

PLOT 567

LOCATION: 43 m from western edge of Grid Square #: 567

DATE SAMPLED: 7/10/84

SITE VARIABLES:

SLOPE: 1° ASPECT: 270° POSITION: midslope and local depression

SURFACE WATER: ephemeral stream

LITTER DEPTH: 2.00 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: 42.4 cm Carya glabra : 76 years

CANOPY HEIGHT: 24.7 m % SKY VISIBLE: 4.0

COMMENTS:

HYDROLOGY:

Ephemeral stream runs through the plot. Site very wet. No litter.

SOILS:

Soils are shallow on ridge, and deep in swale. Moderately stony on the ridge and not stony in swale.

HISTORY:

Paved road just north of plot. Some windthrown trees in plot.

STAND CONDITION:

Canopy intact (i.e. no openings from dieback), but a little sparse in swale.

ADDITIONAL COMMENTS ON THE SITE:

There is barbed wire stuck in the tree that was cored and some broken pottery and clam shells in the plot. Bedrock is at surface.

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 |
| Acer saccharum | 20 | 1.471 | 40 | 0.723 | 60 | 1.546 | 120 | 3.740 |
| Quercus alba | 40 | 3.380 | 40 | 0.999 | 0 | 0.000 | 80 | 4.379 |
| Quercus rubra | 20 | 2.797 | 0 | 0.000 | 0 | 0.000 | 20 | 2.797 |
| Quercus prinus | 20 | 1.608 | 20 | 0.867 | 0 | 0.000 | 40 | 2.476 |
| Carya glabra | 60 | 6.598 | 40 | 1.936 | 0 | 0.000 | 100 | 8.534 |
| Ostrya virginiana | 0 | 0.000 | 40 | 0.365 | 20 | 0.157 | 60 | 0.522 |
| Fraxinus americana | 0 | 0.000 | 20 | 0.249 | 20 | 0.173 | 40 | 0.423 |
| Carya ovata | 0 | 0.000 | 20 | 0.449 | 0 | 0.000 | 20 | 0.449 |
| TOTALS: | DENSITY / HA | 160 | | 220 | | 100 | | 480 |
| | BASAL AREA (M2) / HA | 15.8548 | | 5.5884 | | 1.8760 | | 23.3193 |

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 | % |
| Acer saccharum | 13 | 9 | 18 | 13 | 60 | 82 | 25 | 16 | 20.52 |
| Quercus alba | 25 | 21 | 18 | 18 | 0 | 0 | 17 | 19 | 17.72 |
| Quercus rubra | 13 | 18 | 0 | 0 | 0 | 0 | 4 | 12 | 8.08 |
| Quercus prinus | 13 | 10 | 9 | 16 | 0 | 0 | 8 | 11 | 9.48 |
| Carya glabra | 38 | 42 | 18 | 35 | 0 | 0 | 21 | 37 | 28.71 |
| Ostrya virginiana | 0 | 0 | 18 | 7 | 20 | 8 | 13 | 2 | 7.37 |
| Fraxinus americana | 0 | 0 | 9 | 4 | 20 | 9 | 8 | 2 | 5.07 |
| Carya ovata | 0 | 0 | 9 | 8 | 0 | 0 | 4 | 2 | 3.05 |

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 |
| Acer saccharum | 3 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | |
| Quercus alba | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | |
| Quercus rubra | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | |
| Quercus prinus | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | |
| Carya glabra | 0 | 0 | 1 | 2 | 0 | 0 | 2 | 0 | |
| Ostrya virginiana | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Fraxinus americana | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Carya ovata | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | |
| TOTALS | 9 | 2 | 3 | 4 | 2 | 1 | 3 | 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 |
| Acer saccharum | 0.0 | 0.00 | 0.0 | 0.00 |
| Quercus alba | 0.0 | 0.00 | 0.0 | 0.00 |
| Quercus rubra | 0.0 | 0.00 | 0.0 | 0.00 |
| Quercus prinus | 0.0 | 0.00 | 0.0 | 0.00 |
| Carya glabra | 0.0 | 0.00 | 20.0 | 20.00 |
| Ostrya virginiana | 0.0 | 0.00 | 0.0 | 0.00 |
| Fraxinus americana | 0.0 | 0.00 | 0.0 | 0.00 |
| Carya ovata | 0.0 | 0.00 | 0.0 | 0.00 |
| TOTALS: | 0.0 | 0.00 | 20.0 | 4.17 |

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 | |
| Ostrya virginiana | 160 | 80 | 40 | 40 | 120 | 440 |
| Acer saccharum | 1400 | 280 | 80 | 120 | 40 | 1920 |
| Cornus florida | 280 | 0 | 0 | 0 | 0 | 280 |
| Amelanchier sp. | 80 | 40 | 0 | 0 | 0 | 120 |
| TOTALS: | 1920 | 400 | 120 | 160 | 160 | 2760 |

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

| SPECIES | DENSITY ($\#/m^2$) |
|--------------------|----------------------|
| Fraxinus americana | 1.500 |
| Acer saccharum | 4.500 |
| Quercus alba | 0.250 |
| Ostrya virginiana | 0.500 |
| Prunus serotina | 0.250 |
| Cornus florida | 0.750 |
| TOTAL: | 7.750 |

SHRUBS: Percent cover of shrub species within the stand.

| SPECIES | % COVER |
|-----------------------------|---------|
| Lindera benzoin | 0.238 |
| Parthenocissus quinquefolia | 0.753 |
| Viburnum acerifolium | 1.982 |
| TOTAL: | 2.973 |

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

| | % COVER |
|--------------------------|---------|
| Litter layer | 58.625 |
| Exposed soil | 11.625 |
| Exposed rock | 26.749 |
| Bryophytes | 3.749 |
| Lichens | 2.747 |
| Dead wood | 2.122 |
| Unknown seedlings | + |
| Tree boles | + |
| Anemonella thalictroides | + |
| Galium circaezans | + |
| Carex sp. | + |
| Hepatica americana | + |
| Smilacina racemosa | + |
| Polygonatum pubescens | + |
| Solidago sp. | + |
| Solidago caesia | 1.750 |
| Aster divaricatus | 1.750 |
| Tree root | + |
| Carex platyphylla | + |
| Galium lanceolatum | + |
| Desmodium sp. | + |
| Grass sp. | + |
| Impatiens sp. | + |
| Pilea pumila | + |