

redo & combine PIRA
data

PLOT 639 - PAGE 1

PLOT 639

LOCATION: 60 m from western edge of Grid Square #: 639

DATE SAMPLED: 7/12/84

SITE VARIABLES:

SLOPE: 14° ASPECT: 116° POSITION: midslope

SURFACE WATER: none

LITTER DEPTH: 4.88 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: 39.5 cm Acer rubrum : years

CANOPY HEIGHT: 18.3 m % SKY VISIBLE: 14.0

COMMENTS:

HYDROLOGY:

Site is well drained

SOILS:

The soil is shallow and stony with a well developed organic layer and a MOR humus.

HISTORY:

There was some windthrow, but no stumps.

STAND CONDITION:

There are a few trees with extreme dieback.

ADDITIONAL COMMENTS ON THE SITE:

There are quite a few pitch pine on site. The sapling layer is dense.

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
Pinus rigida	100	5.562	40	1.281	0	0.000	140	6.843
Carya glabra	40	1.198	60	1.814	0	0.000	100	3.012
Acer rubrum	20	2.451	40	0.641	60	0.658	120	3.750
Quercus rubra	0	0.000	40	0.401	0	0.000	40	0.401
Fraxinus americana	20	1.339	0	0.000	20	0.183	40	1.523
Quercus velutina	20	1.924	0	0.000	0	0.000	20	1.924
Prunus pensylvanica	0	0.000	0	0.000	0	0.000	0	0.000
Pinus strobus	0	0.000	0	0.000	20	0.274	20	0.274
Pinus rigida	80	3.627	0	0.000	0	0.000	80	3.627
Acer saccharum	0	0.000	0	0.000	20	0.321	20	0.321
Carya ovata	0	0.000	20	0.476	0	0.000	20	0.476
TOTALS:	DENSITY / HA	280	200	120	600			
	BASAL AREA (M2) / HA	16.1014	4.6135	1.4356	22.1505			

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
Pinus rigida	36	35	20	28	0	0	23	31	27.11
Carya glabra	14	7	30	39	0	0	17	14	15.13
Acer rubrum	7	15	20	14	50	46	20	17	18.46
Quercus rubra	0	0	20	9	0	0	7	2	4.24
Fraxinus americana	7	8	0	0	17	13	7	7	6.77
Quercus velutina	7	12	0	0	0	0	3	9	6.01
Prunus pensylvanica	0	0	0	0	0	0	0	0	0.00
Pinus strobus	0	0	0	0	17	19	3	1	2.28
Pinus rigida	29	23	0	0	0	0	13	16	14.85
Acer saccharum	0	0	0	0	17	22	3	1	2.39
Carya ovata	0	0	10	10	0	0	3	2	2.74

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
Pinus rigida	0	2	2	2	1	0	0	0	
Carya glabra	0	3	2	0	0	0	0	0	
Acer rubrum	4	1	0	0	0	1	0	0	
Quercus rubra	2	0	0	0	0	0	0	0	
Fraxinus americana	1	0	0	1	0	0	0	0	
Quercus velutina	0	0	0	0	0	1	0	0	
Prunus pensylvanica	0	0	0	0	0	0	0	0	
Pinus strobus	1	0	0	0	0	0	0	0	
Pinus rigida	0	0	3	1	0	0	0	0	
Acer saccharum	1	0	0	0	0	0	0	0	
Carya ovata	0	1	0	0	0	0	0	0	
TOTALS	9	7	7	4	1	2	0	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
Pinus rigida	100.0	71.43	20.0	14.29
Carya glabra	0.0	0.00	0.0	0.00
Acer rubrum	20.0	16.67	20.0	16.67
Quercus rubra	0.0	0.00	0.0	0.00
Fraxinus americana	0.0	0.00	0.0	0.00
Quercus velutina	0.0	0.00	20.0	100.00
Prunus pensylvanica	20.0	999.00	0.0	0.00
Pinus strobus	0.0	0.00	0.0	0.00
Pinus rigida	0.0	0.00	20.0	25.00
Acer saccharum	0.0	0.00	0.0	0.00
Carya ovata	0.0	0.00	0.0	0.00
TOTALS:	140.0	23.33	80.0	13.33

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	
Quercus alba	80	0	0	40	0	120
Fraxinus americana	40	0	0	40	0	80
Acer rubrum	320	120	40	40	80	600
Hammamelis virginiana	160	40	0	0	0	200
Quercus prinus	40	80	0	0	0	120
Quercus velutina	80	120	0	0	0	200
Amelanchier sp.	160	0	0	80	40	280
Betula lenta	480	0	0	0	0	480
Cornus florida	0	160	40	0	0	200
Quercus alba	40	0	0	0	0	40
Ostrya virginiana	160	40	0	0	0	200
Quercus rubra	0	40	0	40	0	80
Acer saccharum	120	40	0	0	0	160
Prunus serotina	40	0	0	0	0	40
TOTALS:	1720	640	80	240	120	2800

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

SPECIES	DENSITY (#/m ²)
Acer rubrum	4.250
Fraxinus americana	1.250
Hammamelis virginiana	0.500
Cornus florida	0.250
Quercus alba	0.750
Prunus serotina	0.750
Carya glabra	0.750
Amelanchier sp.	1.250
TOTAL:	9.750

SHRUBS: Percent cover of shrub species within the stand.

SPECIES	% COVER
<i>Viburnum acerifolium</i>	7.491
<i>Vaccinium angustifolium</i>	0.317
<i>Parthenocissus quinquefolia</i>	1.427
TOTAL:	9.235

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

	% COVER
Litter layer	94.625
Exposed soil	+
Exposed rock	+
Bryophytes	2.872
Lichens	+
Dead wood	2.246
Unknown seedlings	+
Tree boles	+
<i>Maianthemum canadense</i>	3.749
<i>Carex</i> sp	+
<i>Chimaphila maculata</i>	+
Deadwood over	+
<i>Galium</i> sp.	+
<i>Monotropa uniflora</i>	+
<i>Solidago</i> sp.	+