



LIBRARIES

UNIVERSITY OF WISCONSIN-MADISON

Site 3190: Otter Island, Ashland County. 1956-07-17

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

<https://digital.library.wisc.edu/1711.dl/YDITGHQY7NBPQ8T>

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. 3190

Name: OTTER ISLAND

Locality: SOUTH END

County: ASHLAND

T:

R:

Sec:

Date: 7/17/56

Observers: COTTAM, VOGL & HALE

Size of Stand: WHOLE SOUTH END 2

Size of Area Sampled: 10-ACRES

Forest Type: THUJA - ABIES

Soil Type:

Topography: GENTLE SLOPE

Slope:

Directions

Condition of Stand: HAD BEEN CUT, EVIDENCE OF LARGE OLD HEMLOCK STUMPS.
 MAINLY THUJA, ABIES, & BETULA LUTEA PRESENT. TAXUS CAN. WAS
 SPOTTY, IN PATCHES.

Open Grown Trees:

% Canopy:

 LO-60
 LO-40

Stumps:

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

Soil Data:

	pH	N	P	K	Ca	Mg	Org. Mat.	Colloids	W.H.C.
A ₀									
A ₁									
A ₂	4"								
B									

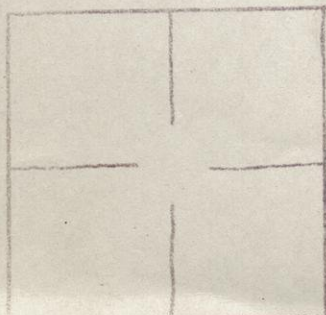
DEPTH

CHARACTERISTICS (Color, Texture, Structure, etc.)

A ₀	1"	
A ₁	1"	black sandy silt
A ₂	4"	greyish brown sand
B	Unknown	sandy clay with pebbles of reddish brown

Parent Material:

Map:



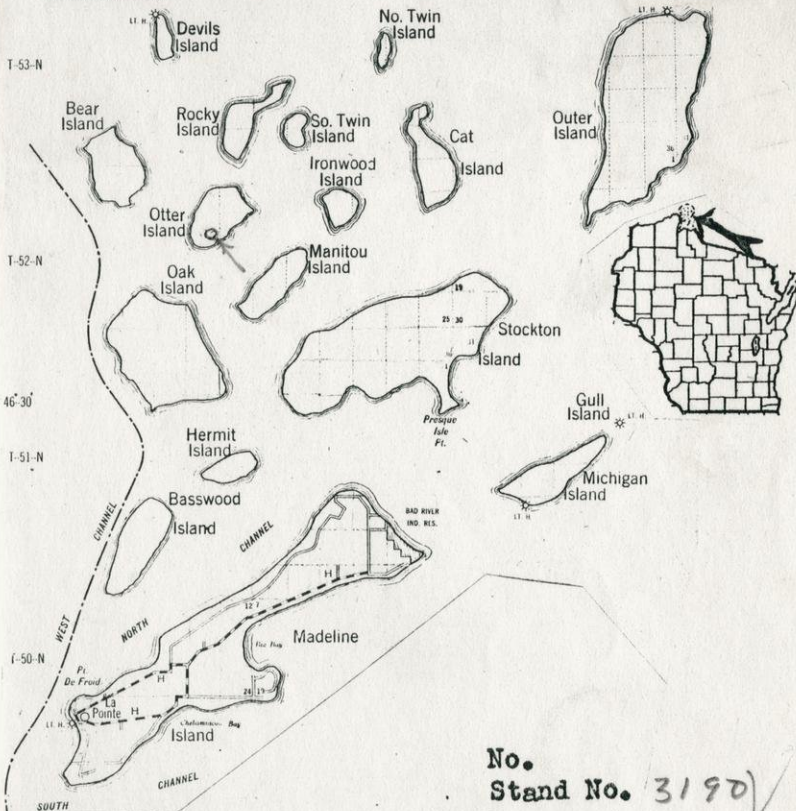
R-3-W

R-2-W

R-1-W

Northern WISCONSIN ASHLAND County

APOSTLE ISLANDS in LAKE SUPERIOR



No.
Stand No. 3190 ✓
Date:

Collected by

Grant Cottam
Richard J. Vogl

Northern Pine-Hardwoods

Station Number:

3190

92 160 119 40 1 10638 160

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	18	25	21	4		1149	35	21.9			19.6	15.6	10.8	46.0	
Acer rubru	2	3	3			97					2.2	1.9	.9	5.0	
A. sacchar	2	2	1	1		235	2	1.2			2.2	1.2	2.2	5.6	
A. spicatu															
Betula lut	20	28	13	14	1	3514	4	2.5			21.7	17.5	33.0	72.2	
B. papyrif	8	13	6	7		1285	2	1.2			8.7	8.1	12.1	28.9	
Carpinus c															
Fagus gran															
Ostrya vir	1	1		1		150					1.1	.6	1.4	3.1	
Picea glau															
Pinus Bank															
P. resinosa															
P. Strobus															
Populus ba															
P. grandid															
P. tremulo															
Prunus pen	2	2	2			58					2.2	1.2	.5	3.9	
Quercus el															
Q. rubra															
Tilia amer															
Tsuga cana	1	1	1			60	2	1.2			1.1	.6	.6	2.3	
Thuja occi	35	82	69	13	3115	3995	115	71.9			38.0	51.3	37.6	126.9	
Ulmus amer															
U. fulva															
Pyrus Amer.	3	3	3			95					3.3	1.9	.9	6.1	
								99.9			100.1	99.9	100.0	300.0	

AVE. DIST. BTW'N TREES:

11.9
Ave. Sap. Dist. 12.9

AVE B. A.:

66.5

TREES/ACRE:

307.6
261.8

DOM./ACRE:

20455.4
142.104

20.5

45.5

 -1.5^-

+ .5

- 4.5-

2.25

125

100

15-

101

1.00

1, 98

3.14

45

45

225-

190

2025

۵۰

45

275

22570

3025

205

678

715
84E

1 6 5 7

145

POINT RECORD TREES APOSTLE ISLANDS

Point Number	1	2	3	4	5	6	7	8	9	10	
<i>Abies balsamea</i>			X	45		25 145			35	35	4/5
<i>Acer rubrum</i>			1	17		2			1	1	1/1
<i>Acer saccharum</i>				X			200		X		1/1
<i>Betula lutea</i>			25 250						21		2/3
<i>Betula papyrifera</i>		30				150					2/2
<i>Quercus rubra</i>		2									
<i>Tsuga canadensis</i>				60							1/1
<i>Thuja occidentalis</i>	26 19 22 15	32 110 17	52 32 [3]	45 24 [4]	65 12 12 32	25 [2]	35 19 [4]	12 23 17 35	12 26 [3]	70 100 40	10/20
<i>Pinus pens.</i>							45				1/1
Tree distance	14 9.5 8.5 4	6.5 10.5 7.5 13.5	23 14 10 14	9.5 10 22 8.5	13.5 3 13 10.5	22 10.5 17 9	2.5 7 7 9	4.5 8 15 17	6 22 26 7.5	14.5 12 24 4	
Sapling distance	4.5 12.5 19.5 11	11.5 3 9 9.5	13 13.5 12.5 21	24 20 15 5	2 20 6 4	8 7.5 11 29	2.5 13 17 6	14 7 9.5 15	10 20 30 30	5.5 14 11 8	

POINT RECORD TREES APOSTLE ISLANDS

Point Number	11	12	13	14	15	16	17	18	19	20
<i>Abies balsamea</i>	13	20	35 90	45				35 50	35 50	180
<i>Acer rubrum</i>	3		1		1	1	2	1	2	2
<i>Acer saccharum</i>	X									
<i>Betula lutea</i>	200	40			95 170		27	80	80	90
<i>Betula papyrifera</i>		65 85					20 170 80	55	55	
<i>Quercus rubra</i>										
<i>Tsuga canadensis</i>										
<i>Thuja occidentalis</i>	120 160		120 15	35 120 100	20 ^X 24	75 65 16		45 38 80	23	23 23
	1	3	3	2	3	3	2	3	1	2
Tree distance	3.5 14.5 10.5 28	3 3.5 12.5 13.5	9 21 12 3	12 23.5 16 5.5	17 9.5 11 3.5	10 13 9.5 10	3 16 18 23.5	3 12 8 14	5 5 7 7	24 25 12.5 3
Sapling distance	17 38 8.5 5.5	7 7 7 7	7 6.5 5 2	7.5 14 17 23	2 15 4 12.5	19 28 16 6	18 18 24 7	11.5 2.5 3 6	4 15 9.5 6.5	5.5 32 17 2.5

6/8

6/7

3/6

7/19

24

POINT RECORD TREES APOSTLE ISLANDS

3190

(3)

Point Number	21	22	23	24	25	26	27	28	29	30
<i>Abies balsamea</i>			22 80							19
<i>Acer rubrum</i>		2 45 35						1	1	3
<i>Acer saccharum</i>				35						
<i>Betula lutea</i>	65 70	65				300 500	300	60 270 70	100	200 45
<i>Betula papyrifera</i>		1	X	1						
<i>Quercus rubra</i>										
<i>Tsuga canadensis</i>										
<i>Thuja occidentalis</i>	30 45		20 15	17 110	27 35 25	40 40	30 30 22	26	35 45 80	160 3
<i>Pyrus americana</i>	4	1 35	4	3	27 4	4	19 4	3	3	1
<i>Ostrya virginiana</i>				150						
Tree distance	4 8 9 30	25 21 6 18	11.5 15 17 15	11.5 13 21 24	8.5 5 6.5 8.5	2 2.5 5 12	8.5 12 8 11	24 30 10 10.5	8.5 7.5 8 6	9 25 7.5 16
Sapling distance	5 28 30 29	8.5 45 35 22	12 12 18.5 13	20 16 28 50	7 8.5 7.5 12.5	6 10.5 16 15	5 13 12.5 16	10 7 14 9	4 10 15 16	6 18 12 17

2/3

1/2

1/1

6/11

9/2

1/1

1/1

POINT RECORD TREES APOSTLE ISLANDS

Point Number	31	32	33	34	35	36	37	38	39	40	
<i>Abies balsamea</i>		17	17	13 13	130 30	12		30 13			6/9
<i>Acer rubrum</i>		2	3	2		1			1	1	
<i>Acer saccharum</i>									1		
<i>Betula lutea</i>		16	180	160	140			95 70	110		6/7
<i>Betula papyrifera</i>	140					100 120	75 75				3/5
<i>Quercus rubra</i>											
<i>Tsuga canadensis</i>											
<i>Thuja occidentalis</i>	100 100 2	80 200 4	100 X 13 1	35 2	50 4	50 3	65 60 4		27 4	35 50 1 55 3	9/16
<i>Prunus penn.</i>	13										X1
<i>Pyrus amer.</i>									35 25		2/2
Tree distance	10 11 15 5	4 7 11 13.5	11 21.5 3 21	13 11.5 12.5 5.5	9.5 7 12 21	6 8 22 12.5	24 30 6 11	10 11.5 13.5 2	17 6 7 18	4 4.5 14.5 13	
Sapling distance	17 10 16 21	14 8.5 8 7	11 16 18 18	3.5 8 11 12.1	3 5.5 5 9	10 25 23 4.5	4 7 17 15	6 12.5 9.5	5 4 2.5 8.5	6 13 12 10	

STAND # 3190

SPECIES TO	T	H	M	L	O	
			1			54
TAX						52
AS						33
AC		1	1		1	3
AB						12
CC				1		5
AM				1		1
	14		25	59	62	

STAND # 3190

BROWSE CONDITION BY SPECIES %

SPECIES	T	H	M	L	O	TOTAL
TO			1.9	20.4	77.8	100.1
TAX		17.3	23.1	44.2	15.4	100.0
AS		12.1	27.3	60.6		100.0
AO		33.3	33.3		33.3	99.9
AB				25.0	75.0	100.0
CC			40.0	20.0	40.0	100.0
AM				100.0		100.0

% EACH SPECIES CONTRIBUTES TO EACH BROWSE CATEGORY

	TO	TAX	AS	AO	AB	CC	AM	TOTAL
T								
H		64.3	28.6	7.1				100.0
M	4.0	48.0	36.0	4.0		8.0		100.0
L	18.6	39.0	33.9		5.1	1.7	1.7	100.0
O	67.7	12.9		1.6	14.5	3.2		99.9

% EACH CATEGORY CONTRIBUTES TO TOTAL BROWSE = CATEGORY / 100

T	H	M	L	O	TOTAL
8.8	8.8	15.6	36.9	38.8	100.1

% BROWSE SPECIES

TO	TAX	AS	AO	AB	CC	AM	TOTAL
33.8	32.5	20.6	1.9	7.5	3.1	.6	100.0

DEER DAMAGE REPORT FORM

Stand No. 3190

247.5				269.5				300.0				394.0				Stand No. 3110
Pt. No.	Sp	Dis	Con	Sp	Dis	Con	Sp	Dis	Con	Sp	Dis	Con				
1	TAX	24	H	To	13	O	TAX	45	H	To	175	O	Tapira spots			
2	TAX	21	L	To	22	L	To	18	O	TAX	18	M				
3	TAX	55	M	To	25	L	To	145	L	AS	17	L				
4	TAX	6	L	To	9	L	TAX	11	M	AS	9	H				
5	AS	4.5	L	TAX	5	L	TAX	5	H	TAX	11.5	L				
6	AS	2	L	AS	3	M	AS	4.5	L	TAX	7	M				
7	AS	6	L	AS	12.5	M	To	95	L	TAX	11	L				
8	To	135	O	To	145	O	To	105	L	To	7	L				
9	AC	3	M	Ac	2	H	To	5.5	O	To	135	O				
10	To	11	O	To	8	O	To	10	O	To	12	O				
11	AB	5.5	L	To	5.5	O	TAX	4	O	CC	3.5	L				
12	TAX	5	M	To	4.5	L	To	4	L	AS	17	M				
13	AS	11.5	L	AS	14.5	L	AS	12	L	AB	17	L				
14	AS	7	H	TAX	2	L	TAX	5	O	AS	6.5	L				
15	TAX	25	L	TAX	25	M	To	2	O	TAX	7	L				
16	CC	25	M	To	55	O	TAX	0.5	L	TAX	9	O				
17	AS	3	L	To	4	O	AS	6	L	AB	18	O				
18	AM	15	L	To	25	O	To	4	O	To	14	O				
19	TAX	105	L	Ac	9	O	AS	145	L	To	13	O				
20	AS	9.5	M	AB	31	O	AS	9	H	AS	8	H				
21	TAX	3	L	TAX	4	L	TAX	5	L	AB	4	L				
22	TAX	2	L	TAX	13	L	AS	9	M	TAX	8	H				
23	AS	9	L	AB	4	O	To	5	O	CC	8	O				
24	TAX	2	H	CC	2	O	CC	8	M	TAX	8.5	H				
25	TAX	1	L	TAX	3	L	TAX	6	M	TAX	5	L				
26	To	55	M	TAX	4	O	TAX	19	M	AB	18	O				
27	To	3	O	To	3	O	AS	45	L	To	7	O				
28	TAX	5	M	TAX	3	L	TAX	3	L	AS	5	M				
29	To	3	O	To	3	O	To	6	O	To	5	O				
30	AB	3	O	AS	4.5	L	AS	7	L	AS	8	L				
31	AS	4	M	TAX	4	M	AS	8	M	AB	8	O				
32	To	5	O	TAX	8	H	To	11	L	AS	13	M				
33	To	7	O	TAX	10.5	H	TAX	8	L	TAX	8.5	O				
34	AS	5	L	TAX	7	M	TAX	10	M	To	3	L				
35	To	25	O	TAX	4	L	TAX	0.5	O	To	4	O				
36	AB	45	O	TAX	1.5	O	AB	6	O	To	8	O				
37	To	35	O	To	5	O	To	7	O	To	8	O				
38	To	35	O	To	2	O	To	11	O	TAX	7.5	O				
39	AS	3.5	L	TAX	3	L	AB	5	O	To	8	O				
40	To	4	O	TAX	8.5	H	To	7	O	AS	13	L	1211.0			

Ave. Dist. 7.57
Browse proc. 760.2

DEER DAMAGE WAS
LIGHT IN ALMOST
ALL CASES.

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No. 3190
Quadrat No. 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
Carex albursina
Caulophyllum thalictroides
Chimaphila umbellata
Circaea alpina
Circaea latifolia
 35 *Clintonia borealis* 5
Coptis trifolia
Corallorrhiza maculata
Cornus alternifolia
Cornus canadensis
Cornus rugosa
Corylus americana
Corylus cornuta
Cypripedium acaule
Diervilla lonicera
Dirca palustris
 9 *Dryopteris ~~linnaeana~~ ^{disjuncta}* 5
Dryopteris phegopteris
 3, 23, 17, 7 *Dryopteris spinulosa* 20
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
 39, 27, 7, 5 *Lycopodium lucidulum* 25
Lycopodium obscurum
Lysimachia quadrifolia
Maianthemum canadense
Mitchella repens 25, 21, 19, 17, 13, 11, 7, 5, 3
Mitella diphylla 27, 29, 31, 33, 35
Mitella nuda 39
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 75
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

9, 1, 5, 3 *Acer spicatum* 60
 11, 13, 23, 27, 29, 31, 35, 39

190 *smunda cinnam.* 5

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.

<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.
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

PRESENCE LIST

NORTHERN PINE-HARDWOODS

STAND NO. 3190

X *Abies balsamea*
Acer rubrum
 X *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
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

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 phytoelaccoides
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
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
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
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

X *Dryopteris disjuncta*

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
X 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	Rubus - dewberry	Viburnum acerifolium
Pedicularis lanceolata	Rubus - raspberry	Viburnum affine
Phytolacca leptostachya	Sambucus canadensis	Viburnum lentago
Podophyllum peltatum	Sambucus pubens	Viola canadensis
Polemonium reptans	Sanguinaria canadensis	Viola cucullata
Polygala pauciflora	Sanicula gregaria	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
Pteris nodulosa	Smilacina stellata	Waldsteinia fragarioides
Pteridium aquilinum	Smilax ecirrhata	Zanthoxylum americanum

Additional Species:

Viola incognita