seedlings	2.874
Tree boles	+
Deadwood over	+
Potentilla simplex	1.125
Arisaema triphyllum	+
Maianthemum canadense	+
Grass sp.	1.497
Impatiens capensis	+
Galium sp.	+
Oxalis stricta	+
Anemonella thalictroides	+
Galium lanceolatum	+
Carex sp.	+