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Site 6003 (Boreal Stand 3). 1954-08-08

[s.l.]: [s.n.], 1954-08-08

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[= Site 6003]

Soil Pit #1 - Stand 3 - Aug 8/54.
Near survey point #2

Litter - $\frac{1}{2}$ "
Firmest - $\frac{1}{4}$ "
Humus - $\frac{1}{2}$ - 1"
A₁ - $\frac{1}{4}$ "
A₂ - 1" - 2"
A₃ - $\frac{1}{4}$ "

Soil pit #2 - Stand 3 - Aug 8/54
Near survey point #33.

Litter - $\frac{1}{4}$ "
Firmest - $\frac{1}{2}$ "
Humus - 1"
A₁ - $\frac{1}{4}$ - $\frac{1}{2}$ "
A₂ - 3" - 3 $\frac{1}{2}$ "
A₃ - 1" - 1 $\frac{1}{2}$ "

Soil pit #3 - Stand 3 - Aug 8/54
Near survey point 40

Litter - $\frac{3}{4}$ "
Firmest, - $\frac{1}{8}$ "
Humus - 1" - 2"
A₁ - $\frac{1}{2}$ "
A₂ - 2 $\frac{1}{2}$ " - 3"
A₃ - $\frac{1}{4}$ "

Plant Ecology Research
TREE DATA SUMMARY SHEET

University of Wisconsin

268.6

Spruce-fir
Northern Pine-Hardwoods

Station Number: 3 - 1627

TREE	# PTS	# TRS	DOM. CLASSES			TOT. DOM.	# SAP	D. % SAP	F. % SDL	F. % TRS	% SUM F. TR.	D. % TRS	DOM% TRS	DFD INDEX	C. I.
			-80	-320	321										
Abies bals	33	57				1946	97	60.6		82.5	30.0	35.6	14.7	80.3	562.1
Acer rubru							2	1.3							
A. sacchar							1	0.6							
A. spicatu															
Betula lut															
B. papyrif	2	2				208				5.0	1.8	1.2	1.6	4.6	23.0
Carpinus c															
Fagus gran															
Ostrya vir															
Picea glau	31	46				5140	19	11.9		77.5	28.2	28.7	38.8	95.8	574.8
Picea mar. Pinus-Bank	6	6				195	11	6.9		15.0	5.5	3.7	1.5	10.7	21.4
P. resinosa	3	3				707	6	3.8		7.5	2.8	1.9	5.3	10.0	30.0
P. Strobus	23	28				4415	6	3.8		57.5	20.9	17.5	33.4	71.8	359.0
Populus ba															
P. grandid															1.0
P. tremulo	12	18				618	16	10.0		30.0	10.9	11.2	4.7	26.8	53.6
Prunus pen							2	1.3							1.0
Quercus el															
Q. rubra															
Tilia amer															
Tsuga cana															
Thuja occi															
Ulmus amer															
U. fulva															
Amelanchier															1.0
TOTALS		160				13229	160	100.0		275.0	100.0	100.0	100.0	300.0	1627

AVE. DIST. BTW'N TREES:

18.3

AVE. B. A.:

82.7

TREES/ACRE:

130

DOM. /ACRE:

10,751

N. Limit
Index

64.2.4

41.4

958.0

107.0

60.0

430.8

1.0

241.2

1.0

1.0

2484

722.7

46.0

958.0

107.0

70.0

502.6

6.0

214.4

3.0

2630

STAND #3

Tree	No. Pts.	No. Tr.	Size Class Sq. In.			No. Dom.	No. Sap.	Seed	P.% Seed	P.% Tr.	D.% Tr.	Dom.% Trees	D.F.D. Index	Station No.
ABIES BALSAMICA	33	57	12-80:81-220:221- 7-65-66-260-261- 54 4 3 53			1946	97	8	30.8 40	82.5 (30.0)	35.63	14.71	80.34	Total Length of Transect 3600'
ACER PENNSYLVANICUM							2	5	19.2 25					Total Length of Transect
ACER NIRMUM							1							
ACER SACCHARINUM														
ACER SPICATUM														
BETULA LUTEA														Ave. Dist. Btw'l Trees 18.28'
BETULA Papyrifera	2	2			2✓	208		2	7.7 10	5.0 (1.8)	1.25	1.57	4.62	Saplings/unit- area 149
YAGUS GRANDIFOLIA														Ave. BA (Total BA = 120) 82.68 sq"
FRAXINUS AMERICANA														
FRAXINUS NIGRA														No. trees/acre 130
LARIX LARICINA														Dom./acre 10,748
OSTRYA VIRGINIANA														
PICEA GLAUCA	31	46	11 15 35	31		5140	19	3	11.5 15	77.5 (28.2)	28.75	38.85	95.80	
PICEA MARIANA	6	6	6✓			195	11			15.0 (5.5)	3.75	1.47	10.72	
PINUS RESINOSA	3	3		1 3	2	707	6		11.5	7.5 (2.8)	1.88	5.34	10.02	
PINUS STROBUS	23	28	24	24	2	4415	6	3	15	57.5 (20.9)	17.50	33.37	71.77	
POPULUS BALSAMIFERA														
POPULUS GRANDIDENTATA														
POPULUS TREMULOIDES	12	18	16✓	2✓		618	16	4	15.4 20	30.0 (10.9)	11.25	4.67	26.82	
PRUNUS SEROTINA														
PRUNUS PENNSYLVANICUM							2	1	3.8 5					
PRUNUS AMERICANA														
THUJA OCCIDENTALIS														
THUJA AMERICANA														
ULMUS AMERICANA														
ULMUS RUBRA														
TOTALS	110	160	88	68	4	13229	160	26.		(100.0)(100.0)	100.0	300.0		

DEPARTMENT OF BOTANY
BIRGE HALL

MADISON 6, WISCONSIN, U. S. A.

40 gts yielded - 46 trees

Expected for each 10 pts. - 11 trees

EXPECTED	OBSERVED	DEVIATION	(DEVIATION) ²	(DEV.) ² / EXPECTED
11.5	12	+0.5	0.25	0.1
11.5	10	-1.5	2.25	0.1
11.5	11	0.5	0.25	0.0
11.5	13	+1.5	2.25	0.3
	<u>46</u>			<u>0.5</u>

$$26^2 = 0.5 \quad 3^\circ$$

PROBABILITY = 0.90 - 95

40 pts. welded - 28 trees

Expected for each 10 pts - Trees

EXPECTED	OBSERVED	DEVIATION	(DEVIATION) ²	$\frac{(DEV)^2}{EXPECTED}$
7	10	+3	9	1.3
7	10	+3	9	1.3
7	3	-4	16	2.2
7	5	-2	4	0.5
		<u>0</u>		<u>5.3</u>

$$76^2 = 5.3 \quad 30$$

PROBABILITY = $0.20 - 0.10$

$\frac{15}{15} \times \frac{75}{15} = \frac{225}{225}$

$$\begin{array}{r} 115 \overline{) 12500} \\ \underline{115} \\ 100 \\ \underline{1035} \\ 650 \end{array}$$

$$115 \overline{) 0.250} \quad .021$$

Total distances for trees - 2925'
 Average distance (160 trees) - 18.28'
 Total distances for saplings - 2732'
 Average distance (160 saplings) - 17.08

Frequency - Trees

	freq.	freq. %
<i>Abies balsamea</i>	57	35.63
<i>Picea glauca</i>	46	28.75
<i>Pinus strobus</i>	28	17.50
<i>Populus trem.</i>	18	11.25
<i>Picea mariana</i>	6	3.75
<i>Pinus resinosa</i>	3	1.87
<i>Betula papy.</i>	2	1.25
	160	100.00

Stand #3

Large stand - size estimated from photos. Bounded north by Crosby Creek, east New Creek, South Highway 60. Large area of characteristic pinery beginning at mile 19 1/2. Cover is fairly open throughout. Heavily covered with bracken. Area has been logged for pine and burned.

Preliminary Survey. - White Pine + W. Spruce recorded at 100 yd. intervals. Counted along a compass line passing due North beginning at highway boundary. Transect is 4 yds wide - 2 yds each side.

Segment #1, no seedlings considered.

White Spruce

White Pine

[### 1
1]

[II
III]

[III
1]

[III
II]

more balsam less spruce
more spruce less balsam

[~~###~~
III]

[III
II]

[III
~~###~~ 1]

[I
III]

Size 40 x 40 chains or approx 155 acres

PC	PM	PS	PR	PT	BP	AB.
	1		3		2	
	6					
				12		
1						
31		23				33

Running List of Plants

Pinus strobus
Pinus resinosa
Populus tremuloides
Populus grandidentata
Betula papyrifera
Picea glauca
Picea mariana
Abies balsamea
Thuja occidentalis
Cornus canadensis
Vaccinium angustifolium
Vaccinium myrtillodes
Caluogon canadense
Polytrichum commune
Cladonia rangiferina
Saxifraga hypnoides
Saxifraga hypnoides
Melampyrum lineare
Lycopodium obscurum
Lycopodium clavatum
Lycopodium tristachyum
Lycopodium complanatum
Juncus - spp.
Carex - spp.
Maianthemum canadense
Heracium aurantiacum
Heracium pratense
Heracium peabryum
Aster macrophyllus
Rubus allagibiensis
Cladonia gracilis
Viburnum cassinoides
Lycopodium annotinum

Stand # 3

Amelanchier sp.
Spiraea latifolia
Rhus typhina
Riparian repens
Solidago canadensis
Rubus idaeus
Anaphalis margaritacea
Polygala paucifolia
Corylus cornuta
Viola sp.
Dierilla lonicera
Aralia nudicaulis
Acer rubrum - seedlings
Solidago like Solidago Aster umbellatus
Apocynum androsaemifolium
Juncus officinalis
Antennaria canadensis
Lydia elliptica
Prunus pennsylvanica
Rumex acetosella ? - check lower leaf
Achillea millefolium
Epilobium angustifolium
Coptis groenlandicum
Juncus typhina
Lycopodium obscurum var dendroideum
Spiranthes Romanzoffiana
Prunus serotina - seedling
Erigeron - white flower strigosus
Dalibarda repens
Monotropa uniflora
Lycop. clavatum - var megastachyum
Solidago graminifolia

Antennaria canadensis
Rubus pubescens
Salix triflorum
Dryopteris spinulosa
Amelanchier sp.
Prunus pennsylvanica

WARD SMITH
PRESS BOND


[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

	/0	20	
Podophyllum peltatum			
Polygala paucifolia ✓		3	15
Polygonatum biflorum			
Polygonatum pubescens			
Polygonum cilinode			
Polymnia canadensis			
Polypodium virginianum			
Potentilla canadensis			
Potentilla norvegica			
Potentilla simplex			
Potentilla tridentata			
Prenanthes alba			
Primula mistassinaca			
Prunella vulgaris			
Prunus pumila			
Pteretis pensylvanica			
Pteridium aquilinum ✓		20	100
Pyrola asarifolia			
Pyrola elliptica ✓		2	10
Pyrola grandiflora			
Pyrola minor			
Pyrola rotundifolia			
Pyrola secunda			
Pyrola virens			
Pyrus floribunda			
Pyrus melanocarpa			
Ranunculus abortivus			
Ranunculus acris			
Ranunculus pensylvanicus			
Ranunculus recurvatus			
Ranunculus repens			
Ranunculus septentrionalis			
Rhamnus alnifolia			
Rhus glabra			
Rhus radicans			
Rhus typhina			
Rhus vernix			
Ribes americanum			
Ribes cynosbati			
Ribes glandulosum			
Ribes hirtellum			
Ribes lacustre			
Ribes oxycanthoides			
Ribes triste			
Rosa sp.			
✓ Rubus allegheniensis ✓		2	10
Rubus idaeus ✓		1	5
Rubus hispidus			
Rubus odoratus			
Rubus parviflorus			
Rubus pubescens ✓		1	5
✓ Rubus (blackberry)			

[illegible]

[illegible]

Quadrat #1 - survey point #1 - Stand 3 - Aug 4/54.

Pteridium aquilinum
Cornus canadensis
Gaultheria procumbens
Carex - sp.
Apocynum androsaemifolium
Muell. pyram. lineare
Cladonia gracilis
Polytrichum juniperinum

Vacc. angustifolium

- (a) *Picea glauca* - 12" ¹¹³, 10' from point, height - 37' - tree
Populus trem. - 2 1/2", 13' " " " 14' - sap.
- (b) *Pinus strobus* - 10" ⁷⁹, 18' " " " 30' - tree
Abies balsamea - 2 1/4", 28' " " " 15' - sap.
- (c) *Abies balsamea* - 7" ³⁹, 13' " " " 30' - tree
Abies balsamea - 2", 17' " " " 16' - sap.
- (d) *Picea glauca* - 13" ¹³³, 22' " " " 34' - tree
Abies balsamea - 2 1/2", 9' " " " 15' - sap.

Very light litter
 Ground deeply covered with mosses & reindeer moss
 Heavy cover of blueberries
 Bracken - fairly heavy, no hazel
 W. spruce, W. pine, Balsam, Poplar Trem, W. Birch.

T.D. = 63'

Survey point # 2

- (a) *Pinus strobus* - 16" ²⁰¹ - 25' from point, height - 32' - tree
Picea glauca - 1" - 2' " " " - 8' - sap.
- (b) *Picea mariana* - 9" ⁶⁴ - 12' " " " - 40' - tree
Picea mariana - 1 ³/₄" - 6' " " " - 14' - sap.
- (c) *Pinus strobus* - 14" ¹⁵⁴ - 16' " " " - 38' - tree
Picea glauca - 2" - 14' " " " - 9' - sap.
- (d) *Abies balsamea* - 6" ²⁸ - 9' " " " - 39' - tree
Abies balsamea - 2" - ~~11~~" " " " - 11' - sap.

Slight litter - pine needles

Moderate amount of blueberries

Bracken - heavy, slight hazel

W. pine, W. spruce, B. spruce, Balsam, Pop. - tree

T.D. = 62'

Quadrat #2 - Survey Point #3 - Stand #3 - Aug 4/54
 Pteris aquilina
 Melanopyrum lineare
 Vacc. angust.
 Hieracium aurantiacum
 Trifolium pratense
 Brass. sp.
 Cladonia rangiferina
 Cladonia gracilis
 Polytrichum junip.

- (a) Pinus resinosa - 19" ²⁸³ - 28' from point - height 46' - tree
 Abies balsamea - 1 1/2" - 10' " " - " 11' sap.
 (b) Picea glauca - 12" ¹¹³ - 17' " " - " 42' - tree
 Pinus resinosa - 1 1/2" - 12' " " - " 7' - sap.
 (c) Picea glauca - 10" ⁷⁹ - 40' " " - " 40' - tree
 Abies balsamea - 2 1/2" - 38' " " - " 17' - sap
 (d) Pinus strobus - 13" ¹³³ - 19' " " - " 30' - tree
 Picea glauca - 1" - 13' " " - " 5' sap

Light litter - ground 60% covered with small lichens
 Blueberry - moderate
 Bracken fairly heavy, Little hazel
 W. pine, W. spruce, R. pine, Balsam, Pop. here W. birch
 W. spruce + R. pine regen

T.D. = 104'

Survey Point #4

Aug 5/54

- | | | | | | | | |
|-----|----------------------------|----------|----------------|-----|------------|--------------|--------|
| (a) | <i>Abies balsamea</i> | - 6 1/2" | ³³ | 7' | from point | height - 38' | - tree |
| | <i>Picea glauca</i> | - 1" | | 9' | " " | 8' | - sap. |
| (b) | <i>Picea glauca</i> | - 10" | ⁷⁹ | 25' | " " | 37' | - tree |
| | <i>Abies balsamea</i> | - 1 1/2" | | 36' | " " | 11' | - sap. |
| (c) | <i>Pinus strobus</i> | - 12" | ¹¹³ | 12' | " " | 42' | - tree |
| | <i>Pinus resinosa</i> | - 1" | | 32' | " " | 8' | - sap. |
| (d) | <i>Populus tremuloides</i> | - 4 1/2" | ¹⁶ | 5' | " " | 40' | - tree |
| | <i>Abies balsamea</i> | - 2 3/4" | | 7' | " " | 16' | - sap. |

Fairly heavy litter of needles + poplar leaves.
Considerable mosses

Heavy bracken, some blueberries, light hazel

W. pine, W. spruce, Balsam, Pop. - trem. R. pine, B. spruce
Regen white spruce

T.D. = 49'

Quadrat # 3 - Survey Point 5 - Stand 3 Aug 5/54

Pterid. aquil.

Montalia brevis

Cornus canadensis

Mulinum perenne

Galium aparine

Calcegon schreiberi

Sycophorum clavatum

Vacc. angust.

Abies balsam. - seedling

Acer rubrum - seedling

Picea glauca seedling

(a) *Picea glauca* - 9" ⁶⁴, 30' from front, height - 26' - tree
Abies balsamea - 2", 13' " " " - 15' - sap.

(b) *Populus trem.* - 7" ³⁸, 17' " " " - 51' - tree
Abies balsamea - 13 ¹/₄" ⁴⁴, 28' " " " - 16' - sap

(c) *Picea glauca* - 9" ⁶⁴, 8' " " " - 35' - tree
Picea mariana - 1", 2' " " " - 6' - sap

(d) *Populus trem.* - 7 ¹/₂" ⁴⁴, 13' " " " - 48' - tree
Picea glauca - 1", 12' " " " - 6' - sap

Heavy litter leaves + dead bracken

Considerable blueberry

Heavy bracken, light hazel

Pop. trem., W spruce, W spruce, B spruce, Balsam

W + B spruce regen.

T.D. = 68'

Survey Point #6

(a)	<i>Picea mariana</i>	- 5" ²⁰	26'	from point	height - 20' - tree
	<i>Picea glauca</i>	- 2" ¹	30'	" "	" 14' - sap
(b)	<i>Abies balsamea</i>	- 6 1/2" ³³	15'	" "	" 33' - tree
	<i>Populus trem</i>	- 2 1/2" ¹	32'	" "	" 24' - sap
					" 30' - tree
(c)	<i>Abies balsamea</i>	- 4 1/2" ¹⁶	25'	" "	" 7' - sap
	<i>Picea mariana</i>	- 1" ¹	9'	" "	"
(d)	<i>Picea glauca</i>	- 13 4/8" ¹³³	18'	" "	" 45' - tree
	<i>Picea mariana</i>	- 1" ¹	13'	" "	" 7' - sap

Light little grasses + bracken.
 Moderate bracken, Some blueberry, Little hazel
 W. spruce, Pop trem, W pine, B spruce, Balsam
 W. B spruce + Balsam reger.

T.D. ~ 84'

Quadrat #4 - Survey Point 7 - Stand 3.

Aug 6/54.

Pteris aquil.

Vacc angust

Maianthemum canadense

Pop. trem. - seedling

Grass sp.

Corylus cornuta 1.

Lycopodium obscurum

Polystichum juniperinum

Cladonia gracilis

(a) *Picea glauca* - 10" ⁷⁹, 25' from point - height 37' - tree
Populus trem. - 1 1/2", 26' " " - " 19' - sap.

(b) *Picea glauca* - 8" ⁵⁰, 10' " " - " 31' - tree
Abies balsamea - 1", 9' " " - " 6' - sap.

(c) *Pinus strobus* - 9" ⁶⁴, 22' " " - " 26' - tree
Abies balsamea - 1", 21' " " - " 8' - sap.

(d) *Populus trem.* - 4" ¹³, 12' " " - " 28' - tree
Abies balsam - 1", 13' " " - " 6' - sap

Fairly heavy litter, dead leaves + bracken

Light *Vaccin.* - Fairly heavy bracken, some Hazel

w. pine, w. spruce, Poplar trem, *Abies balsam*

Regen balsam mostly some w. spruce.

T.D. = 69'

Survey Point 8

- (a) *Betula papyrifera* 11" ⁹⁵ 31' from point, height 40' - tree
Picea glauca - 1 1/2" 15' " " " 12' - sap
- (b) *Abies balsamea* - 4" 13 25' " " " 20' - tree
Abies balsamea - 1 1/2" 6' " " " 11' - sap
- (c) *Pinus strobus* - 15" 177 21' " " " 32' - tree
Abies balsam - 2 1/2" 22' " " " 17' - sap
- (d) *Abies balsamea* - 4 1/2" 16 13' " " " 27' - tree
Populus trem - 2" 40' " " " 28' - sap

Moderate litter grass, leaves + bracken:

Fairly heavy bracken, some blueberries, considerable hazel.

Pop trem, balsam, W spruce, W pine, B spruce.

W + B spruce regen + some balsam

T.D. = 90'

Quadrat #5 - Survey Point 9 - Stand #3 - Aug 6/54

Pterid. aquilinum
Calceol. scheberi
Maianthemum canadense
Polygala paucifolia
Lycopodium clavatum
Polypodium junip.
Carex sp.
Dicentra foncea

Abies balsamea - seedling
Vacc. angust.
Acer rubrum - seedling
Corylus cornuta
Pop. trem. - seedling
Rubus idaeus

- (a) *Picea glauca* 16" ²⁰¹ - 31' from point, height - 45' tree
Abies balsamea 2 1/2" - 30' " " " - 13' sap.
- (b) *Pinus strobus* 13" ¹³³ - 20' " " " - 38' tree
Abies balsamea 1 1/2" - 14' " " " - 9' sap.
- (c) *Abies balsamea* 6" ²⁸ - 16' " " " - 37' tree
Abies balsamea 1 3/4" - 16' " " " - 12' sap.
- (d) *Abies balsamea* 5" ²⁰ - 11' " " " - 34' tree
Pop. trem. 2 1/2" - 32' " " " - 26' sap.

Moderate little dead branches & leaves

Light blueberry, heavy bracken, some hazel.

Pop. trem., w. spruce, balsam, w. pine,
 Balsam + w. spruce regen.

T.D. = 78'

W. & J. SMITH
 BOND

Survey Point 10

- (a) *Pinus strobus* 12" ¹³³ 30' from point height - 31' - tree
Abies balsamea 2 1/2" 9' " " " 13' - sap.
- (b) *Populus trem.* 10" ⁸⁰ 16' " " " 41' - tree
Abies balsamea 2 1/2" 15' " " " 16' - sap.
- (c) *W. spruce* - 7" ³⁹ 18' " " " 29' - tree
Pop. trem. - 2" 17' " " " 24' - sap.
- (d) *Pinus strobus* - 13" ¹³³ 16' " " " 33' - tree
Pinus strobus - 1" 8' " " " 8' - sap

Moderate litter needles leaves + bracken

Some blueberry, considerable bracken, no hazel

W. pine, W. spruce, Poplar, Balsam

Pine w, balsam + spruce w. alder

T.D. = 80'

Quadrat #6 - Survey Point " - Stand 3 - Aug 6/24

Pter. ag.
 Cornus Canadensis
 Menziesia borealis
 Macranthemum
 Calcegon. schreber.
 Polytrichum junip.
 L. sp.
 Taraxacum officinale
 Polygala paucifolia

Abies bals. seedling
 Corylus cornuta
 Vacc. angust.
 W. Birch - seedling
 W. Spruce - seedling
 W. pine seedling
 Acer rubrum - cot.

- (a) Pinus strobus - 10" ⁸⁰ 24' from point - height 25' - tree
 Abies balsamea - 2" 7' " " - " 11' - sap.
 (b) Abies balsamea - 6" ²⁸ 9' " " - " 20' - tree
 Abies balsamea - 2" 20' " " - " 16' - sap.
 (c) Pinus strobus - 20" ³¹⁴ 20' " " - " 37' - tree
 Abies balsam. - 1" 17' " " - " 7' - sap.
 (d) Pinus strobus 18" ²⁵⁴ 18' " " - " 36' - tree
 Abies balsam 1 1/2" 5' " " - " 9' - sap.

Moderate litter, needles, leaves, branches

Little blueberry, moderate branches, considerable moss

W. pine, Pop. trem, Balsam, W. spruce

Considerable balsam regen

T.D. = 71'

Survey point # 12

- (a) *Picea glauca* - 11" ⁹⁵ 9' from point, height - 40' tree
Picea mariana 1" 8' " " 7' - sap
- (b) *Pop. tremuloides* 5" ²⁰ 30' " " 26' - tree
Abies balsam 1" 18' " " 8' - sap
- (c) *Picea glauca* - 7" ³⁸ 23' " " 29' - tree
Abies balsam - 2 1/2" 11' " " 15' - sap
- (d) *Pinus strobus* - 9" ⁶⁴ 22' " " 26' - tree
Abies balsam - 1" 7' " " 8' - sap

Moderate litter tracker

Consid. tracker, no blueberry, some hazel

W. spruce, Pop., W. pine, Balsam, B. spruce.

Considerable balsam regem

T.D. = 84'

quadrat 7 Survey Point # 13 - Stand 3 - Aug 6/54.

Pterid. ag.

Cornus canadensis

Polystichum junip.

Cladonia rangiferina

Lycop. clavatum

Prun. sp.

Tricent. borealis

Maianthemum

Vacc. myrtilloides

Abies balsam - seedling

Acer rubrum - seedling

Corylus cornuta

(a) Pinus strobus - 13" ¹³³ 32' from point - height 31' - tree
Abies balsam - 2" 35' " " - " 10' - sap.

(b) Abies balsam - 7" ³⁹ 13' " " - " 30' - tree
Picea mariana - 1" 14' " " - " 7' - sap

(c) Picea glauca - 15" ¹⁷⁷ 10' " " - " 50' - tree
Populus trem. - 2" 14' " " - " 30' - sap.

(d) Abies balsam - 6" ²⁸ 15' " " - " 35' - tree
Pinus strobus - 1" 31' " " - " 8' - sap.

Fairly heavy litter of bracken & bare needles.

Considerable bracken & blueberry Some hazel

W. spruce, Balsam ^{Popla}, W. pine, B. spruce W. birch.

Balsam poplar

T.D. = 70'

Survey Point #14

clearing.

- (a) *Abies balsamea* 8" ⁵⁰ 9' from point height 38' - tree
Abies balsamea 1" 4' " " " 7' - sap
- (b) *Abies balsamea* - 5" ²⁰ 13' " " " 27' - tree
Picea glauca - 2" 23' " " " 9' - sap.
- (c) *Abies balsamea* - 6" ²⁸ 25' " " " 28' - tree
Abies balsamea - 1" 30' " " " 10' - sap
- (d) *Picea glauca* - 12" ¹¹³ 40' " " " 42' - tree
Abies balsamea - 1" 12' " " " 8' - sap

Light Litter - bracken

Heavy Bracken & blueberry, some hazel

Abies balsamea, *Populus*, *W. spruce*, *W. larch*

Balsam - mainly, some *W. spruce* reger

Some bracken *Abies balsamea*

T.D. ~ 87'

Quadrat #8 - Survey Point 15 Stand # 3 Aug 6/54

Pteridium aquilinum
Lycopodium obscurum
Lycopodium clavatum
Comarostaphylos canadensis
Mnium

Vaccinium angustifolium

Balsam seedling

Prunus pensylvanica - seedling

Prunella borealis

Calcegon streperum

(a) <i>Betula papyrifera</i>	12" ¹¹³	28'	- from point	height	48'	tree
<i>Abies balsamea</i>	1 1/2"	7'	"	"	10'	sap
(b) <i>Picea glauca</i>	10" ⁷⁹	14'	"	"	42'	tree
<i>Prunus pensylvanica</i>	2"	29'	"	"	17'	Sap.
(c) <i>Prunus serotina</i>	16" ²⁰¹	16'	"	"	36'	tree
<i>Abies balsamea</i>	1"	1'	"	"	7'	sap.
(d) <i>Abies balsamea</i>	8" ⁵⁰	22'	"	"	38'	tree
<i>Abies balsamea</i>	1"	7'	"	"	10'	sap

Light litter needles + bracken

Heavy bracken, some blueberries, consid hazel

Abies, W spruce, W pine, Birch, Poplar

All balsam regen.

T.D. = 80'

Survey Point # 16

- a) *Abies balsamea* - 6"²⁸ - 18' from point - height 35' - tree
Abies balsamea - 1" - 3' " " - " 6' - sap.
- b) *Pinus strobus* - 19"²⁸³ 30' " " - " 36' - tree
Abies balsam. - 1 1/2" 8' " " - " 12' - sap.
- c) *Abies balsamea* - 7"³⁸ 10' " " - " 38' - tree
Pinus pensylvanica 1" 15' " " - " 16' - sap.
- d) *Abies balsamea* - 8"⁵⁰ 13' " " - " 38' - tree
Abies balsamea - 1" 7' " " - " 6' - sap.

Fairly heavy litter - broken needles, leaves.

Heavy tracks - little blueberries, heavy hazel.

Balsam, W pine, W spruce, W birch, *Pinus pensylvanica*
All balsam regen.

T.D. = 71'

Quadrat #9 Survey point 11 - Stand 3 - Aug 6/54

Pterid. ag.

Aralia nudicaulis

Cornus

Truentalis

Rubus pubescens

Salix triflorum

Pyrola elliptica

Aster macrophyllus

Thermilla floridica

Maranthemum

Pachyrrhizus

Lycop. obscurum

Moss

Abies balsam - seedlings

Vacc. angust

Pop. trem - seedling

(a) Picea glauca - 9" ⁶⁴ 6' from point, height 36' tree
Abies balsam - 1" 19' " " " 8' - sap

(b) Pinus strobus - 14" ¹⁵⁴ 15' " " " 34' tree
Acer saccharum - 2 1/2" 18' " " " 20' - sap

(c) Picea glauca - 14" ¹⁵⁴ 7' " " " 42' tree
Abies balsam - 2 1/2" 24' " " " 13' sap

(d) Abies balsam - 8" ⁵⁰ 15' " " " 40' tree
Abies balsam - 1" 18' " " " 13' sap

Tight litter needles.

Very little track - Aralia, Consider hazel

W. Spruce, Balsam, W. pine W. Birch Poplar

T.D. = 42'

Survey Point 18

(a) <i>Pinus strobus</i>	10" ⁷⁹	45'	from point	height	32'	tree
<i>Abies balsam</i>	2" ¹	18'	"	"	"	13' - sap.
b) <i>Pinus strobus</i>	16" ²⁰¹	28'	"	"	"	35' - tree
<i>Abies balsamea</i>	2" ¹	14'	"	"	"	15' - sap
(c) <i>Abies balsam</i>	7" ³⁹	9'	"	"	"	34' - tree
<i>Populus trem</i>	2" ¹	29'	"	"	"	26' - sap,
(d) <i>Abies balsamea</i>	7" ³⁸	12'	"	"	"	36' - tree
<i>Acer rubrum</i>	2" ¹	6'	"	"	"	15' - sap

Light litter track

Heavy track, considerable hazel, heavy blueberry

Balsam, W pine, W spruce Poplar

Balsam + W spruce regem

T.D. = 94'

Quadrat #10 - Survey Point 19 - Stand 3 - Aug 6/54
 west of original starting point. - Clearing

Pteris aquil.
Hieracium scabrum
Mass. sp.
Vacc. myrtillades
Vacc. angust.

Cladonia rangiferina
Achillea millefolium
Hieracium aurantiacum
Pityrogramma juniper

- | | | | | | | | |
|-----|-----------------------|--------------------|-----|------------|--------|-----|------|
| (a) | <i>Abies balsamea</i> | 8" ⁵⁰ | 60' | from point | height | 33' | tree |
| | <i>Pinus strobus</i> | 2" | 70' | " " | " | 11' | sap |
| (b) | <i>Abies balsamea</i> | 6" ²⁸ | 9' | " " | " | 29' | tree |
| | <i>Abies balsamea</i> | 1" | 13' | " " | " | 6' | sap |
| (c) | <i>Picea glauca</i> | 15" ¹⁷⁷ | 9' | " " | " | 40' | tree |
| | <i>Picea glauca</i> | 2" | 45' | " " | " | 15' | sap |
| (d) | <i>Picea glauca</i> | 12" ¹¹³ | 15' | " " | " | 37' | tree |
| | <i>Abies balsamea</i> | 1" | 16' | " " | " | 9' | sap |

moderate litter grasses + bracken
 moderate bracken, consid blueberry, no hazel
 W spruce, Balsam, W pine, Pop. tree.

T.D. = 93'

Survey Point # 20

- (a) Pop. trem. - 9" ⁶⁴ - 13' from point - height - 35' tree
 Abies balsam - 2" - 17' " " - " 15' - sap
- (b) Abies balsam - 6" ²⁸ - 10' " " " 25' - tree
 Abies balsam - 1" - 13' " " " 7' - sap
- (c) Picea glauca - 12" ¹¹³ - 36' " " " 46' - tree
 Pseudotsuga - 1" - 12' " " " 5' - sap
- (d) Abies balsam - 7" ³⁹ - 26' " " " 30' - tree
 Abies balsam - 1" - 13' " " " 6' - sap

Light litter track.

Fairly heavy track, consid blueberry, no hazel

W. spruce, Balsam, Pop. Pine W + R.

Regen - balsam + W spruce.

T.D. = 85'

Quadrat #11 - Survey Point 21 - Stand 3 - Aug 7/54.
 Vacc august

Pteridium aquil
Cladonia rangiferina
Polytrichum juniper
Solidago canadensis
Rubus allgiphimus
Grass sp.
Hieracium scabrum

- a) *Picea glauca* - 8" ⁵⁰ 33' from point - height - 28' - tree
Abies balsam - 2" 8' " " - " - 15' - sap.
 b) *Abies balsamea* - 4" ¹³ 7' " " - " - 22' - tree
Abies balsamea - 2 1/2" 6' " " - " - 18' - sap.
 c) *Picea mariana* 7" ³⁹ 7' " " - " - 20' - tree
Picea mariana 2 1/2" 13' " " - " - 13' - sap.
 d) *Abies balsamea* 8" ⁵⁰ 25' " " - " - 28' - tree
Picea glauca 1 1/2" 30' " " - " - 9' - sap.

Light litter dead bracken + *Cladonia*
 Fairly heavy bracken, consid blueberry, no hazel
 W. spruce, Balsam, B. spruce, Poplar, W. pine R. pine
 Regen - balsam + W. spruce

T.D. = 72'

Survey Point 22

a) <i>Picea glauca</i>	13" ¹³³	13'	from point	height	47'	tree
<i>Abies balsam</i>	3" ¹	15'	"	"	24'	sap.
b) <i>Pinus strobus</i>	12" ¹¹³	11'	"	"	26'	tree
<i>Abies balsam</i>	2" ¹	17'	"	"	14'	sap.
c) <i>Picea glauca</i>	6" ²⁸	12'	"	"	29'	tree
<i>Pinus resinosa</i>	1" ¹	6'	"	"	10'	sap.
d) <i>Abies balsam</i>	6 1/4" ³²	15'	"	"	32'	tree
<i>Pinus resinosa</i>	2" ¹	10'	"	"	12'	sap.

Light litter bracken + dead wood.

Moderate bracken, light blueberry, some hazel.

W. spruce, balsam, R. pine, W. pine, Poplar, B. spruce

Regen W spruce + R pine

R pine 25' from point 50' high DBH - 20"

Wonderful R pine.

T.D. = 51'

Quadrat #12 - Survey Point 23 - Stand 3 - Aug 7/54

Pterid aquil.

Vacc. myrt.

Lycop. clavatum

R. deligehemensis

Melampyrum lineare

Polystich. junif.

Caher. gon. Shrubberi

(a) *Picea glauca*. 14" ¹⁵⁴ 35' from point - height - 43' - tree
Pop. trem. 2 1/4" 3' " " " 24' - sap.

(b) *Populus trem.* - 4 1/2" ¹⁶ 6' " " " 29' - tree
Abies balsam. - 2" 10' " " " 16' - sap.

(c) *Picea glauca* - 16 1/2" ²¹³ 28' " " " 45' - tree
Pop. trem. - 2" 33' " " " 28' - sap.

(d) *Abies balsam.* 7" ³⁹ 18' " " " 25' - tree
Abies balsam. 2 1/2" 19' " " " 20' - sap.

Heavy litter tracken + leaves.

Mod. heavy tracken, consid blueberry, some hazel

W spruce, Poplar, Balsam, W pine, R. pine

Balsam budworm

W spruce + balsam region

T.D. = 87'

Survey point 24.

- (a) *Picea mariana* - 3" 11 9' from point - height 16' - tree
Abies balsamea - 1" 3' " " - " 7' - sap.
- (b) *Pinus strobus* 15" 177 20' " " - " 36' - tree
Abies balsamea 2 1/2" 14' " " - " 17' - sap.
- (c) *Abies balsamea* 7" 39 25' " " - " 30' - tree
Abies balsamea 1" 7' " " - " 8' - sap.
- (d) *Picea glauca* - 13 1/2" 143 12' " " - " 44' - tree
Abies balsam - 1 1/2" 30' " " - " 13' - sap.

Light litter track

Heavy blueberry, moderate track, no hazel

W. Spruce, Balsam, W pine, B spruce W Birch Pop.

Balsam regen

T.D. = 66'

Quadrat 13. Survey point 25 - Stand 3 Aug 7/54

Pterid aquil.
Cornus canadensis
Maianthemum
Brass sp.
Rumex acetosella
Lycop. clavatum

Corylus cornuta
Picea glauca - shrub + seedling
Balsam seedling
W. Birch pots
W pine seedling

(a) <i>Picea glauca</i>	10" ⁷⁹	11'	from point	- height	42'	- tree
<i>Abies balsamea</i>	1"	13'	"	"	8'	- sap
(b) <i>Pop. trem.</i>	8" ⁵⁰	6'	"	"	55'	- tree
<i>Abies balsam.</i>	2 1/2"	23'	"	"	18'	- sap
(c) <i>Pop. trem.</i>	4 1/2" ¹⁶	1'	"	"	48'	- tree
<i>Abies bal.</i>	2"	4'	"	"	13'	- sap
(d) <i>Pop. trem.</i>	4 1/4" ¹⁵	2'	"	"	48'	- tree
<i>Abies bal.</i>	1"	20'	"	"	7'	- sap

Light litter, leaves + dead wood
 Consider bracken, no blueberry, little hazel
 W. spruce, Poplar, Balsam, W. pine, W. Birch
 Balsam + W. spruce reger

T.D. = 20'

Survey point # 26.

- (a) *Abies balsamea* - $6\frac{1}{2}"$ ³³ 21' from point - height - 30' - tree
Picea glauca - $1"$ 16' " " " 7' - sap.
- (b) *Abies balsam* - $5"$ ²⁰ 18' " " " 26' - tree
Pinus resinosa - $1"$ 21' " " " 5' - sap.
- (c) *Pinus resinosa* - $18\frac{1}{2}"$ ²⁷⁰ 38' " " " 50' - tree
Abies balsam - $2"$ 31' " " " 15' - sap.
- (d) *Picea mariana* - $3\frac{1}{4}"$ " 30' " " " 16' - tree
Abies balsamea - $2\frac{1}{2}"$ 5' " " " 13' - sap.

Light layer balsam + needles

mod. heavy tracks, no blueberry, little hazel

W. pine, Balsam, W. spruce, R. pine, B. spruce, Poplar
 Balsam + W. spruce reg.

T.D. = 107'

Quadrat 14 - Survey point - 27 - Stand 3 - Aug 7/54

Pterid ag

Vacc argut

Heracium aurant.

Grass sp.

Carex sp.

Lycopodium clavatum var megastachyon

Cladonia rangiferina

Polytrichum juniper

Solidago canadensis

Melampyrum lineare.

- (a) *Picea glauca* 8" ⁵⁰ 18' from point - height. 31' - tree
Abies balsam. 2 1/2" 16' " " " 15' - sap.
- (b) Abies balsam - 4" ¹³ 18' " " " 31' - tree
Abies balsam - 1" 17' " " " 7' - sap.
- (c) Abies balsam - 7" ³⁸ 14' " " " 32' - tree
Picea glauca - 1" 15' " " " 6' - sap.
- (d) *Picea glauca* 15" ¹⁷⁷ 24' " " " 42' - tree
Abies balsamea 2" 27' " " " 15' - sap.

Light litter dead grass & bracken.

Mod. heavy bracken, very little blueberry, some hazel

W. spruce, balsam, Poplar, W. pine

Balsam, W. spruce, W. R. pine regen

Poplars tend to grow in small groves through stands

T.D. = 74'

Survey point 28

- (a) *Abies balsam* - 6" ²⁸ 19' from point - height 35' - tree
Picea glauca - 2" 13' " " - " 8' - sap.
- (b) *Picea glauca* 13" ¹³³ 38' " " - " 38' - tree
Abies balsam 1" 23' " " - " 7' - sap.
- (c) *Abies balsam* 8" ⁵⁰ 17' " " - " 35' - tree
Abies balsam - 2 3/4" 8' " " - " 14' - sap.
- (d) *Abies balsam* - 5" ²⁰ 7' " " - " 35' - tree
Abies balsam - 2" 19' " " - " 14' - sap.

Light litter bracken + lichens

much *huicium* covering ground + *Cladonia* sang.

Consid bracken, no blueberry, some hazel

Balsam, W. Spruce, Poplar, W. pine, R. pine

Balsam + W. spruce regen.

T.D. = 81'

Quadrat 15 - Survey point 29 - Stand 3 - Aug 7/54

Pterid. ag.
Lycop. obscurum
Lycop. clavatum
Lycop. sp.
Vacc. ang.
W pine seedling.

Polytrichum junip.
Cladonia rang.
Anaphalis margaritacea

- (a) Abies balsamea 5 1/2" ²⁴ - 11' from point - height 28' - tree
Abies balsamea - 2" , 32' " " " 11' - sap.
- (b) Abies balsamea 7" ³⁹ 23' " " " 39' - tree
Abies balsamea - 1" , 25' " " " 13' - sap.
- (c) Picea glauca 13" ¹³³ 20' " " " 45' - tree
Pop. trem. 2 1/2" , 20' " " " 28' - sap.
- (d) Pinus resinosa 14" ¹⁵⁴ 32' " " " 45' - tree
Abies balsam. 1" , 15' " " " 9' - sap.

Very light litter grass, bark + needles

Consid. bracken, little blueberry. Some hazel.

Balsam, Pop. W spruce, R. pine, W birch

Balsam + R. pine regen.

T.D. = 86'

Survey point # 30

- (a) *Pinus strobus* - 14" ¹⁵⁴ 18' from point - height - 33' - tree
Abies balsamea - 2 3/4" 19' " " - " 16' - sap.
- (b) *Abies balsamea* - 6" ²⁸ 14' " " - " 21' - tree
Pinus strobus - 1" 20' " " - " 11' - sap.
- (c) *Populus trem.* - 7" ³⁹ 13' " " - " 25' - tree
Abies balsam. - 1" 9' " " - " 6' - sap.
- (d) *Pop. trem.* - 5" ²⁰ 12' " " - " 33' - tree
Pop. trem. - 2 3/4" 7' " " - " 28' - sap.

Light litter leaves.

Alnus incana, Very heavy hazel. Some blueberry

Balsam, *Populus trem.* W. pine W. spruce + W. birch

Balsam regen

Pop. grandidentata

T.D. = 57'

Quadrat #16 - Survey point 31 - stand 3 - Aug 7/54

Pteris ag

Grass

Comus

Caherger

Lycopodium obscurum var dendroid

Anthriscus

Maranthaceae

Vaccinium

Balsam - seedlings

Corylus cornuta

Acer rubrum - seedling

(a) Picea glauca - 5" ²⁰ - 22' from point - height 18' - tree

Acer rubrum - 1 1/2" - 4' " " - " 10' - sap.

(b) Abies balsam - 5" ²⁰ - 9' " " - " 25' - tree

Abies balsam - 2" - 12' " " - " 12' - sap.

(c) Pinus strobus - 14" ¹⁵⁴ - 25' " " - " 35' - tree

Abies balsam - 1" - 27' " " - " 8' - sap.

(d) Abies balsam - 7" ³⁸ - 21' " " - " 40' - tree

Picea glauca - 2" - 20' " " - " 11' - sap

Very light litter grass

Some bracken, Heavy blueberry, Heavy hazel

Balsam, w pine, w spruce Pop trem, Pop grand

Balsam, w pine, w spruce Acer rubrum

T.D. = 77'

Survey post 32

- (a) *Picea glauca* - 11" ⁹⁵ 15' from point - height - 36' - tree
Abies balsam - 1" 16' " " - 8' - sap.
- (b) *Picea glauca* 12" ¹¹³ 8' " " " 40' - tree
Abies balsamea 2" 24' " " " 10' - sap
- (c) *Picea mariana* 8" ⁵⁰ 7' " " " 34' - tree
Abies balsam - 1" 21' " " " 9' - sap
- (d) *Picea glauca* - 12" ¹¹³ 23' " " " 40' - tree
Abies balsamea - 1 1/2" 18' " " " 12' sap

mod heavy ltr. leaves & needles

Little blacken, little blueberry, heavy hazel

W. spruce, balsam, W. pine

Prunus pennsylvanica

Balsam poplar

T.D. = 53'

W. birch 1 of them B. spruce

Quadrat # 17 - Survey point # 33 - Stand 3 Aug 8/54
Vacc august.

Pterid ag.
Cladonia rang.
Tremella loricata
Lecan. sp.
Lycop clavatum

West from survey point 16

- (a) Abies balsam. 10" ⁸⁰ 21' from point - height 37' - tree
Picea mariana 1 1/2" 22' " " - " 7' - sap.
- (b) Abies balsam. 6" ²⁸ 15' " " - " 35' - tree
Picea glauca 2" 12' " " - " 11' - sap
- (c) Pinus strobus 17" ²²⁷ 24' " " - " 36' - tree
Picea glauca 2" 10' " " - " 11' - sap
- (d) Abies balsam. 7" ³⁸ 16' " " - " 34' - tree
Picea mariana 1 1/2" 22' " " - " 12' - sap

Light litter tracken + dead wood.

Light tracken, considerable blueberry, some hazel.

Balsam, W pine, W spruce, B spruce, Pop-thorn

T.D. = 76'

Survey point 34.

- (a) *Picea glauca* - 15" ¹⁷⁷ 16' from point - height - 45' - tree
Pinus strobus - 1" 18' " " - " - 6' - sap.
 " " " " - " - 35' - tree
- (b) *Pinus strobus* - 14" ¹⁵⁴ 26' " " - " - 12' - sap.
Picea mariana - 2" 28' " " - " - 12' - sap.
- (c) *Abies balsamea* - 3" ¹⁰ 9' " " - " - 14' - tree
Abies balsamea - 2" 8' " " - " - 13' - sap.
- (d) *Abies balsamea* - 10" ⁸⁰ 18' " " - " - 40' - tree
Pinus strobus - 1 1/2" 17' " " - " - 12' - sap

Light litter leaves + needles.

Consid. hickory + blueberry, + hazel.

Balsam, W spruce, W pine, Pop. trem., B spruce, R pine

Balsam, B spruce, W spruce, W pine + R. pine reglar

T.D. = 69'

Quadrat #18 - Survey point # 35 - Stand # 3 Aug 8/54

Pteridium aquilinum

Conyza cornuta

Lycop obscurum

Vacc. angust.

Lycop. clavatum

Aralia nudicaulis

Cornus canadensis

- (a) *Picea glauca* 13" ¹³³ 18' from point - height - 46' - tree
Abies balsam 2 1/2" 28' " " - " - 15' - sap.
- (b) *Pinus strobus* 14" ¹⁵³ 16' " " - " - 37' - tree
Abies balsam - 1 1/2" 30' " " - " - 10' - sap.
- (c) *Abies balsam* - 7" ³⁹ 17' " " - " - 35' - tree
Picea glauca - 1" 12' " " - " - 9' - sap
- (d) *Pop. trem.* - 10 1/2" ⁸⁶ 15' " " - " - 48' - tree
Abies bal. - 2 1/2" 19' " " - " - 14' - sap

Heavy litter, needle & leaves

Light blueberry, moderate braker, consid hazel

W pine, Bal, W S., 65, pop trem, R. pine.

R pine, W pine & Bal regem.

T.D. = 66'

Survey point # 36.

- (a) *Picea glauca* - 13" ¹³³ 12' from point. - height 48' - tree
Abies balsamea - 2 1/2" - 15' " " - " 14' - sap.
- (b) *Populus trem.* - 8" ⁵⁰ 27' " " - " 50' - tree
Picea mariana - 1 1/2" 11' " " - " 11' - sap.
- (c) *Abies balsamea* - 4" ¹³ 23' " " - " 30' - tree
Abies balsamea - 1" 16' " " - " 10' - sap.
- (d) *Picea glauca* 6 1/2" ³³ 27' " " - " 29' - tree
Abies balsam. - 2 1/2" 10' " " - " 18' - sap.

Moderate litter, broken + leaves.

Consid broken, no blueberry, some hazel

Balsam, Poplar, W spruce, W pine, B spruce.

Balsam regem.

T.D. = 89'

Squadrat # 19 - Survey point 37 - Stand 3 - Aug 8/54

Pteris sp.
Comus canadensis
Lycopodium clavatum
Malampyrum lineare
Grass sp.
Polytrichum juniper
Oxycoccus
Polygala pauc.
Matantherum
Carex sp.
Pipula elliptica

Pop trem. - seedling.
Vacc angust
Vacc myrt.

In poplar grove.

- (a) *Pop. trem.* - 5 1/4" ²² 12' from point - height - 32' - tree
Pop. trem. - 2" 7' " " - " 28' - sap.
- (b) *Pop. trem.* - 3 1/4" 11 10' " " - " 31' - tree
Pop. trem. - 2" 12' " " - " 30' - sap.
- (c) *Pop. trem.* - 4 3/4" 18 15' " " - " 36' - tree
Picea glauca 2" 16' " " - " 12' - sap.
- (d) *Abies balsam* 9 1/2" ⁷⁰ 16' " " - " 39' - tree
Pop. trem. 1" 17' " " - " 18' - sap.

Light litter broken + leaves.

Heavy broken, little blueberry, little hazel

Balsam + w. spruce resin

T.D. = 53'

Survey point # 38

(a) <i>Abies balsamea</i>	-	4 1/2" ¹⁶	27'	from point, height.	-	30' - tree
<i>Abies bal.</i>	-	1" ¹	28'	" " "	"	7 1/2' - sap
(b) <i>Pinus strobus</i>	-	16" ²⁰⁰	7'	" " "	"	42' - tree
<i>Abies bal.</i>	-	1 1/2" ¹	14'	" " "	"	11' - sap
(c) <i>Abies bal.</i>	-	4 1/2" ¹⁶	13'	" " "	"	31' - tree
<i>Abies bal.</i>	-	1 1/2" ¹	4'	" " "	"	8' - sap.
(d) <i>Picea glauca</i>	-	13 1/2" ¹⁴³	27'	" " "	"	40' - tree
<i>Abies bal.</i>	-	2 1/2" ¹	38'	" " "	"	18' - sap.

mod. lotter needles

Moderate bracken, heavy blueberry, little hazel

Balsam + w. spruce regen

T.D. = 74'

Quadrat # 20 - Survey point # 39 - Stand 9. Aug 8/54
Vacc myrt.

Pterid ag.
Solidago canad.
Maz. spp.
Carex
Melampyrum.
Polystichum pinip
Hebeacum aurant
Epil. angust.
Cladonia rangif.

- (a) Picea glauca - 15" ¹⁷⁷ 24' from point - height 50' - tree
Abies balsam - 2" 19' " " - " 14' - sap.
- (b) Abies balsamula - 4 1/4" ¹⁸ 23' " " - " 18' - tree
Abies bals. - 2 3/4" 15' " " - " 16' - sap.
- (c) Abies bals. - 4" ¹³ 20' " " - " 23' - tree
Abies bals. - 1 1/2" 19' " " - " 14' - sap.
- (d) Picea glauca - 14" ¹⁵⁴ 23' " " - " 48' - tree
Abies bals. - 2 1/2" 26' " " - " 18' - sap

Light litter, bracken + grass.

Consid bracken + blueberry. Some hazel.

Balsam, W spruce, Poplar, W pine, R pine

Balsam + W spruce regen T.D. = 90

Survey point 40

- (a) *Abies balsam* 11" ⁹⁵ 12' from point, height - 50' - tree
Pop trem. 2" 14' " " " - 20' - sap.
- (b) *Picea glauca* 10½" ⁸⁶ 13' " " " - 40' - tree
Abies balsam. 2½" 28' " " " - 21' - sap.
- (c) *Picea glauca* 16" ²⁰⁰ 9' " " " - 48' - tree
Abies balsam - 2" 22' " " " - 15' - sap.
- (a) *Abies balsam.* 8¼" ⁵³ 19' " " " - 38' - tree
Picea glauca 2½" 28' " " " - 15' - sap

Light litter bracken + leaves

Moderate bracken, Considerable hazel; moderate blueberry.

W. spruce, balsam, Poplar, W pine R pine

Balsam + R pine regl

T.D. = 53'