

PLOT 731

LOCATION: 4 m from western edge of Grid Square #: 731

DATE SAMPLED: 7/19/8

SITE VARIABLES:

SLOPE: 10° ASPECT: 270° POSITION: midslope and local depression

SURFACE WATER: none

LITTER DEPTH: 3.63 cm EXPOSED BEDROCK: no

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: 42.5 cm Quercus prinus : years

CANOPY HEIGHT: 17.0 m % SKY VISIBLE: 2.0

COMMENTS:

HYDROLOGY:

Site is well drained and located between two ridges.

SOILS:

In swale, the soils are deep and stony with a well developed organic layer  
On slopes, the soil is more shallow and stony.

HISTORY:

Canopy gap resulted from death (standing still) of several trees.

STAND CONDITION:

The canopy is very dense except in gap (from windthrow & disease?).

ADDITIONAL COMMENTS ON THE SITE:

The shrub layer is dense. There is windthrow on exposed bedrock and shallow soil.

## 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 prinus	160	15.298	140	8.700	0	0.000	300	23.997
Prunus avium	0	0.000	0	0.000	0	0.000	0	0.000
Quercus rubra	0	0.000	20	1.087	0	0.000	20	1.087
Acer rubrum	0	0.000	20	0.809	60	0.660	80	1.469
Pinus strobus	40	3.059	0	0.000	20	0.226	60	3.285
Acer saccharum	0	0.000	0	0.000	20	0.170	20	0.170
Cornus florida	0	0.000	0	0.000	0	0.000	0	0.000
Quercus velutina	0	0.000	0	0.000	0	0.000	0	0.000
TOTALS:	DENSITY / HA	200		180		100		480
	BASAL AREA (M2) / HA		18.3568		10.5954		1.0560	30.0082

**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 prinus	80	83	78	82	0	0	63	80	71.23
Prunus avium	0	0	0	0	0	0	0	0	0.00
Quercus rubra	0	0	11	10	0	0	4	4	3.89
Acer rubrum	0	0	11	8	60	62	17	5	10.78
Pinus strobus	20	17	0	0	20	21	13	11	11.72
Acer saccharum	0	0	0	0	20	16	4	1	2.37
Cornus florida	0	0	0	0	0	0	0	0	0.00
Quercus velutina	0	0	0	0	0	0	0	0	0.00

**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 prinus	0	0	1	7	3	3	1	0	
Prunus avium	0	0	0	0	0	0	0	0	
Quercus rubra	0	0	0	1	0	0	0	0	
Acer rubrum	3	0	1	0	0	0	0	0	
Pinus strobus	1	0	0	0	2	0	0	0	
Acer saccharum	1	0	0	0	0	0	0	0	
Cornus florida	0	0	0	0	0	0	0	0	
Quercus velutina	0	0	0	0	0	0	0	0	
TOTALS	5	0	2	8	5	3	1	0	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
Quercus prinus	0.0	0.00	140.0	46.67
Prunus avium	20.0	999.00	0.0	0.00
Quercus rubra	20.0	100.00	0.0	0.00
Acer rubrum	0.0	0.00	40.0	50.00
Pinus strobus	60.0	100.00	40.0	66.67
Acer saccharum	0.0	0.00	20.0	100.00
Cornus florida	40.0	999.00	0.0	0.00
Quercus velutina	20.0	999.00	0.0	0.00
TOTALS:	160.0	33.33	240.0	50.00

**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 rubrum	120	80	0	0	40	240
Acer saccharum	200	40	40	0	40	320
Amelanchier sp.	800	40	40	0	0	880
Quercus rubra	0	40	0	0	0	40
Ostrya virginiana	1040	0	0	0	0	1040
Betula lenta	80	0	0	0	0	80
Fraxinus americana	0	40	0	0	0	40
TOTALS:	2240	240	80	0	80	2640

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

SPECIES	DENSITY (#/m <sup>2</sup> )
Castanea dentata	0.250
Amelanchier sp.	1.000
Quercus rubra	0.250
Quercus prinus	0.250
Carya glabra	0.250
TOTAL:	2.000

**SHRUBS:** Percent cover of shrub species within the stand.

SPECIES	% COVER
Viburnum acerifolium	20.135
Viburnum rafinesquianum	1.070
Vaccinium angustifolium	0.238
TOTAL:	21.443

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

	% COVER
Litter layer	96.625
Exposed soil	+
Exposed rock	+
Bryophytes	+
Lichens	+
Dead wood	3.000
Unknown seedlings	+
Tree boles	+
Deadwood over	6.750
Maianthemum canadense	2.122