



LIBRARIES

UNIVERSITY OF WISCONSIN-MADISON

Site 3218: Michigan Island #4, Ashland County. 1956-08-15

[s.l.]: [s.n.], 1956-08-15

<https://digital.library.wisc.edu/1711.dl/CZ76SQ4EIVY7E8V>

This material may be protected by copyright law (Title 17, US Code).

For information on re-use see:

<http://digital.library.wisc.edu/1711.dl/Copyright>

The libraries provide public access to a wide range of material, including online exhibits, digitized collections, archival finding aids, our catalog, online articles, and a growing range of materials in many media.

When possible, we provide rights information in catalog records, finding aids, and other metadata that accompanies collections or items. However, it is always the user's obligation to evaluate copyright and rights issues in light of their own use.

Data Form No. 20

Plant Ecology Research

Univ. of Wisconsin

STAND RECORD

FORESTS

Stand No. 3218

Name: MICHIGAN ISLAND #4

Locality: CENTRAL-EAST

County: ASHLAND

T:

R:

Sec:

Date: 8-15-56

Observers: RICHARD & MIKE VOGL

Size of Stand 2 (CENTRAL PORTION OF ISLE) Size of Area Sampled: 40 ACRES

Forest Type: BETULA PAPIRIFERA - THUJA

Soil Type:

Topography: LEVEL WITH OCCASION LOW AREAS Slope: Directions

Condition of Stand: THIS STAND HAD BEEN CUT, BUT NOT RECENTLY. NUMEROUS OLD STUMPS AND GROWN OVER LOGGING ROADS INDICATE THAT THE CUTTING WAS THOROUGH, BUT NOT RECENT. IN SOME AREAS THERE WHERE DENSE GROWTHS OF THUJA, TAXUS COVERED MOST OF AREA.

Open Grown Trees:

Stumps:

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

% Canopy: 60 LO SCALE

45 " "

Soil Data:

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

A₀A₁A₂

B

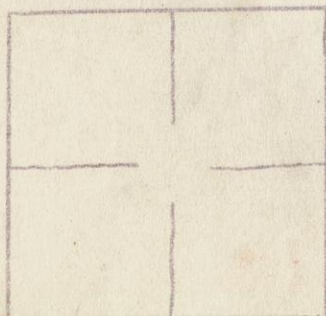
DEPTH

CHARACTERISTICS (Color, Texture, Structure, etc.)

A ₀	1"	deciduous leaves
A ₁	1"	black sand
A ₂	3"-4"	gray fine sand
B	2" +	brown sand, compacted

Parent Material:

Map:



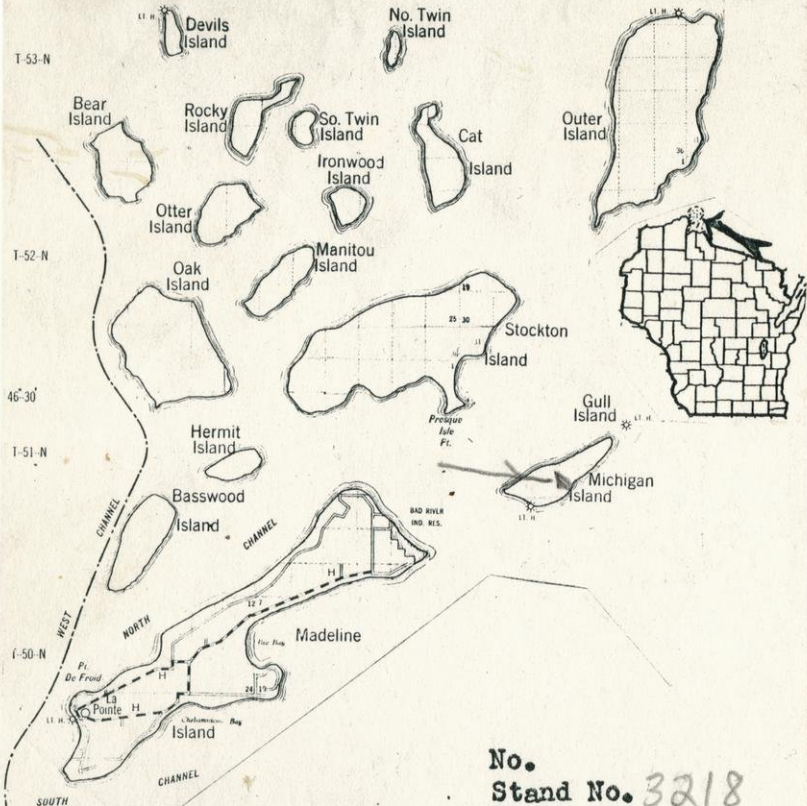
R-3-W

R-2-W

R-1-W

Northern WISCONSIN ASHLAND County

APOSTLE ISLANDS in LAKE SUPERIOR



No.
Stand No. 3218
Date:

Collected by
Grant Cottam
Richard J. Vogl

Northern Pine-Hardwoods

Station Number: 3218

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	3	4	4			153	27	16.9			3.7	2.5	2.1	8.3	
Acer rubru	5	7	7			163	3	1.9			6.1	4.4	2.3	12.8	
A. sacchar															
A. spicatu															
Betula lut	7	12	11	1		532	24	15.0			8.5	7.5	7.4	23.4	
B. papyrif	35	86	75	11		4069	24	15.0			42.7	53.8	56.2	152.7	
Carpinus c															
Fagus gran															
Ostrya vir															
Picea glau															
Pinus Bank															
P. resinosa															
P. Strobus															
Populus ba															
P. grandid															
P. tremulo															
Prunus pen							1	.6							
Quercus el															
Q. rubra															
Tilia amer															
Tsuga cana							1	.6							
Thuja occi	28	42	42	5	2217	2217	72	45.0			34.1	29.4	30.6	94.1	
Ulmus amer															
U. fulva															
PYRUS AMER	4	4	4	1	101	101	8	5.0			4.9	2.5	1.4	8.8	
								100.0			100.0	100.1	100.0	300.1	

 AVE. DIST. BTW'N TREES: 9.8
 Ave Sap Dist. 11.0

AVE B. A.: 45.2

TREES/ACRE: 453.6
360.0DOM./ACRE: 20502.7
142.409 ft.

POINT RECORD TREES APOSTLE ISLANDS

3218

Point Number	1	2	3	4	5	6	7	8	9	0	
<i>Abies balsamea</i>						18 30	55 1				2/3
<i>Acer rubrum</i>					45 ✓						1/1
<i>Acer saccharum</i>											
<i>Betula lutea</i>			60			27 30					2/3
<i>Betula papyrifera</i>		11	12		11			1	3	1	8/17
	40 90 110	150 130	130	60 110	12 50			14	21 26 35	35 18	
<i>Quercus rubra</i>											
<i>Tsuga canadensis</i>											
<i>Thuja occidentalis</i>	50	45 40	35 35	22 45			24 20	23 35 18	50	18	8/14
	3	3	1	3	2	2	3	1	1		
PYROS AMER					25 1		30				2/2
PRUNUS PENN											
								1			
Tree distance	5 8 8 8.5	12 11 8 7	4 7 13 30	5 8.5 8 14	8 10 16 2	5 7 4 7	12 8 6 6	4 11.5 4.5 5	6 11 8 12.5	2 3 8 14.5	
Sapling distance	12.5 32 14.5 19	15 4 10.5 20	6 6 16 13	7 4 2 3	4 7 3 13	8 12.5 6 12.5	8 7 11.5 15	8 16 18 22	8.5 12.5 14 21	15 3 5 7	

POINT RECORD TREES APOSTLE ISLANDS

3218

Point Number	1	2	3	4	5	6	7	8	9	20
<i>Abies balsamea</i>										
<i>Acer rubrum</i>	2	1		2			1	1	3	3
<i>Acer saccharum</i>		23		1						
<i>Betula lutea</i>	25	30								60 40 130
<i>Betula papyrifera</i>	22 25 21 -1	15	160	45 75		30 21	12 23 35	16 21 50	24 45	80
<i>Quercus rubra</i>			1							
<i>Tsuga canadensis</i>										
<i>Thuja occidentalis</i>		45	50 25 12	60 18	28 25 35 50	60	15	150	14 50	
<i>PYRUS AMER</i>		1	2	3	1	2	8	2		
						18				
Tree distance	7 7 12 11	4 8 9.5 8	7 8.5 8 8	5 12.5 10.5 10	11 7 6 12	7 8 4.5 14	8.5 4 12.5 8	6.5 9 13.5 10	7 19 13 14.5	14 7.5 18 15
Sapling distance	4 3 2 14	4 15.5 8 8	8 8 6 2	13 7 5 17	10 18 14 9	3 7 4 24	3 4 3.5 13	6 7 13 4	9.5 10.5 14 18.5	6 16 24 14

Y1

3/5

9/18

9/15

Y1

POINT RECORD TREES APOSTLE ISLANDS

8218

Point Number	21	22	23	24	25	26	27	28	29	30
<i>Abies balsamea</i>				2					2	
<i>Acer rubrum</i>		12 18 23								
<i>Acer saccharum</i>										
<i>Betula lutea</i>										
<i>Betula papyrifera</i>	38 20 20 1	14 1	55 60 20 1	35 15 12 22	20 55 15 12	65 30 15 12	13 80 16 1	16 45 16 1	110 50 50 140	2
<i>Quercus rubra</i>										
<i>Tsuga canadensis</i>										
<i>Thuja occidentalis</i>	50 3		65 1			200 85 1	30 210 1	30 10 1	29 70 12 28	29 70 12 28
PYROS AMER										
Tree distance	6 9.5 10.5 18	11.5 11 12 8	4 13 17 8	4 7 8 8.5	6 24 16 9	17.5 4 16 11	16 18 13.5 9	5 10.5 8 13.5	11 15 3 3	9 16.5 10.5 8
Sapling distance	6 7 9 18	8 15 14 10.5	8 14 7 25	8 12.5 12 15	8 13 23 16	11 25 21 14	9.5 19 9 29	3 23 27 2.6	6 14 12 34	3 8 11.5 15

1/3

9/26

6/10

1/1

STAND 3218

T

H

M

L

O

SPECIES

TO

||||| 13
|||

TAX

||||

||||| 126
|||

AB

||||| 12
|||

AS

||

||||

7

BP

1

1 2

5

33

83

39

STAND # 3218

BROWSE CONDITION BY SPECIES %

SPECIES	T	H	M	L	O	TOTAL
TO					100.0	100.0
TAX		4.0	24.6	61.1	10.3	100.0
AB					100.0	100.0
AS			28.6	71.4		100.0
BP				50.0	50.0	100.0

% EACH SPECIES CONTRIBUTES TO EACH BROWSE CATEGORY

	TO	TAX	AB	AS	BP	TOTAL
T		100.0				100.0
H		93.9		6.1		100.0
M		92.8		6.0	1.2	100.0
L		33.3	30.8		2.6	100.0
O	33.3					

% EACH CATEGORY CONTRIBUTES TO TOTAL BROWSE = CATEGORY TOTAL / 160

T	H	M	L	O	TOTAL
3.1	20.6	51.9	24.4		100.0

% Browse SPECIES

TO	TAX	AB	AS	BP	TOTAL
8.1	78.8	7.5	4.4	1.3	100.1

DEER DAMAGE REPORT FORM

Stand No. 3218

121.5				117.5				130.5				173.0			
Pt. No.	Sp	Dis	Con	Sp	Dis	Con	Sp	Dis	Con	Sp	Dis	Con	Sp	Dis	Con
1	TAX	4	L	TAX	2	M	TAX	3	L	TAX	8	L			
2	TAX	1.5	0	TAX	4	L	TAX	3	M	TAX	8	L			
3	AB	3	0	TAX	4	L	TAX	2	L	TAX	1	L			
4	TAX	1	0	TAX	1	L	TAX	1	0	TAX	1	L			
5	AB	6	0	AB	5	0	TO	6	0	TO	3	0			
6	AB	4	0	AB	5	0	AS	6	L	TO	8	0			
7	TAX	2	0	TAX	3	0	TAX	5	L	TAX	8	L			
8	TAX	2	L	TAX	3	H	TAX	1	L	TAX	2	M			
9	TAX	14	2	TAX	1	L	TAX	2	L	TAX	6	H			
10	TAX	2	L	TAX	1	L	TAX	8	L	TAX	3	0			
11	AB	2	0	TAX	2	0	TAX	2	L	TAX	3	L			
12	TAX	5	0	TAX	3	0	TAX	3.5	L	TAX	3	0			
13	TAX	2	M	AS	5	L	TAX	8	L	TAX	5	M			
14	TAX	1	L	TAX	3	M	TAX	2	M	TAX	4	M			
15	TAX	2	M	TAX	3	M	TAX	3	M	TAX	4	L			
16	TO	3	0	TO	2	0	TAX	1.5	M	TAX	2	L			
17	TO	8	0	AB	6	0	TS	3.5	0	TO	9	0			
18	TAX	2	M	TAX	1	M	TAX	4	M	TAX	5	L			
19	TAX	2	L	TAX	2	M	TAX	3	L	TAX	4	M			
20	AB	2	0	TAX	1.5	M	TAX	2	L	TAX	4	0			
21	TAX	2	L	AS	2	M	TAX	3.5	M	TAX	3	L			
22	TAX	1	L	TAX	2	M	TAX	3	M	TAX	3.5	L			
23	TAX	7	M	TAX	4	M	TAX	5	M	TAX	5.5	M			
24	AB	2	0	AB	2.5	0	AB	4	0	AS	8	L			
25	TAX	1	L	TAX	2	L	TAX	1.5	L	TAX	2	L			
26	TAX	1	L	TAX	3	M	TAX	2	L	TAX	1.5	L			
27	TAX	4	M	TAX	2	L	TAX	1	L	TAX	6	H			
28	TAX	1	L	TAX	2	L	TAX	6	L	AB	3	0			
29	TAX	5	L	TAX	3	L	TAX	4	L	AS	6	M			
30	TAX	3	L	TAX	3.5	H	TAX	3	M	TAX	1.5	L			
31	TAX	3	L	TAX	2	L	TAX	1	L	TAX	3	L			
32	TAX	3	H	TAX	2	M	TAX	2	L	TAX	3	L			
33	TAX	2	L	TAX	3	L	TAX	3	L	TAX	5	L			
34	TAX	2	L	TAX	5	L	TO	5	0	TAX	6	0			
35	TAX	2	0	TAX	3	L	TAX	5	L	TAX	8	L			
36	TAX	8	L	TAX	3	L	AS	3	L	BP	2	0			
37	TAX	1	L	TAX	3	L	TAX	2	L	TAX	4.5	L			
38	TO	4	0	TAX	2	L	TAX	4	L	TAX	3.5	M			
39	AS	4	L	TAX	6	L	BP	3	L	TO	10	0			
40	TO	1.5	0	TO	1.5	0	TAX	1	L	TAX	3	L			

542.5

Ave Dist 3.39
Browse per acre 3,791.1

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No. 3218

Quadrat No. 1-10

Actaea pachypoda
 Actaea rubra
 Adiantum pedatum
 Allium tricoccum
 Anemone quinquefolia
 Aquilegia canadensis
 Aralia nudicaulis
 Aralia racemosa
 Arisaema atrorubens
 Aster macrophyllus
 Aster sagittifolius
 Athyrium angustum
 Botrychium virginianum
 Brachyelytrum erectum
 Carex albursina
 Caulophyllum thalictroides
 Chimaphila umbellata
 Circaea alpina
 Circaea latifolia
 Clintonia borealis
 Coptis trifolia
 Corallorrhiza maculata
 Cornus alternifolia
 Cornus canadensis
 Cornus rugosa
 Corylus americana
 Corylus cornuta
 Cyripedium acaule
 Diervilla lonicera
 Dirca palustris
 Dryopteris linnaeana
 Dryopteris phegopteris
 9,3,1 Dryopteris spinulosa
 Epifagus virginiana
 Epigaea repens

Fragaria virginiana
 Galium lanceolatum
 Galium triflorum
 Gaultheria procumbens
 Gaylussacia baccata
 Geranium maculatum
 Geum canadense
 Gnaphalium obtusifolium
 Helianthemum sp.
 Helianthus strumosus
 Hepatica acutiloba
 Hepatica americana
 Impatiens biflora
 Linnaea borealis
 Lonicera oblongifolia
 Lupinus perennis
 Lycopodium annotinum
 Lycopodium complanatum
 Lycopodium lucidulum
 Lycopodium obscurum
 Lysimachia quadrifolia
 Maianthemum canadense
 Mitchella repens
 Mitella diphylla
 Mitella nuda
 Monotropa uniflora
 Myrica asplenifolia
 Onoclea sensibilis
 Oryzopsis asperifolia
 Osmorhiza claytoni
 Oxalis montana
 Phryma leptostachya
 Polygala pauciflora
 Polygonatum commutatum
 Polygonatum pubescens

Potentilla simplex
 Prenanthes alba
 Pteridium aquilinum
 Pyrola elliptica
 Pyrola rotundifolia
 Pyrola secunda
 Ranunculus recurvatus
 Rhus radicans
 Ribes americanum
 Rosa sp.
 Rubus parviflorus
 Rubus (blackberry)
 9 Rubus (dewberry)
 Sambucus pubens
 Sanguinaria canadensis
 Sanicula gregaria
 Smilacina racemosa
 Smilacina stellata
 Smilax ecirrhata
 Solidago ulmifolia
 Streptopus roseus
 9,7,3,1 Taxus canadensis
 Thalictrum dioicum
 Trientalis borealis
 Trillium grandiflorum
 Uvularia grandiflora
 Uvularia sessilifolia
 Vaccinium angustifolium
 Vaccinium pennsylvanicum
 Viburnum acerifolium
 Viola canadensis
 9 Viola cucullata INSIGNITA
 Viola pallens
 Viola pubescens
 Waldsteinia fragarioides

5,1 ACER SPIC

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No. 3218
Quadrat No. 11-20

Actaea pachypoda
Actaea rubra
Adiantum pedatum
Allium tricoccum
Anemone quinquefolia
Aquilegia canadensis
Aralia nudicaulis
Aralia racemosa
Arisaema atrorubens
Aster macrophyllus
Aster sagittifolius
Athyrium angustum
Botrychium virginianum
Brachyelytrum erectum
Carex albursina
Caulophyllum thalictroides
Chimaphila umbellata
Circaea alpina
Circaea latifolia
Clintonia borealis
Coptis trifolia
Corallorrhiza maculata
Cornus alternifolia
Cornus canadensis
Cornus rugosa
Corylus americana
Corylus cornuta
Cypripedium acaule
Diervilla lonicera
Dirca palustris
Dryopteris linnaeana
Dryopteris phegopteris
1981 Dryopteris spinulosa
Epifagus virginiana
Epigaea repens

Fragaria virginiana
Galium lanceolatum
Galium triflorum
Gaultheria procumbens
Gaylussacia baccata
Geranium maculatum
Geum canadense
Gnaphalium obtusifolium
Helianthemum sp.
Helianthus strumosus
Hepatica acutiloba
Hepatica americana
Impatiens biflora
Linnaea borealis
Lonicera oblongifolia
Lupinus perennis
Lycopodium annotinum
Lycopodium complanatum
Lycopodium lucidulum
17 Lycopodium obscurum
Lysimachia quadrifolia
17 Maianthemum canadense 19, 15, 13, 11
Mitchella repens
Mitella diphylla
Mitella nuda
Monotropa uniflora
Myrica asplenifolia
Onoclea sensibilis
Oryzopsis asperifolia
Osmorhiza claytoni
Oxalis montana
Phryma leptostachya
Polygala pauciflora
Polygonatum commutatum
Polygonatum pubescens

Potentilla simplex
Prenanthes alba
Pteridium aquilinum
Pyrola elliptica
Pyrola rotundifolia
Pyrola secunda
Ranunculus recurvatus
Rhus radicans
Ribes americanum
Rosa sp.
Rubus parviflorus
Rubus (blackberry)
Rubus (dewberry)
Sambucus pubens
Sanguinaria canadensis
Sanicula gregaria
Smilacina racemosa
Smilacina stellata
Smilax ecirrhata
Solidago ulmifolia
Streptopus roseus
Taxus canadensis
Thalictrum dioicum
Trientalis borealis
Trillium grandiflorum
Uvularia grandiflora
Uvularia sessilifolia
Vaccinium angustifolium
Vaccinium pennsylvanicum
Viburnum acerifolium
Viola canadensis
Viola cucullata
Viola pallens
Viola pubescens
Waldsteinia fragarioides

1305 MUND A CIN
15 ACER SPIC

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No. 3218
Quadrat No. 21-30

Actaea pachypoda
Actaea rubra
Adiantum pedatum
Allium tricoccum
Anemone quinquefolia
Aquilegia canadensis
Aralia nudicaulis
Aralia racemosa
Arisaema atrorubens
Aster macrophyllus
Aster sagittifolius
Athyrium angustum
Botrychium virginianum
Brachyelytrum erectum
29, 23 Carex ^{sp.} ~~albursina~~
Caulophyllum thalictroides
Chimaphila umbellata
Circaea alpina
Circaea latifolia
Clintonia borealis
Coptis trifolia
Corallorrhiza maculata
Cornus alternifolia
Cornus canadensis
Cornus rugosa
Corylus americana
Corylus cornuta
Cypripedium acaule
Diervilla lonicera
Dirca palustris
Dryopteris linnaeana
Dryopteris phegopteris
29, 27 Dryopteris spinulosa
Epifagus virginiana
Epigaea repens

Fragaria virginiana
Galium lanceolatum
27 Galium triflorum
Gaultheria procumbens
Gaylussacia baccata
Geranium maculatum
Geum canadense
Gnaphalium obtusifolium
Helianthemum sp.
Helianthus strumosus
Hepatica acutiloba
Hepatica americana
Impatiens biflora
Linnaea borealis
29 Lonicera ^{CANADENSIS} oblongifolia
Lupinus perennis
Lycopodium annotinum
Lycopodium complanatum
Lycopodium lucidulum
Lycopodium obscurum
Lysimachia quadrifolia
Maianthemum canadense 29, 25, 21
Mitchella repens
Mitella diphylla
Mitella nuda
Monotropa uniflora
Myrica asplenifolia
Onoclea sensibilis
Oryzopsis asperifolia
Osmorhiza claytoni
Oxalis montana
Phryma leptostachya
Polygala pauciflora
Polygonatum commutatum
Polygonatum pubescens

Potentilla simplex
Prenanthes alba
Pteridium aquilinum
Pyrola elliptica
Pyrola rotundifolia
Pyrola secunda
Ranunculus recurvatus
Rhus radicans
Ribes americanum
Rosa sp.
Rubus parviflorus
Rubus (blackberry)
Rubus (dewberry)
Sambucus pubens
Sanguinaria canadensis
Sanicula gregaria
Smilacina racemosa
Smilacina stellata
Smilax ecirrhata
Solidago ulmifolia
Streptopus roseus
29, 25, 21 Taxus canadensis
Thalictrum dioicum
Trientalis borealis
Trillium grandiflorum
Uvularia grandiflora
Uvularia sessilifolia
Vaccinium angustifolium
Vaccinium pennsylvanicum
Viburnum acerifolium
Viola canadensis
27, 28 Viola ^{INCAGNITA} cucullata
Viola pallens
Viola pubescens
Waldsteinia fragarioides
23 ACER SPIC

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No. 3218
Quadrat No. 31-40

Actaea pachypoda

Actaea rubra

Adiantum pedatum

Allium tricoccum

Anemone quinquefolia

Aquilegia canadensis

Aralia nudicaulis

Aralia racemosa

Arisaema atrorubens

Aster macrophyllus

Aster sagittifolius

Athyrium angustum

Botrychium virginianum

Brachyelytrum erectum

37 Carex ^{SP} albursina 15

Caulophyllum thalictroides

Chimaphila umbellata

Circaea alpina

Circaea latifolia

31 Clintonia borealis 5

Coptis trifolia

Corallorrhiza maculata

Cornus alternifolia

39 Cornus canadensis 5

Cornus rugosa

Corylus americana

Corylus cornuta

Cypripedium acaule

Diervilla lonicera

Dirca palustris

Dryopteris linnaeana

Dryopteris phegopteris

37, 31 Dryopteris spinulosa 39 50

Epifagus virginiana

Epigaea repens

Fragaria virginiana

Galium lanceolatum

5 Galium triflorum

Gaultheria procumbens

Gaylussacia baccata

Geranium maculatum

Geum canadense

Gnaphalium obtusifolium

Helianthemum sp.

Helianthus strumosus

Hepatica acutiloba

Hepatica americana

Impatiens biflora

Linnaea borealis

5 Lonicera ^{CANADENSIS} oblongifolia

Lupinus perennis

Lycopodium annotinum

Lycopodium complanatum

Lycopodium lucidulum

5 Lycopodium obscurum

Lysimachia quadrifolia

39, 33 Maianthemum canadense 37, 35, 33, 38

Mitchella repens

Mitella diphylla

Mitella nuda

Monotropa uniflora

Myrica asplenifolia

Onoclea sensibilis

Oryzopsis asperifolia

Osmorhiza claytoni

Oxalis montana

Phryma leptostachya

Polygala pauciflora

Polygonatum commutatum

Polygonatum pubescens

Potentilla simplex

Prenanthes alba

Pteridium aquilinum

Pyrola elliptica

Pyrola rotundifolia

Pyrola secunda

Ranunculus recurvatus

Rhus radicans

Ribes americanum

Rosa sp.

Rubus parviflorus

Rubus (blackberry)

5 Rubus (dewberry)

Sambucus pubens

Sanguinaria canadensis

Sanicula gregaria

Smilacina racemosa

Smilacina stellata

Smilax ecirrhata

Solidago ulmifolia

Streptopus roseus

Taxus canadensis 39

Thalictrum dioicum

39, 5 Trientalis borealis

Trillium grandiflorum

Uvularia grandiflora

Uvularia sessilifolia

Vaccinium angustifolium

Vaccinium pennsylvanicum

Viburnum acerifolium

Viola canadensis

37, 20 Viola ^{INCIGNITA} cucullata

Viola pallens

Viola pubescens

Waldsteinia fragarioides

35 39, 35 33 ACER SPIC
5 OSMUNDA CIN

PRESENCE LIST

NORTHERN PINE-HARDWOODS

STAND NO. 3218

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
 Pinus strobus
 Populus balsamifera
 Populus grandidentata
 X *Populus tremuloides*
 X *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
 X *Alnus rugosa*
 Amphicarpa bracteata
 Anemone canadensis
 Anemone quinquefolia
 Antennaria sp.
 Apocynum androsaemifolium
 Apocynum cannabinum
 Aquilegia canadensis
 X *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
 Carex albursina
 Carex pensylvanica
 Caulophyllum thalictroides
 Celastrus scandens
 Chimaphila umbellata
 Chiogenes hispida

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
 X *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
 X *Lactuca canadensis*
 Laportea canadensis
 Lappula virginica
 Lathyrus ochroleucus
 Ledum groenlandicum
 Linnaea borealis
 X *Lonicera canadensis*
 Lonicera hirsuta
 Lonicera oblongifolia
 Lonicera prolifera
 Luzula multiflora
 X *Lycopodium annotinum*
 Lycopodium clavatum
 Lycopodium complanatum
 X *Lycopodium lucidulum*
 X *Lycopodium obscurum*
 Lycopodium tristachyum
 Lycopus americanus
 Lycopus uniflora
 Lysimachia quadrifolia
 X *Maianthemum canadense*

Data Form No. 17 (P.2)

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
Monotropa uniflora	Rhus radicans	X Taxus canadensis
Myrica asplenifolia	Rhus typhina	Thalictrum dioicum
Onoclea sensibilis	Ribes americanum	Tiarella cordifolia
Oryzopsis asperifolia	Ribes cynosbati	X Trientalis borealis
Osmorhiza claytoni	Ribes lacustre	Trillium cernuum
X 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	X 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: