

PLOT 502

LOCATION: 42 m from western edge of Grid Square #: 502

DATE SAMPLED: 6/11/84

SITE VARIABLES:

SLOPE: 3° ASPECT: 18° POSITION: ridgetop

SURFACE WATER: none

LITTER DEPTH: 0.88 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: 33.1 cm Quercus velutina : years

CANOPY HEIGHT: 14.6 m % SKY VISIBLE: 31.0

COMMENTS:

HYDROLOGY:

Site is well drained.

SOILS:

Exposed bedrock "cause" of canopy gaps.

HISTORY:

Site very stressed (dry and lack of soil).

STAND CONDITION:

No signs of any major dieback.

ADDITIONAL COMMENTS ON THE SITE:

Water stressed site. Soils very shallow.

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
Juniperus virginiana	40	0.599	0	0.000	0	0.000	40	0.599
Quercus alba	100	2.339	0	0.000	0	0.000	100	2.339
Betula lenta	140	2.414	0	0.000	0	0.000	140	2.414
Quercus velutina	60	2.663	0	0.000	0	0.000	60	2.663
TOTALS:	DENSITY / HA	340		0		0	340	
	BASAL AREA (M2) / HA	8.0144		0.0000		0.0000		8.0144

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
Juniperus virginiana	12	7	0	0	0	0	12	7	9.62
Quercus alba	29	29	0	0	0	0	29	29	29.30
Betula lenta	41	30	0	0	0	0	41	30	35.65
Quercus velutina	18	33	0	0	0	0	18	33	25.43

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
Juniperus virginiana	1	1	0	0	0	0	0	0	
Quercus alba	3	1	0	1	0	0	0	0	
Betula lenta	4	3	0	0	0	0	0	0	
Quercus velutina	1	1	0	0	1	0	0	0	
TOTALS	9	6	0	1	1	0	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
Juniperus virginiana	0.0	0.00	0.0	0.00
Quercus alba	0.0	0.00	20.0	20.00
Betula lenta	0.0	0.00	20.0	14.29
Quercus velutina	0.0	0.00	0.0	0.00
TOTALS:		0.0	40.0	11.76

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	
Betula lenta	200	200	80	160	0	640
Juniperus virginiana	40	0	40	120	0	200
Quercus alba	80	80	0	0	0	160
Sassafras albidum	40	0	40	0	0	80
Acer rubrum	0	0	0	40	0	40
Betula populifolia	40	0	40	0	0	80
Quercus velutina	0	0	40	0	0	40
Cornus florida	0	40	0	0	0	40
TOTALS:	400	320	240	320	0	1280

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

SPECIES	DENSITY ($\#/m^2$)
Sassafras albidum	1.000
Quercus alba	0.250
Quercus velutina	1.250
Juniperus virginiana	0.250
TOTAL:	2.750

SHRUBS: Percent cover of shrub species within the stand.

SPECIES	% COVER
Vaccinium sp.	0.555
TOTAL:	0.555

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

	% COVER
Litter layer	63.874
Exposed soil	18.249
Exposed rock	4.875
Bryophytes	+
Lichens	10.875
Dead wood	1.499
Unknown seedlings	+
Tree boles	+
Carex sp.	1.375
Hieracium sp	+
Grass sp.	2.500
Carex umbellata	1.499
Solidago sp.	+