

PLOT 503

LOCATION: 48 m from western edge of Grid Square #: 503
DATE SAMPLED: 6/11/84

SITE VARIABLES:

SLOPE: 3° ASPECT: 168° POSITION: midslope
SURFACE WATER: ephemeral pond
LITTER DEPTH: 0.25 cm EXPOSED BEDROCK: yes
SOIL SERIES (mapped):
SOIL pH:

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

AGES OF DOMINANT TREES: 38.2 cm Fraxinus americana : years

CANOPY HEIGHT: 25.0 m % SKY VISIBLE: 56.0

COMMENTS:

HYDROLOGY:

Small dry pond in plot with little vegetation. Some flooding at times.

SOILS:

Some exposed bedrock, extensive amount of exposed bedrock just off plot.

HISTORY:

Pastured, with signs of deer grazing. Open old field in one corner of plot.

STAND CONDITION:

Canopy trees healthy except for Pinus strobus.

ADDITIONAL COMMENTS ON THE SITE:

One quadrat of plot in early successional stage. Complex topography: bedrock alternating with ravines. NOTE: this plot should not have been sampled (not one of the grid squares considered samplable).

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
Fraxinus americana	20	2.292	0	0.000	0	0.000	20	2.292
Acer rubrum	100	3.046	0	0.000	0	0.000	100	3.046
Quercus alba	40	2.243	20	0.226	0	0.000	60	2.469
Juniperus virginiana	20	0.219	20	0.303	40	0.488	80	1.010
Quercus velutina	40	0.767	0	0.000	0	0.000	40	0.767
Pinus strobus	0	0.000	0	0.000	20	0.183	20	0.183
TOTALS:	DENSITY / HA	220	40	60	320			
	BASAL AREA (M2) / HA	8.5669	0.5297	0.6711	9.7677			

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 VALUE
	%D	%BA	%D	%BA	%D	%BA	%D	%BA	
Fraxinus americana	9	27	0	0	0	0	6	23	14.86
Acer rubrum	45	36	0	0	0	0	31	31	31.22
Quercus alba	18	26	50	43	0	0	19	25	22.02
Juniperus virginiana	9	3	50	57	67	73	25	10	17.67
Quercus velutina	18	9	0	0	0	0	13	8	10.18
Pinus strobus	0	0	0	0	33	27	6	2	4.06

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	
Fraxinus americana	0	0	0	0	0	1	0	0	
Acer rubrum	1	2	1	1	0	0	0	0	
Quercus alba	2	0	0	0	0	1	0	0	
Juniperus virginiana	4	0	0	0	0	0	0	0	
Quercus velutina	1	1	0	0	0	0	0	0	
Pinus strobus	1	0	0	0	0	0	0	0	
TOTALS	9	3	1	1	0	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
Fraxinus americana	0.0	0.00	0.0	0.00
Acer rubrum	0.0	0.00	0.0	0.00
Quercus alba	20.0	33.33	0.0	0.00
Juniperus virginiana	0.0	0.00	0.0	0.00
Quercus velutina	0.0	0.00	0.0	0.00
Pinus strobus	0.0	0.00	20.0	100.00
TOTALS:	20.0	6.25	20.0	6.25

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	200	120	120	0	0	440
Juniperus virginiana	0	120	80	0	40	240
Quercus velutina	120	40	0	0	0	160
Carya ovata	40	0	0	0	0	40
Quercus alba	40	0	40	40	0	120
Carya glabra	0	120	80	40	0	240
TOTALS:	400	400	320	80	40	1240

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

SPECIES	DENSITY ($\#/m^2$)
Fraxinus americana	4.250
Prunus serotina	0.500
Juniperus virginiana	1.000
Ostrya virginiana	0.250
Amelanchier sp.	0.250
TOTAL:	6.250

SHRUBS: Percent cover of shrub species within the stand.

SPECIES	% COVER
Cornus racemosa	3.686
TOTAL:	3.686

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

	% COVER
Litter layer	61.500
Exposed soil	13.747
Exposed rock	+
Bryophytes	+
Lichens	+
Dead wood	4.499
Unknown seedlings	+
Tree boles	+
Roots	1.875
Hieracium sp.	1.125
Solidago sp.	5.000
Carex sp.	1.875
Lycopodium obscurum	+
Carex sp.	1.999
Grass sp.	3.750
Grass sp.	5.375
Fragaria virginiana	1.625
Ranunculus sp.	+
Potentilla sp.	3.749
Veronica sp.	+
Rumex acetosella	+
Solidago sp.	1.000
Solidago sp.	+
Oxalis stricta	+
Lespedeza hirta	+