

PLOT 798

LOCATION: 4 m from western edge of Grid Square #: 798

DATE SAMPLED: 7/20/81

SITE VARIABLES:

SLOPE: 8° ASPECT: 62° POSITION: midslope and local depression

SURFACE WATER: dry stream

LITTER DEPTH: 3.88 cm EXPOSED BEDROCK: no

SOIL SERIES (mapped):

SOIL pH:

VISUAL EVIDENCE OF: LOGGING: yes

GRAZING: no

STONE WALLS: no

FIRE: no

RECENT WINDTHROW: yes

MOUNDS & PITS: yes

AGES OF DOMINANT TREES: 54.1 cm Acer saccharum : years

CANOPY HEIGHT: 27.7 m % SKY VISIBLE: 9.0

COMMENTS:

HYDROLOGY:

There is a stream running through the site which created a fairly deep gorge.

SOILS:

The soils are deep, moderately stony and moderately coarse to fine grained. They are well drained with a well developed organic layer.

HISTORY:

There are stumps present along with some windthrow.

STAND CONDITION:

The canopy is dense except where there is standing dead Tsuga canadensis. There are quite a few dead Tsuga canadensis.

ADDITIONAL COMMENTS ON THE SITE:

The understory is dense only where there are light gaps, otherwise it is very sparse.

## 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
<i>Fagus grandifolia</i>	0	0.000	40	2.867	0	0.000	40	2.867
<i>Tsuga canadensis</i>	20	3.771	0	0.000	0	0.000	20	3.771
<i>Acer saccharum</i>	20	4.597	80	5.083	0	0.000	100	9.680
<i>Acer rubrum</i>	20	2.174	0	0.000	0	0.000	20	2.174
<i>Quercus prinus</i>	20	1.880	20	1.188	0	0.000	40	3.068
<i>Quercus rubra</i>	20	1.358	0	0.000	0	0.000	20	1.358
<i>Fraxinus americana</i>	0	0.000	20	0.215	0	0.000	20	0.215
<i>Betula lenta</i>	0	0.000	0	0.000	20	0.358	20	0.358
TOTALS:	DENSITY / HA	100	160		20		280	
	BASAL AREA (M2) / HA	13.7809	9.3524		0.3582		23.4914	

**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
<i>Fagus grandifolia</i>	0	0	25	31	0	0	14	12	13.24
<i>Tsuga canadensis</i>	20	27	0	0	0	0	7	16	11.60
<i>Acer saccharum</i>	20	33	50	54	0	0	36	41	38.46
<i>Acer rubrum</i>	20	16	0	0	0	0	7	9	8.20
<i>Quercus prinus</i>	20	14	13	13	0	0	14	13	13.67
<i>Quercus rubra</i>	20	10	0	0	0	0	7	6	6.46
<i>Fraxinus americana</i>	0	0	13	2	0	0	7	1	4.03
<i>Betula lenta</i>	0	0	0	0	100	100	7	2	4.33

**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
<i>Fagus grandifolia</i>	0	0	0	1	1	0	0	0	
<i>Tsuga canadensis</i>	0	0	0	0	0	0	0	1	
<i>Acer saccharum</i>	0	0	2	1	0	1	0	0	54
<i>Acer rubrum</i>	0	0	0	0	0	1	0	0	
<i>Quercus prinus</i>	0	0	0	1	1	0	0	0	
<i>Quercus rubra</i>	0	0	0	1	0	0	0	0	
<i>Fraxinus americana</i>	1	0	0	0	0	0	0	0	
<i>Betula lenta</i>	0	1	0	0	0	0	0	0	
TOTALS	1	1	2	4	2	2	0	1	1

**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
Fagus grandifolia	0.0	0.00	0.0	0.00
Tsuga canadensis	200.0	1000.00	0.0	0.00
Acer saccharum	20.0	20.00	0.0	0.00
Acer rubrum	0.0	0.00	0.0	0.00
Quercus prinus	0.0	0.00	0.0	0.00
Quercus rubra	0.0	0.00	0.0	0.00
Fraxinus americana	0.0	0.00	0.0	0.00
Betula lenta	0.0	0.00	0.0	0.00
TOTALS:	220.0	78.57	0.0	0.00

**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	
Fagus grandifolia	2000	0	0	0	0	2000
Tsuga canadensis	0	40	0	0	0	40
Ostrya virginiana	80	0	0	0	0	80
Acer pennsylvanicum	80	0	0	0	0	80
Fraxinus americana	0	0	0	40	0	40
Castanea dentata	160	0	0	0	0	160
TOTALS:	2320	40	0	40	0	2400

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

SPECIES	DENSITY (#/m <sup>2</sup> )
Betula lenta	0.250
Fagus grandifolia	0.750
TOTAL:	1.000

SHRUBS: Percent cover of shrub species within the stand.

SPECIES	% COVER
<i>Viburnum acerifolium</i>	2.616
TOTAL:	2.616

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

	% COVER
Litter layer	0.860
Exposed soil	6.622
Exposed rock	2.246
Bryophytes	1.871
Lichens	+
Dead wood	3.622
Unknown seedlings	+
Tree boles	1.250
<i>Carex platyphylla</i>	+
Unknown fern	+
<i>Eupatorium rugosum</i>	+
Tree root	3.125
Deadwood over	1.000
<i>Maianthemum canadense</i>	1.249
<i>Arailia nudicaulis</i>	+
<i>Polygala paucifolia</i>	+
<i>Carex</i> sp.	+
<i>Solidago caesia</i>	+
<i>Polystichum acrostichoides</i>	2.125
<i>Aster divaricatus</i>	+