

PLOT 569

LOCATION: 74 m from western edge of Grid Square #: 569
 DATE SAMPLED: 7/12/84

SITE VARIABLES:

SLOPE: 1° ASPECT: 292° POSITION: ridgetop
 SURFACE WATER: none
 LITTER DEPTH: 2.75 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: 45.8 cm Pinus strobus : 113 years

CANOPY HEIGHT: 23.5 m % SKY VISIBLE: 3.0

COMMENTS:

HYDROLOGY:

Site is well drained.

SOILS:

Soils are shallow, stony, and have a poorly developed organic layer.

HISTORY:

Site was pastured. There is a stone wall nearby. Some blowdown in plot. No stumps are evident.

STAND CONDITION:

There is quite a bit of hemlock mortality in the plot and some of the old pines have dieback and woodpecker holes.

ADDITIONAL COMMENTS ON THE SITE:

Road just to the east of the plot (within sight). There is a fairly dense shrub understory. This entire end of the forest has North-South trending bedrock covered ridges with very deep to shallow ravines in between. Soils are shallow on the ridges and fairly deep to shallow in the ravines. Some of the ravines have perennial wet areas and most have high precipitation or runoff swails.

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	80	3.929	40	1.363	20	0.157	140	5.449
Quercus rubra	40	4.402	40	1.099	0	0.000	80	5.501
Tsuga canadensis	0	0.000	0	0.000	60	1.784	60	1.784
Carya glabra	20	1.795	0	0.000	0	0.000	20	1.795
Pinus strobus	60	6.828	0	0.000	0	0.000	60	6.828
Carya glabra	40	2.946	0	0.000	20	0.317	60	3.263
Acer saccharum	0	0.000	40	0.419	0	0.000	40	0.419
Acer rubrum	0	0.000	0	0.000	20	0.201	20	0.201
Quercus alba	20	2.104	0	0.000	0	0.000	20	2.104
Cornus florida	0	0.000	0	0.000	0	0.000	0	0.000
Quercus velutina	20	1.742	0	0.000	0	0.000	20	1.742
TOTALS:	DENSITY / HA	280		120		120		520
	BASAL AREA (M2) / HA	23.7455		2.8809		2.4582		29.0847

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	29	17	33	47	17	6	27	19	22.83
Quercus rubra	14	19	33	38	0	0	15	19	17.15
Tsuga canadensis	0	0	0	0	50	73	12	6	8.84
Carya glabra	7	8	0	0	0	0	4	6	5.01
Pinus strobus	21	29	0	0	0	0	12	23	17.51
Carya glabra	14	12	0	0	17	13	12	11	11.38
Acer saccharum	0	0	33	15	0	0	8	1	4.57
Acer rubrum	0	0	0	0	17	8	4	1	2.27
Quercus alba	7	9	0	0	0	0	4	7	5.54
Cornus florida	0	0	0	0	0	0	0	0	0.00
Quercus velutina	7	7	0	0	0	0	4	6	4.92

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
Quercus prinus	1	2	2	2	0	0	0	0	
Quercus rubra	1	0	1	1	0	0	1	0	
Tsuga canadensis	1	1	0	1	0	0	0	0	
Carya glabra	0	0	0	0	1	0	0	0	
Pinus strobus	0	0	0	0	1	1	0	1	
Carya glabra	1	0	0	1	1	0	0	0	
Acer saccharum	2	0	0	0	0	0	0	0	
Acer rubrum	1	0	0	0	0	0	0	0	
Quercus alba	0	0	0	0	0	1	0	0	
Cornus florida	0	0	0	0	0	0	0	0	
Quercus velutina	0	0	0	0	1	0	0	0	
TOTALS	7	3	3	5	4	2	1	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
Quercus prinus	20.0	14.29	0.0	0.00
Quercus rubra	0.0	0.00	0.0	0.00
Tsuga canadensis	60.0	100.00	0.0	0.00
Carya glabra	0.0	0.00	0.0	0.00
Pinus strobus	40.0	66.67	0.0	0.00
Carya glabra	0.0	0.00	0.0	0.00
Acer saccharum	0.0	0.00	0.0	0.00
Acer rubrum	0.0	0.00	0.0	0.00
Quercus alba	0.0	0.00	0.0	0.00
Cornus florida	20.0	999.00	0.0	0.00
Quercus velutina	0.0	0.00	20.0	100.00
TOTALS:	140.0	26.92	20.0	3.85

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	120	160	0	0	40	320
Amelanchier sp.	720	120	120	0	0	960
Quercus prinus	0	0	0	0	40	40
Ostrya virginiana	520	120	40	0	0	680
Fraxinus americana	40	40	0	40	0	120
Acer rubrum	0	40	40	0	0	80
Cornus florida	40	0	40	0	0	80
Pinus strobus	0	40	0	0	0	40
TOTALS:	1440	520	240	40	80	2320

SEEDLINGS: Densities (per m²) of stems < 1 m tall.

SPECIES	DENSITY (#/m ²)
Amelanchier sp.	1.250
Acer rubrum	0.250
Cornus florida	0.750
Quercus prinus	0.750
Ostrya virginiana	0.750
Fraxinus americana	0.500
Acer saccharum	0.250
TOTAL:	4.500

SHRUBS: Percent cover of shrub species within the stand.

SPECIES	% COVER
Vaccinium angustifolium	2.893
Viburnum acerifolium	3.012
Viburnum rafinesquianum	0.634
TOTAL:	6.540

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

	% COVER
Litter layer	93.625
Exposed soil	+
Exposed rock	+
Bryophytes	+
Lichens	+
Dead wood	3.499
Unknown seedlings	+
Tree boles	1.000
Tree root	+
Uvularia perfoliata	+
Solidago caesia	+
Carex sp.	+
Melampyrum lineare	+
Aster macrophyllous	+
Hepatica americana	+
Aster divaricatus	+
Maianthimum canadense	+