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Site 3217: Michigan Island #3, Ashland County. 1956-08-15

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STAND RECORD

FORESTS

Stand No. 3217⁴

Name: MICHIGAN ISLAND #3

Locality: NORTH EAST

County: ASHLAND

T: R: Sec:

Date: 8-15-56

Observers: RICHARD & MIKE VOGL

Size of Stand 20 ACRES

Size of Area Sampled: 20 ACRES

Forest Type: BETULA LUTEA - THUJA

Soil Type:

Topography: LEVEL

Slope:

Directions

Condition of Stand: THIS STAND APPEARED TO HAVE NEVER BEEN CUT, WITH NO EVIDENCE OF CUTTING PRESENT. THIS STAND WAS A NARROW STRIP BORDERING THE LAKE SHORE AND HAD NUMEROUS OPENINGS AND WIND FALLS AS A DIRECT EFFECT OF THE WIND & THE POSITION OF STAND

Open Grown Trees:

Stumps:

- | | | | |
|----|----|----|-----|
| 1. | 4. | 7. | 10. |
| 2. | 5. | 8. | 11. |
| 3. | 6. | 9. | 12. |

% Canopy: 25 LO SCALE

Soil Data:

	pH	N	P	K	Ca	Mg	Org. Mat.	Colloids	W.H.C.
A ₀									
A ₁									
A ₂									
B									

DEPTH

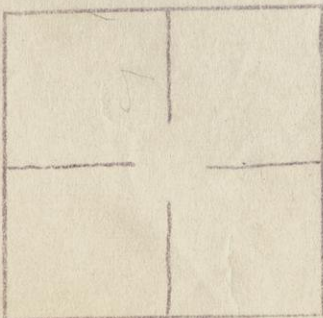
CHARACTERISTICS (Color, Texture, Structure, etc.)

A ₀	2"	compacted deciduous litter
A ₁	1"	loam sandy (brown)
A ₂	1"	sand (brown)
B	4"	light gray, hard-packed sand

Parent Material:

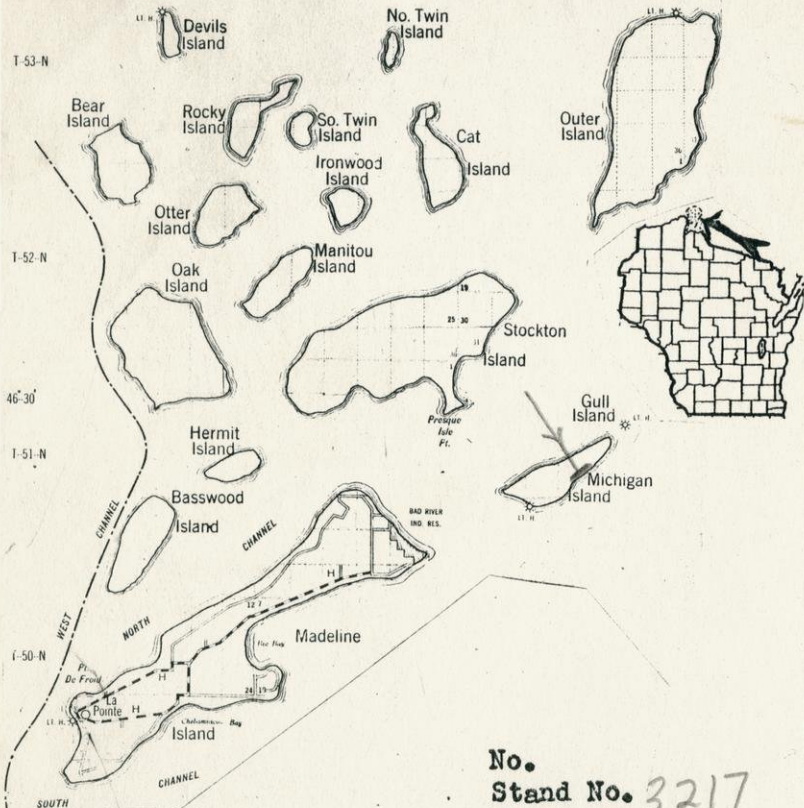
ENTIRE PROFILE

Map:



Northern WISCONSIN
ASHLAND County

APOSTLE ISLANDS in
LAKE SUPERIOR



Collected by

Grant Cottam
Richard J. Vogl

No.
Stand No. 3217
Date:

Northern Pine-Hardwoods

83 160 93 66 1 15,295 160

Station Number: 3217

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							40	25.0							
Acer rubru	1	1	1			80				1.2	.6	.5	2.3		
A. sacchar	1	1	1			40				1.2	.6	.3	2.1		
A. spicatu															
Betula lut	36	82	40	41	1	885	36	22.5		43.4	51.3	57.9	152.6		
B. papyrif	13	20	8	12		2595	3	1.9		15.7	12.5	17.0	45.2		
Carpinus c															
Fagus gran															
Ostrya vir															
Picea glau															
Pinus Bank															
P. resinus															
P. Strobus															
Populus ba															
P. grandid															
P. tremulo															
Prunus pen															
Quercus el															
Q. rubra															
Tilia amer															
Tsuga cana	1	1		1		220				1.2	.6	1.4	3.2		
Thuja occi	30	54	42	12	345	3434	71	48.1		36.1	33.8	22.4	92.3		
Ulmus amer															
U. fulva															
PYPUS AMER	1	1	1			75	4	2.5		1.2	.6	.5	2.3		
								100.0		100.0	100.0	100.0	300.0		

AVE. DIST. BTW'N TREES: 12.1
Ave. Sap. Dist. 20.9

AVE B. A.: 95.4

TREES/ACRE: 297.5
99.7

DOM./ACRE: 294.1
197.5 Ag. ft.

POINT RECORD TREES APOSTLE ISLANDS

3217

Point Number	1	2	3	4	5	6	7	8	9	0	
<i>Abies balsamea</i>											
	1	2	2	2	2		1	3	3	1	
<i>Acer rubrum</i>											
<i>Acer saccharum</i>											
<i>Betula lutea</i>	31.4 130 30 90	120 120	150 130 40	22.0 55 16.	90			140 180	115	110	8/17
<i>Betula papyrifera</i>		140					270 190		80 15		3/5
<i>Quercus rubra</i>										1	
<i>Tsuga canadensis</i>											
<i>Thuja occidentalis</i>		95	65	80	55 10.0 75	35 24 50 180	85 60	170 180	30	28 50 28	9/18
	2	2	2	2	2	2	2	1		2	
PYRUS AMER.	1									1	
Tree distance	8.5 9.5 27 16	4 17 18 23	14 7 7.5 9.5	15 11 8.5 6	17 22 6 8	9 12 7.5 7.5	23 19 9.5 21	7 10.5 18.5 24	11 8 7 7.5	4 12 5 7	
Sapling distance	21 12.5 30 28	22.5 22 16 25	4 8 15 7	19 22 16 21	2 11 22 10	6 8 2 7	8 21 22 18	5 8 4 7	12.5 5 25 30	16 20 7 22	

POINT RECORD TREES APOSTLE ISLANDS

8217

Point Number	1	2	3	4	5	6	7	8	9	20
<i>Abies balsamea</i>										
	2	2	3				1	1	1	1
<i>Acer rubrum</i>										
<i>Acer saccharum</i>										
<i>Betula lutea</i>	30	75 60 170		60 55 95	200 35 100 3	280 65 35	110 65 200 3	180 110 210 12	170	370 19
<i>Betula papyrifera</i>					55	50		160		
<i>Quercus rubra</i>		1								
<i>Tsuga canadensis</i>										
<i>Thuja occidentalis</i>	25 35 35 2	90	30 40 80 50	35					90 140	55 18
<i>PYRUS AMER</i>									75	
Tree distance	5 5.5 7.5	15 15.5 14.5 8.5	8 13 2 7	16.5 7.5 12 10	10.5 14 16 22	13 20 10.5 18	26 14.5 18 34	7.5 12 28 20	8.5 10 15 28	6 12.5 8.5 20
Sapling distance	7.5 7 9 9	7 4 5 28	17 28 18 14	16 13 10.5	16 28 24 18	15 26 32 18	23 34 28 75	35 40 38 22	25 23 35 16	30 19 22 50

9/32

3/3

6/13

1/1

POINT RECORD TREES APOSTLE ISLANDS

52.17

Point Number	21	22	23	24	25	26	27	28	29	30
Abies balsamea										
Acer rubrum	80									
Acer saccharum										
Betula lutea	80 140 2	220 130 230 4	130 70 80 1	25 40 160 55	80 55 1	29 95 85 40	40 65 55 3	70 110 110 3	55	60 70
Betula papyrifera		110	180		200				120 200	
Quercus rubra										
Tsuga canadensis										
Thuja occidentalis	70 2				70 3		40 1	55 1	50 1	70 35 4
Tree distance	9.5 17 7 6.5	13.5 21 6 17.5	11.5 18.5 13.5 9.5	13 10.5 13.5 22	8 14.5 18 14	3 10.5 10 11.5	9 11 9.5 16	7 9.5 10 10	15 11.5 12 18	4 8 10 12
Sapling distance	18 15 28 34	31 21 8 32	11 15 30 60	22 26 28 36	9 26 23.5 22	44 50 10 34	26 15 18 60	22 30 31 35	15 26 16 17	4 10 25 30

1/1

10/27

4/5

4/17

1/6

POINT RECORD TREES APOSTLE ISLANDS

3217

Point Number	31	32	33	34	35	36	37	38	39	40	
Abies balsamea											
Acer rubrum	1		2	1	1	1					2
Acer saccharum							40				1/1
Betula lutea	35 45	45 130		50	22 70	55	60	140	240 150	110 75 275	9/15
Betula papyrifera	1		2	70 150 40 75	170 80		240				3/7
Quercus rubra											
Tsuga canadensis		220									1/1
Thuja occidentalis	75 180	30		60	20 40	30 75	95 35	20 85 40	45 35	60	9/16
	2	3		3	3	3	3	4	4	2	
PYROS AMER								1			
Tree distance	6 6.5 6 8.5	19 17 14 12.5	4 6 14 7	4 11 11.5 19	8 6 17 16	7 7.5 6 18	13.5 18 5 8	8 24 15.5 7	18 10 13 20	2 4 8 7.5	
Sapling distance	22 33 8 50	13.5 6 34 54	7 8 6 17	12 38 37 8	21 22 21 38	8 18 8 10	20 17.5 8 22	34 28 40 35	13 18 22 32	12.5 18 23 16	

T H M L O

SPECIES
TO

1 III 4

TAX

II

|||||
|||||

|||||
|||||

|||||
120

AS

|||||

|||||

|||||
|||||

1 32

AB

III 3

BP

1

2

27

30

84

17

1

BROWSE CONDITION BY SPECIES %

SPECIES	T	H	M	L	O	TOTAL
TO				25.0	75.0	100.0
TAX	1.7	15.8	20.0	54.2	8.3	100.0
AS		21.9	18.8	56.3	3.1	100.1
AB					100.0	100.0
BP		100.0				100.0

% EACH SPECIES CONTRIBUTES TO EACH BROWSE CATEGORY

	TO	TAX	AS	AB	BP	TOTAL
T		100.0				100.0
H		70.4	25.9		3.7	100.0
M		80.0	20.0			100.0
L	1.2	77.4	21.4			100.0
O	17.6	58.8	5.9	17.6		99.9

% EACH SPECIES CONTRIBUTES TO TOTAL BROWSE = CATEGORY/160

T	H	M	L	O	TOTAL
1.3	16.9	18.8	52.5	10.6	100.1

TO	TAX	% BROWSE AS	% BROWSE AB	% BROWSE BP	TOTAL
2.5	75.0	20.0	1.9	.6	100.0

DEER DAMAGE REPORT FORM

Stand No. 3217

138.5

150.

175.

194.5

Pt. No.	Sp	Dis	Con	Sp	Dis	Con	Sp	Dis	Con	Sp	Dis	Con
1	TAX	2	M	TAX	2.5	M	TAX	3	H	TAX	7	L
2	TAX	.5	H	TAX	4	M	TAX	6	H	TAX	3	M
3	TAX	3	T	TAX	3	L	TAX	1	L	TAX	5	H
4	TAX	1.5	L	TAX	1	L	TAX	1.5	L	TAX	1.5	L
5	TO	2	L	TAX	6	L	TAX	5	L	TAX	7	O
6	TAX	3	M	TO	2	O	TAX	3	L	TO	4	O
7	AS	4	L	AS	6	M	TAX	3.5	H	TAX	8	M
8	TAX	1.5	L	TAX	5	H	TAX	4	M	TAX	3	L
9	TAX	3	H	TAX	7	L	TAX	1	L	TAX	2	H
10	TAX	2	H	AB	3	O	TAX	3	L	TAX	7	L
11	TAX	3	L	TAX	2	L	TAX	2	L	TAX	5	L
12	AS	3	H	TAX	2	L	TAX	4	L	TAX	5	L
13	AS	4	M	AS	3	L	AB	13	O	AB	4	O
14	TAX	1	H	TAX	1.5	H	TAX	5	H	TAX	5	L
15	TAX	7	L	TAX	3	H	TAX	3.5	H	AS	5	M
16	TAX	7	H	AS	3	L	TAX	3	M	TAX	3	H
17	TAX	3	M	TAX	1	L	AS	2	L	AS	4	L
18	AS	3	H	AS	4	H	AS	3	H	AS	6	H
19	TAX	3	M	TAX	4	L	AS	7	L	TAX	6	L
20	TAX	4	M	TAX	2	L	TAX	5	L	TAX	3	L
21	AS	6	L	TAX	5	L	TAX	2	L	TO	5	O
22	TAX	5	M	AS	6	L	TAX	8	T	TAX	7	M
23	AS	8	M	AS	6	M	TAX	9	L	TAX	9	L
24	AS	5	H	AS	3	H	BP	8	H	TAX	12	L
25	AS	9	O	TAX	6	H	AS	6	M	AS	5	L
26	TAX	3	L	TAX	4	L	TAX	6	L	TAX	5	M
27	TAX	8	L	TAX	14	H	TAX	4	O	TAX	8	H
28	TAX	3	M	TAX	6	M	AS	5	C	TAX	9	L
29	TAX	4	L	TAX	5	L	TAX	5.5	M	TAX	3	L
30	TAX	3	L	TAX	2	L	TAX	6	L	TAX	9	L
31	TAX	3	O	AS	10	L	TAX	6	O	TAX	6.5	L
32	TAX	2	L	TAX	4	L	AS	7	L	TAX	9	M
33	TAX	5	O	TAX	2	L	TAX	6	L	TAX	2.5	L
34	TAX	1	O	TAX	4	L	TAX	3	L	TAX	3.5	C
35	TAX	1	O	TAX	5	L	AS	5.5	L	TAX	6	L
36	TAX	2	L	TAX	1.5	O	TAX	4	L	AS	3	L
37	TAX	2	L	TAX	3	L	TAX	.5	O	AS	2.8	L
38	TAX	1	M	TAX	1	L	TAX	2	L	AS	2	L
39	TAX	4	M	TAX	6	M	AS	3	L	TAX	2.5	O
40	AS	5	L	TAX	0	M	TAX	3	M	TAX	5	M

658.0

AMEN

Ave. dist. 4.1
Browse per acre 2591.3

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No. 3217
Quadrat No. 1-10

Actaea pachypoda	Fragaria virginiana	Potentilla simplex
Actaea rubra	Galium lanceolatum	Prenanthes alba
Adiantum pedatum	Galium triflorum	Pteridium aquilinum
Allium tricoccum	Gaultheria procumbens	Pyrola elliptica
Anemone quinquefolia	Gaylussacia baccata	Pyrola rotundifolia
Aquilegia canadensis	Geranium maculatum	Pyrola secunda
Aralia nudicaulis	Geum canadense	Ranunculus recurvatus
Aralia racemosa	Gnaphalium obtusifolium	Rhus radicans
Arisaema atrorubens	Helianthemum sp.	Ribes americanum
Aster macrophyllus	Helianthus strumosus	Rosa sp.
Aster sagittifolius	Hepatica acutiloba	Rubus parviflorus
Athyrium angustum	Hepatica americana	Rubus (blackberry)
Botrychium virginianum	Impatiens biflora	Rubus (dewberry)
Brachyelytrum erectum	Linnaea borealis	Sambucus pubens
Carex albursina	Lonicera oblongifolia	Sanguinaria canadensis
Caulophyllum thalictroides	Lupinus perennis	Sanicula gregaria
Chimaphila umbellata	Lycopodium annotinum	Smilacina racemosa
Circaea alpina	Lycopodium complanatum	Smilacina stellata
Circaea latifolia	Lycopodium lucidulum	Smilax ecirrhata
Clintonia borealis	Lycopodium obscurum	Solidago ulmifolia
Coptis trifolia	Lysimachia quadrifolia	Streptopus roseus
Corallorrhiza maculata	Maianthemum canadense	Taxus canadensis
Cornus alternifolia	Mitchella repens	Thalictrum dioicum
Cornus canadensis	Mitella diphylla	Trientalis borealis
Cornus rugosa	Mitella nuda	Trillium grandiflorum
Corylus americana	Monotropa uniflora	Uvularia grandiflora
Corylus cornuta	Myrica asplenifolia	Uvularia sessilifolia
Cypripedium acaule	Onoclea sensibilis	Vaccinium angustifolium
Diervilla lonicera	Oryzopsis asperifolia	Vaccinium pennsylvanicum
Dirca palustris	Osmorhiza claytoni	Viburnum acerifolium
Dryopteris linnaeana	Oxalis montana	Viola canadensis
Dryopteris phegopteris	Phryma leptostachya	Viola cucullata
7 Dryopteris spinulosa	Polygala pauciflora	Viola pallens
Epifagus virginiana	Polygonatum commutatum	Viola pubescens
Epigaea repens	Polygonatum pubescens	Waldsteinia fragarioides

97531

7, ACER SPIC

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No. 3217
Quadrat No. 11-20

Actaea pachypoda	Fragaria virginiana	Potentilla simplex
Actaea rubra	Galium lanceolatum	Prenanthes alba
Adiantum pedatum	Galium triflorum	Pteridium aquilinum
Allium tricoccum	Gaultheria procumbens	Pyrola elliptica
Anemone quinquefolia	Gaylussacia baccata	Pyrola rotundifolia
Aquilegia canadensis	Geranium maculatum	Pyrola secunda
Aralia nudicaulis	Geum canadense	Ranunculus recurvatus
Aralia racemosa	Gnaphalium obtusifolium	Rhus radicans
Arisaema atrorubens	Helianthemum sp.	Ribes americanum
Aster macrophyllus	Helianthus strumosus	Rosa sp.
Aster sagittifolius	Hepatica acutiloba	Rubus parviflorus
Athyrium angustum	Hepatica americana	Rubus (blackberry)
Botrychium virginianum	Impatiens biflora	Rubus (dewberry)
Brachyelytrum erectum	Linnaea borealis	Sambucus pubens
Carex albursina	Lonicera oblongifolia	Sanguinaria canadensis
Caulophyllum thalictroides	Lupinus perennis	Sanicula gregaria
Chimaphila umbellata	Lycopodium annotinum	Smilacina racemosa
Circaea alpina	Lycopodium complanatum	Smilacina stellata
Circaea latifolia	Lycopodium lucidulum	Smilax ecirrhata
Clintonia borealis	Lycopodium obscurum	Solidago ulmifolia
Coptis trifolia	Lysimachia quadrifolia	Streptopus roseus
Corallorrhiza maculata	Maianthemum canadense	19171511 Taxus canadensis
Cornus alternifolia	Mitchella repens	Thalictrum dioicum
Cornus canadensis	Mitella diphylla	13 Trientalis borealis
Cornus rugosa	Mitella nuda	Trillium grandiflorum
Corylus americana	Monotropa uniflora	Uvularia grandiflora
Corylus cornuta	Myrica asplenifolia	Uvularia sessilifolia
Cypripedium acaule	Onoclea sensibilis	Vaccinium angustifolium
Diervilla lonicera	Oryzopsis asperifolia	Vaccinium pennsylvanicum
Dirca palustris	Osmorhiza claytoni	Viburnum acerifolium
Dryopteris linnaeana	Oxalis montana	Viola canadensis
Dryopteris phegopteris	Phryma leptostachya	Viola cucullata
91715 Dryopteris spinulosa	Polygala pauciflora	Viola pallens
Epifagus virginiana	Polygonatum commutatum	Viola pubescens
Epigaea repens	Polygonatum pubescens	19151311 ACER SPIC.

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No. 3217
Quadrat No. 21-30

Actaea pachypoda	Fragaria virginiana	Potentilla simplex
Actaea rubra	Galium lanceolatum	Prenanthes alba
Adiantum pedatum	Galium triflorum	Pteridium aquilinum
Allium tricoccum	Gaultheria procumbens	Pyrola elliptica
Anemone quinquefolia	Gaylussacia baccata	Pyrola rotundifolia
Aquilegia canadensis	Geranium maculatum	Pyrola secunda
Aralia nudicaulis	Geum canadense	Ranunculus recurvatus
Aralia racemosa	Gnaphalium obtusifolium	Rhus radicans
Arisaema atrorubens	Helianthemum sp.	Ribes americanum
Aster macrophyllus	Helianthus strumosus	Rosa sp.
Aster sagittifolius	Hepatica acutiloba	Rubus parviflorus
Athyrium angustum	Hepatica americana	Rubus (blackberry)
Botrychium virginianum	Impatiens biflora	Rubus (dewberry)
Brachyelytrum erectum	Linnaea borealis	Sambucus pubens
Carex albursina	Lonicera oblongifolia	Sanguinaria canadensis
Caulophyllum thalictroides	Lupinus perennis	Sanicula gregaria
Chimaphila umbellata	Lycopodium annotinum	Smilacina racemosa
Circaea alpina	Lycopodium complanatum	Smilacina stellata
Circaea latifolia	25, 23 Lycopodium lucidulum	Smilax ecirrhata
Clintonia borealis	21 Lycopodium obscurum	Solidago ulmifolia
Coptis trifolia	Lysimachia quadrifolia	Streptopus roseus
Corallorrhiza maculata	Maianthemum canadense 29, 25, 23, 21	Taxus canadensis
Cornus alternifolia	Mitchella repens	Thalictrum dioicum
Cornus canadensis	Mitella diphylla	Trientalis borealis
Cornus rugosa	Mitella nuda	Trillium grandiflorum
Corylus americana	Monotropa uniflora	Uvularia grandiflora
Corylus cornuta	Myrica asplenifolia	Uvularia sessilifolia
Cypripedium acaule	Onoclea sensibilis	Vaccinium angustifolium
Diervilla lonicera	Oryzopsis asperifolia	Vaccinium pennsylvanicum
Dirca palustris	Osmorhiza claytoni	Viburnum acerifolium
Dryopteris linnaeana	Oxalis montana	Viola canadensis
Dryopteris phegopteris	Phryma leptostachya	Viola cucullata
23, 21 Dryopteris spinulosa 25, 27, 29	Polygala pauciflora	Viola pallens
Epifagus virginiana	Polygonatum commutatum	Viola pubescens
Epigaea repens	Polygonatum pubescens	Waldsteinia fragarioides

29, 23, 21 ACER SPIC

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No. 3217
Quadrat No. 31-40

Actaea pachypoda	Fragaria virginiana	Potentilla simplex
Actaea rubra	Galium lanceolatum	Prenanthes alba
Adiantum pedatum	Galium triflorum	Pteridium aquilinum
Allium tricoccum	Gaultheria procumbens	Pyrola elliptica
Anemone quinquefolia	Gaylussacia baccata	Pyrola rotundifolia
Aquilegia canadensis	Geranium maculatum	Pyrola secunda
Aralia nudicaulis	Ceum canadense	Ranunculus recurvatus
Aralia racemosa	Gnaphalium obtusifolium	Rhus radicans
Arisaema atrorubens	Helianthemum sp.	Ribes americanum
Aster macrophyllus	Helianthus strumosus	Rosa sp.
Aster sagittifolius	Hepatica acutiloba	Rubus parviflorus
Athyrium angustum	Hepatica americana	Rubus (blackberry)
Botrychium virginianum	Impatiens biflora	Rubus (dewberry)
Brachyelytrum erectum	Linnaea borealis	Sambucus pubens
Carex albursina	Lonicera oblongifolia	Sanguinaria canadensis
Caulophyllum thalictroides	Lupinus perennis	Sanicula gregaria
Chimaphila umbellata	Lycopodium annotinum	Smilacina racemosa
Circaea alpina	Lycopodium complanatum	Smilacina stellata
Circaea latifolia	10 Lycopodium lucidulum	Smilax ecirrhata
5 35 Clintonia borealis	5 Lycopodium obscurum	Solidago ulmifolia
Coptis trifolia	Lysimachia quadrifolia	Streptopus roseus
Corallorrhiza maculata	Maianthemum canadense 37, 35, 33, 31, 85	Taxus canadensis
Cornus alternifolia	Mitchella repens	Thalictrum dioicum
Cornus canadensis	Mitella diphylla 10, 31	Trientalis borealis
Cornus rugosa	Mitella nuda	Trillium grandiflorum
Corylus americana	Monotropa uniflora	Uvularia grandiflora
Corylus cornuta	Myrica asplenifolia	Uvularia sessilifolia
Cypripedium acaule	Onoclea sensibilis	Vaccinium angustifolium
Diervilla lonicera	Oryzopsis asperifolia	Vaccinium pennsylvanicum
Dirca palustris	Osmorhiza claytoni	Viburnum acerifolium
Dryopteris linnaeana	Oxalis montana	Viola canadensis
Dryopteris phegopteris	Phryma leptostachya	Viola cucullata
5 37, 35 Dryopteris spinulosa	Polygala pauciflora	Viola pallens
Epifagus virginiana	Polygonatum commutatum	Viola pubescens
Epigaea repens	Polygonatum pubescens	Waldsteinia fragarioides

~~4~~ 39, 37, 31 ACER SPIC
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PRESENCE LIST

NORTHERN PINE-HARDWOODS

STAND NO. 3217

X *Abies balsamea*
 X *Acer rubrum*
 Acer saccharum
 X *Acer spicatum*
 Amelanchier sp.
 X *Betula lutea*
 X *Betula papyrifera*
 Caprinus caroliniana
 Carya cordiformis
 Crategeus sp.
 Fagus grandiflora
 Fraxinus americana
 Fraxinus nigra

Fraxinus pennsylvanica
 Juglans cinerea
 Larix laricina
 Ostrya virginiana
 Picea glauca
 Pinus banksiana
 Pinus resinosa
 X *Pinus strobus*
 Populus balsamifera
 Populus grandidentata
 Populus tremuloides
 Prunus pennsylvanica
 Prunus serotina

Prunus virginiana
 Quercus alba
 Quercus ellipsoidalis
 Quercus macrocarpa
 Quercus rubra
 Sorbus decora
 X *Thuja occidentalis*
 Tilia americana
 X *Tsuga canadensis*
 Ulmus americana
 Ulmus fulva
 X PYRUS AMER.

HERBS AND SHRUBS

Actaea pachypoda
 Actaea rubra
 Adiantum pedatum
 Agrimonia gryposepala
 Allium tricoccum
 Alnus rugosa
 Amphicarpa bracteata
 Anemone canadensis
 Anemone quinquefolia
 Antennaria sp.
 Apocynum androsaemifolium
 Apocynum cannabinum
 Aquilegia canadensis
 Aralia nudicaulis
 Aralia racemosa
 Arctostaphylos uva-ursi
 Arisaema atrorubens
 Asarum canadense
 Asclepias phytolaccoides
 Aster cordifolius
 Aster lateriflorus
 Aster macrophyllus
 Aster prenanthoides
 Aster sagittifolius
 Aster shortii
 Aster umbellatus
 Athyrium angustum
 Aureolaria pedicularia
 Boehmeria cylindrica
 Botrychium virginianum
 Brachyelytrum erectum
 Bromus purgans
 Campanula americana
 X *Carex albursina* S^P.
 Carex pennsylvanica
 Caulophyllum thalictroides
 Celastrus scandens
 Chimaphila umbellata
 Chiogenes hispidula

Circaea alpina
 Circaea latifolia
 Claytonia caroliniana
 Claytonia virginiana
 X *Clintonia borealis*
 Convolvulus spithameus
 Coptis trifolia
 Corallorrhiza maculata
 Corallorrhiza striata
 Cornus alternifolia
 X *Cornus canadensis*
 Cornus femina
 Cornus rugosa
 Corylus americana
 Corylus cornuta
 Cryptotaenia canadensis
 Cypripedium acaule
 Cypripedium pubescens
 Cystopteris fragilis
 Danthonia spicata
 Dentaria diphylla
 Desmodium glutinosum
 Desmodium nudiflorum
 Dicentra canadensis
 Dicentra cucullaria
 Diervilla lonicera
 Dirca palustris
 Dryopteris linneana
 X *Dryopteris phegopteris*
 X *Dryopteris spinulosa*
 Epifagus virginiana
 Epigaea repens
 Equisetum arvense
 Erythronium americanum
 Fragaria virginiana
 Galium aparine
 Galium boreale
 Galium circaezans
 Galium concinnum

Galium lanceolatum
 Galium triflorum
 Gaultheria procumbens
 Gaylussacia baccata
 Geranium maculatum
 Geum canadense
 Gnaphalium obtusifolium
 Goodyera pubescens
 Goodyera repens
 Habenaria bracteata
 Hamamelis virginiana
 Helianthus strumosus
 Hepatica acutiloba
 Hepatica americana
 Hieracium canadense
 Hydrophyllum virginianum
 Hystrix patula
 Impatiens biflora
 Lactuca canadensis
 Laportea canadensis
 Lappula virginica
 Lathyrus ochroleucus
 Ledum groenlandicum
 Linnaea borealis
 Lonicera canadensis
 Lonicera hirsuta
 Lonicera oblongifolia
 Lonicera prolifera
 Luzula multiflora
 Lycopodium annotinum
 Lycopodium clavatum
 Lycopodium complanatum
 X *Lycopodium lucidulum*
 X *Lycopodium obscurum*
 Lycopodium tristachyum
 Lycopus americanus
 Lycopus uniflora
 Lysimachia quadrifolia
 Maianthemum canadense

Melampyrum lineare	Pyrola elliptica	Smilax herbacea
Mitchella repens	Pyrola rotundifolia	Smilax hispida
Mitella diphylla	Pyrola secunda	Solidago latifolia
Mitella nuda	Ranunculus abortivus	Solidago ulmifolia
Monarda fistulosa	Ranunculus recurvatus	Streptopus amplexifolius
Moneses uniflora	Ranunculus septentrionalis	Streptopus roseus
X Monotropa uniflora	Rhus radicans	X Taxus canadensis
Myrica asplenifolia	Rhus typhina	Thalictrum dioicum
Onoclea sensibilis	Ribes americanum	Tiarella cordifolia
Oryzopsis asperifolia	Ribes cynosbati	Trientalis borealis
Osmorhiza claytoni	Ribes lacustre	Trillium cernuum
Osmunda cinnamomea	Ribes triste	Trillium grandiflorum
Osmunda claytoniana	Rubus idaeus	Uvularia grandiflora
Oxalis montana	Rubus parviflorus	Uvularia sessilifolia
Panax quinquefolia	Rubus hispidus	Vaccinium angustifolium
Parietaria pennsylvanica	Rubus - blackberry	Vaccinium pennsylvanicum
Parthenocissus vitacea	Rubus - dewberry	Viburnum acerifolium
Pedicularis lanceolata	Rubus - raspberry	Viburnum affine
Phyrma leptostachya	Sambucus canadensis	Viburnum lentago
Podophyllum peltatum	Sambucus pubens	Viola canadensis
Polemonium reptans	Sanguinaria canadensis	Viola cucullata
Polygala pauciflora	Sanicula gregaria	X Viola incognita
Polygonatum commutatum	Schizachne purpurascens	Viola pallens
Polygonatum pubescens	Scutellaria lateriflora	Viola pubescens
Potentilla simplex	Shepherdia canadensis	Vitis aestivalis
Prenanthes alba	Smilacina racemosa	Vitis riparia
Pteretis nodulosa	Smilacina stellata	Waldsteinia fragarioides
Pteridium aquilinum	Smilax ecirrhata	Zanthoxylum americanum

Additional Species: