



LIBRARIES

UNIVERSITY OF WISCONSIN-MADISON

Site 3189: Manitou Island, Ashland County. 1956-07-17

[s.l.]: [s.n.], 1956-07-17

<https://digital.library.wisc.edu/1711.dl/GAOX5XGS3YT3C8X>

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. 3189

Name: MANITOU ISLAND

Locality: MIDDLE WEST (SOUTH OF BEACH)

County: ASHLAND

T:

R:

Sec:

Date: 7/17/56

Observers: COTTAM, VOGL, & HALE

Size of Stand ?

Size of Area Sampled: $\frac{1}{4}$ SQUARE MILE

Forest Type: THUJA - YELLOW BIRCH

Soil Type:

Topography: GENTLE SLOPE

Slope:

Directions

Condition of Stand: OLD STUMPS PRESENT, NO RECENT CUTTING. TAXUS CAN. COVERED
MOST OF AREA SAMPLED

Open Grown Trees:

Stumps:

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

Soil Data:

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

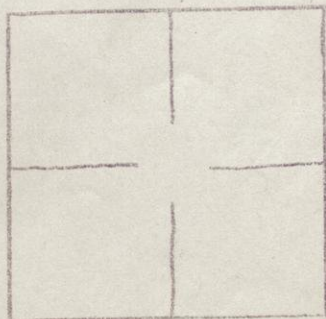
DEPTH

CHARACTERISTICS (Color, Texture, Structure, etc.)

A ₀	$\frac{1}{2}$ -1"	
A ₁	$\frac{1}{2}$ -1"	Black silt
A ₂	3"	Sandy, pinkish brown
B	3"+	Sandy clay, dark pinkish brown

Parent Material:

Map:



NOTE: QUERCUS RUBRA
11' 9" CIRCUMFERENCE

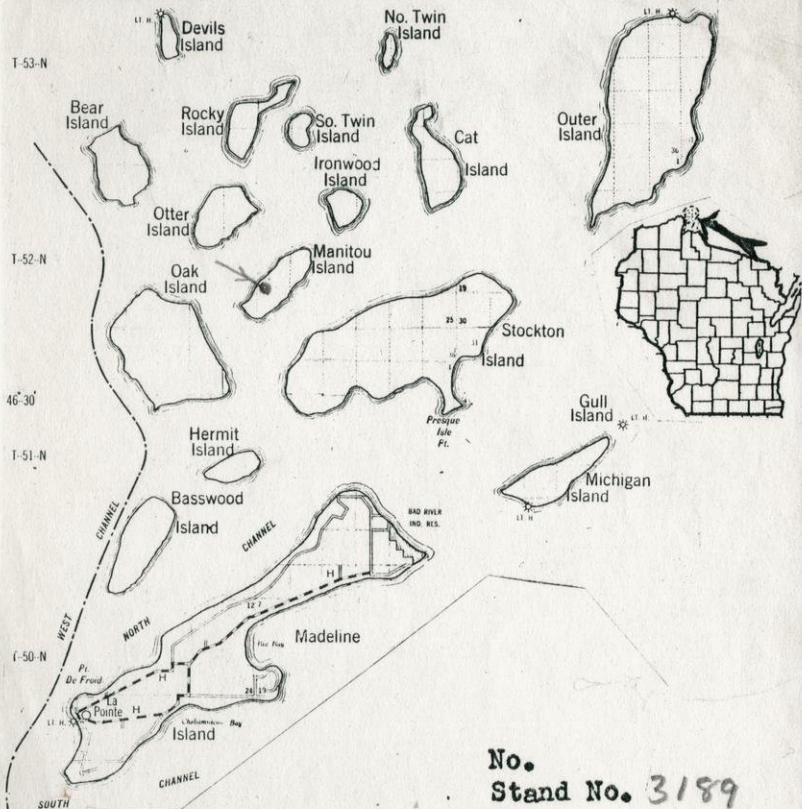
R-3-W

R-2-W

R-1-W

Northern WISCONSIN ASHLAND County

APOSTLE ISLANDS in LAKE SUPERIOR



No.
Stand No. 3189
Date:

Collected by

Grant Cottam
Richard J. Vogl

Northern Pine-Hardwoods

92 160 106 49 5 14897/160

Station Number: 3189

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	14	20	14	6		1222	30	18.8			15.2	12.5	8.2	35.9	
Acer rubru	1	1		1		95	1	.6			7.1	.6	.6	2.3	
A. sacchar	11	13	8	5		1197	22	13.8			12.0	8.1	8.0	28.1	
A. spicatu															
Betula lut	23	39	15	22	2	5639	10	6.2			25.0	24.4	37.8	87.2	
B. papyrif	1	1			1	410					1.1	.6	2.8	4.5	
Carpinus c															
Fagus gran															
Ostrya vir															
Picea glau															
Pinus Bank															
P. resinosa															
P. Strobus															
Populus ba															
P. grandid															
P. tremulo															
Prunus pen	2	2	2			42	3	1.9			2.2	1.2	.3	3.7	
Quercus el															
Q. rubra															
Tilia amer															
Tsuga cana	5	6	3	1	2	1929	2	1.2			5.4	3.8	12.9	22.1	
Thuja occi	32	74	61	13		4131	92	57.5			34.8	46.2	27.7	108.7	
Ulmus amer															
U. fulva															
Pyrus Amer	3	4	3	1		232					3.3	2.5	1.6	7.4	
								100.0			100.1	99.9	99.9	299.9	

AVE. DIST. BTW'N TREES: 12.7
ave sap Dist. 17.2

AVE B. A.: 93.1

TREES/ACRE: 270.1
147.2DOM./ACRE: 25146.3
174.6

$$\begin{array}{r} 35 \\ 35 \\ \hline 145 \\ 105 \\ \hline 12.15 \end{array}$$
$$\begin{array}{r} + 3.5 \\ - 1.5 \\ - 1.5 \\ - 1.5 \\ \hline \end{array} \quad \begin{array}{r} 12.15 \\ .25 \\ 2.25 \\ 2.25 \\ \hline \end{array} \quad \begin{array}{r} 1.66 \\ .01 \\ .12 \\ .12 \\ \hline \end{array}$$

POINT RECORD TREES APOSTLE ISLANDS

3189

Point Number	1	2	3	4	5	6	7	8	9	0
<i>Abies balsamea</i>	45 1	130 1			65			28 18		
<i>Acer rubrum</i>										
<i>Acer saccharum</i>	X		X	X	35	28	X			
<i>Betula lutea</i>	200		320 X			140		45 45 21	120	
<i>Betula papyrifera</i>										410
<i>Quercus rubra</i>										
<i>Tsuga canadensis</i>	29									
<i>Thuja occidentalis</i>	40 3	26 180 140 2	20 3	55 80 19 4	110 95 22 2	23 50 2	13 120 75 30 3		60 170 150 1	90 110 50 3
<i>Pinus americana</i>	X		27 120	40						
Tree distance	10 14 12 8.5	8 10 12.5 2.6	8.5 15 10.5 31	2.5 3 7.5 11.5	7.5 14 22 25	3 5 10 19	6 7 6 8.5	24 17 9.5 8	5 14.5 8 18	5 5 9.5 16
Sapling distance	14 34 12.5 40	31 27 14.5 32	13 19 9 21	15 30 26 44	38 11.5 22 28	16 20 11 24	5 9.5 17 17	7 10 35 18	9 13.5 14 34	21 14 13 20

POINT RECORD TREES APOSTLE ISLANDS

3189

Point Number	1	2	3	4	5	6	7	8	9	0
<i>Abies balsamea</i>							35			70
<i>Acer rubrum</i>		2	1	1	1	1		2	4	
<i>Acer saccharum</i>			55							
<i>Betula lutea</i>	60 X	120	90 22		55 45	50 50 100 170	80 200	160 220	230 15 65	
<i>Betula papyrifera</i>							200			
<i>Quercus rubra</i>										
<i>Tsuga canadensis</i>							95			
<i>Thuja occidentalis</i>	13 X 55 20	55 40 17	18	35 35 40	90 15			140	55	16 12 16
<i>Pyrus americana</i>							45			
Tree distance	8.5 16 9.5 10	4.5 5 9 13	5 7 26 21	6 15.5 9.5 17	12.5 7.5 10 14	9.5 7.5 17 16	8 10 18 19	8 13.5 16 12.5	4.5 19 14 14.5	8 8 7 12.5
Sapling distance	12.5 23 26 28	8 8.5 16 25	12 20 23 24	8 10 17.5 21	10 19 22 18	19 20 19 5	27 21 24 32	19 13 7 11.5	3 8.5 8 20	5 7 8 9.5

3/2

1/1

8/17

1/1

8/18

1/1

POINT RECORD TREES APOSTLE ISLANDS

3189

Point Number	1	2	3	4	5	6	7	8	9	0
<i>Abies balsamea</i>		110 100	120	85 13 40	70 25		50 20 35			
<i>Acer rubrum</i>									75	
<i>Acer saccharum</i>						X 180	X		130 X 120	
<i>Betula lutea</i>	160		70 235 260						460	
<i>Betula papyrifera</i>										
<i>Quercus rubra</i>										
<i>Tsuga canadensis</i>		30 15				900				
<i>Thuja occidentalis</i>	35 75 15			19	60 40 18	50 26	21	65 55 50		85 25 25
<i>Prunus Penns.</i>										25
Tree distance	12.5 21.5 20 12	5.5 16 14 7	10.5 18 11.5 17	1.5 1.5 5 9.5	32 14.5 11.5 12	16 13 10.5 18	27 21 8.5 4.5	16 27 12 16	10.5 14.5 9.5 20	19 8 16.5 2.5
Sapling distance	8.5 28 15.5 5	8 20 14 10	15 14.5 9.5 6.5	10.5 16 12 3	7 21 29 12.5	21 27 27 19	9.5 8 30 24	22 15 15.5 34	11.5 13 11 4	2.5 9 4.5 24.5

5/10

X/1

2/3

3/5

2/3

2/17

X/1

POINT RECORD TREES APOSTLE ISLANDS

3189

Point Number	1	2	3	4	5	6	7	8	9	0
<i>Abies balsamea</i>			40				13 X			35
<i>Acer rubrum</i>										
<i>Acer saccharum</i>	X 75 22		X		X 310		X 70 35		X 115 22	
	2	1	3		1	1	2	2	2	
<i>Betula lutea</i>		130		290 21	280	180	390 60	200 55 120		150
<i>Betula papyrifera</i>										
<i>Quercus rubra</i>										
<i>Tsuga canadensis</i>									860	
<i>Thuja occidentalis</i>	65 30 30 14	26 3	35 22 32	45 80	45 55	55 80			60 190	60
	2		1	3	3	3	1	2	2	2
<i>Prunus penn.</i>						17				
Tree distance	10.5 16.5 10 21	5 7 16 17	13 7.5 40 6	6 3 23 27	24 12 13 15.5	3 15 14.5 12	7.5 14.5 10 16	8.5 16 28 6	12.5 20.5 14 2	8.5 23 18 18
Sapling distance	14 16.5 26 36	21 19 23.5 29	14.5 11.5 16.5 12	11 18 7 27	13 18 24 37	10.5 23 16 37	12 14.5 11 5.5	6 6 17.5 24	11.5 18.5 19.5 13.5	15 21 9.5 30

3/3

6/7

7/11

1/1

8/17

1/1

Stand # 3189

SPECIES	T	H	M	L	O
TO		///	///	/// /// /// ///	/// /// ///
TAX	/// ///	/// /// /// /// ///	/// ///	///	/// ///
AB				///	///
AS		/// /// ///	/// /// ///	///	///
CC		///	/	///	
AC		/	///		/
	11	61	29	41	18

STAND # 3189

BROWSE CONDITION BY SPECIES %

	T	H	M	L	O	TOTAL
TO		7.3	7.3	58.5	26.8	99.9
TAX	17.5	57.1	14.3	9.5	1.6	100.0
AB				60.0	40.0	100.0
AS		47.4	34.2	10.5	7.9	100.0
AC		20.0	60.0		20.0	100.0
CC		37.5	12.5	50.0		100.0

% EACH SPECIES CONTRIBUTES TO EACH BROWSE CATEGORY

	TO	TAX	AB	AS	AC	CC	TOTAL
T		100.0					100.0
H	4.9	59.0		29.5	1.6	4.9	99.9
M	10.3	31.0		44.8	10.3	3.4	99.8
L	58.5	14.6	7.3	9.8		9.8	100.0
O	61.1	5.6	11.1	16.7	5.6		100.0

% EACH CATEGORY CONTRIBUTES TO TOTAL BROWSE = CATEGORY / 160

	T	H	M	L	O	TOTAL
	6.9	38.1	18.1	25.6	11.3	100.0

% BROWSE SPECIES

	TAX	AB	AS	AC	CC	TOTAL
TO	39.4	3.1	23.8	3.1	5.0	100.0

DEER DAMAGE REPORT FORM

Stand No. 3189

Pt. No.	Sp	Dis	Con	Sp	Dis	Con	Sp	Dis	Con	Sp	Dis	Con	
1	AS	12	M	TO	12	L	CC	11.5	L	TAX	10	M	Solid ground cover of
2	AS	9	M	AS	10.5	L	TO	3	O	TO	10	L	Taxus under 2'
3	TAX	1.5	H	TAX	1	H	TAX	3	H	TO	9	M	
4	TAX	9.5	M	AS	8.5	M	TAX	17	M	TAX	18	H	
5	TO	4	L	TAX	7	M	AS	6	M	AS	13	M	
6	TAX	18	H	TO	22	L	AS	26	H	AS	17.5	L	
7	TO	5	H	TAX	7.5	L	TO	14	L	TAX	2.5	T	
8	TAX	1.5	H	TAX	3	H	TAX	0.5	H	TAX	1.5	H	
9	TAX	4	L	TAX	14	H	AS	11	M	TAX	10.5	H	
10	TO	4	L	TAX	10.5	H	TAX	10	H	TO	8	L	
11	TO	3	L	TAX	3	M	TAX	4	M	TAX	4	T	
12	AB	4	L	TAX	12.5	T	TO	8.5	L	TO	8	L	
13	CC	5.5	L	AS	16	H	AB	11	L	TAX	17	H	
14	TAX	12.5	H	TO	6	L	TAX	10	L	TAX	16	M	
15	TAX	5	H	TAX	8	O	AS	8	O	TAX	7.5	H	
16	TAX	6	H	TAX	2	H	TAX	6	H	TO	15	L	
17	CC	3.5	H	CC	4	L	CC	6.5	M	CC	9	H	
18	TO	11	L	TAX	5	H	TO	8	L	TAX	11	H	
19	TAX	2	H	TO	15	L	TAX	9.5	H	TAX	9.5	H	
20	TAX	2.5	T	TAX	3	H	TO	16	L	TO	10.5	O	
21	AB	2	O	TAX	5.5	L	TAX	4.5	M	TAX	3.5	L	
22	TAX	6	T	TO	8.5	L	TO	9	O	TO	20.5	O	
23	AS	3.5	H	TO	9	L	TO	7	M	TAX	9.5	M	
24	TO	12.5	L	AB	23	O	AS	26	O	TO	15	L	
25	AS	4	H	TAX	7.5	T	TO	7.5	M	AS	11	H	
26	AS	22	M	TO	13.5	L	AS	12	H	AS	37	M	
27	AS	8.5	M	CC	27	H	AC	23	H	AS	21	M	
28	TO	3	O	AS	3	H	AS	10.5	H	AS	12.5	H	
29	TO	10.5	O	AS	23.5	L	AS	19	L	CC	8.5	L	
30	TAX	8.5	H	TO	5.5	O	TO	9.5	O	AS	10.5	M	
31	AS	9.5	H	AS	6.5	H	AS	3	H	AS	7	H	
32	AS	8.5	H	TAX	9.5	T	TO	15.5	L	AC	15.5	M	
33	AS	5	H	TO	6.5	O	TAX	6	H	AB	29	L	
34	TAX	10.5	H	TAX	5.5	T	TAX	9	T	TAX	11	T	Dead Taxus found
35	AS	7.5	H	TAX	3	H	TAX	15.5	H	TAX	10.5	H	
36	AS	6	M	TAX	13.5	H	AS	21	H	TO	10.5	O	
37	TAX	7	T	AS	6.5	H	AS	5	O	TAX	2	H	
38	AC	6	O	TAX	16.5	H	AC	16	M	TO	16	O	
39	TO	8	H	TO	8	H	TO	27	L	TO	9.5	L	
40	AS	8	M	TAX	8.5	H	TAX	6.5	L	AC	7.5	M	15.93.0

Ave. Dist. 9.95

Browse per acre 440.0

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No.
Quadrat No.

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
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)
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

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No.
Quadrat No.

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
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)
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

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No.
Quadrat No.

3160

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

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No. ~~3160~~ 3189
Quadrat No. 1-40

Actaea pachypoda

Actaea rubra

Adiantum pedatum

Allium tricoccum

Anemone quinquefolia

Aquilegia canadensis

Aralia nudicaulis

Aralia racemosa

Arisaema atrorubens

Aster macrophyllus

Aster sagittifolius

Athyrum angustum

Botrychium virginianum

Brachyelytrum erectum

Carex albursina

Caulophyllum thalictroides

Chimaphila umbellata

Circaea alpina

Circaea latifolia

19 Clintonia borealis

Coptis trifolia

Corallorrhiza maculata

Cornus alternifolia

Cornus canadensis

Cornus rugosa

Corylus americana

Corylus cornuta

Cyripedium acaule

Diervilla lonicera

Dirca palustris

Dryopteris linnaeana

37, 11 Dryopteris phegopteris 10

25, 11, 9, 7, 5 Dryopteris spinulosa 60

Epifagus virginiana

Epigaea repens

13, 11, 9, 5, 3, 1 Acer spicatum 65

11 Dryopteris disjuncta 5

13 Petasites palmata 5

Fragaria virginiana

Galium lanceolatum

37, 13, 9, 3 Galium triflorum 20

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

2 Lycopodium annotinum 5

Lycopodium complanatum

27, 3 Lycopodium lucidulum 35

27, 3 Lycopodium obscurum 10

Lysimachia quadrifolia

13, 1 Maianthemum canadense 10

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

13 Godyera repens 5

Potentilla simplex

Prenanthes alba

Pteridium aquilinum

Pyrola elliptica

Pyrola rotundifolia

Pyrola secunda

Ranunculus recurvatus

Rhus radicans

Ribes americanum

Rosa sp.

B Rubus parviflorus 5

Rubus (blackberry)

Rubus (dewberry)

Sambucus pubens

Sanguinaria canadensis

Sanicula gregaria

Smilacina racemosa

Smilacina stellata

Smilax ecirrhata

Solidago ulmifolia

11 Streptopus roseus 5

Taxus canadensis 85

Thalictrum dioicum

27 Trientalis borealis 5

Trillium grandiflorum

Uvularia grandiflora

Uvularia sessilifolia

Vaccinium angustifolium

Vaccinium pennsylvanicum

Viburnum acerifolium

Viola canadensis

Viola cucullata

Viola pallens

Viola pubescens

Waldsteinia fragarioides

37, 27, 13, 11, 5 Viola incognita 20

PRESENCE LIST

NORTHERN PINE-HARDWOODS

STAND NO. 3189

- X *Abies balsamea*
- Acer rubrum*
- Acer saccharum*
- X *Acer spicatum*
- Amelanchier* sp.
- X *Betula lutea*
- X *Betula papyrifera*
- Caprinus caroliniana*
- Carya cordiformis*
- Crataegus* 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*
- Populus tremuloides*
- X *Prunus pennsylvanica*
- Prunus serotina*

- Prunus virginiana*
- Quercus alba*
- Quercus ellipsoidalis*
- Quercus macrocarpa*
- X *Quercus rubra*
- Sorbus decora*
- X *Thuja occidentalis*
- Tilia americana*
- X *Tsuga canadensis*
- Ulmus americana*
- Ulmus fulva*
- X *Pyrus americana*

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*
- Carex albursina*
- Carex pensylvanica*
- 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*
- X *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*
- X *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*
- X *Goodyera repens*
- Habenaria bracteata*
- Hamamelis virginiana*
- Helianthus strumosus*
- Hepatica acutiloba*
- Hepatica americana*
- Hieracium canadense*
- Hydrophyllum virginianum*
- Hystrix patula*
- X *Impatiens biflora* *Capensis*
- 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*
- X *Maianthemum canadense*

X *Dryopteris disjuncta*

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	X 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
X Osmorhiza claytoni	Ribes lacustre	Trillium cernuum
Osmunda cinnamomea	Ribes triste	Trillium grandiflorum
Osmunda claytoniana	Rubus idaeus	Uvularia grandiflora
Oxalis montana	X 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
Phyrra 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	X 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:

X Petasites palmata