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Site 3177: Bean Island, Ashland County. 1956-07-02

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STAND RECORD

FORESTS

Stand No. 5

3177 ✓

Name: Bear Island

Locality: SOUTH CENTRAL

County: Ashland

T:

R:

Sec:

Date: July 2 1954

Observers: Cottam & Vogt

Size of Stand 40 acres

Size of Area Sampled: 40 acres

Forest Type: Maple-birch

Soil Type:

Topography: Flat - top of plateau

Slope:

Directions

Condition of Stand: Cut some time ago. The present large trees are left from the cutting - some of the sprouts are just reaching tree size. There is a very dense understory of *Acer spicatum* in this stand - about 12' high.

LIGHT 30 LOW RANGE

Open Crown Trees:

% Canopy:

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									
B									

DEPTH

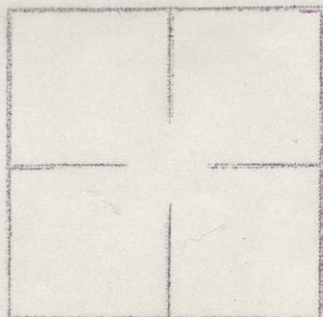
CHARACTERISTICS (Color, Texture, Structure, etc.)

A ₀	1/2 - 1"	DECIDUOUS LEAVES
A ₁	1/2"	SAND - BLACK
A ₂	4"	GRAY SAND
B	2"	RED SAND

Parent Material: SAND STONE

PROFILE VARIES FROM 2" - 6"

Map:



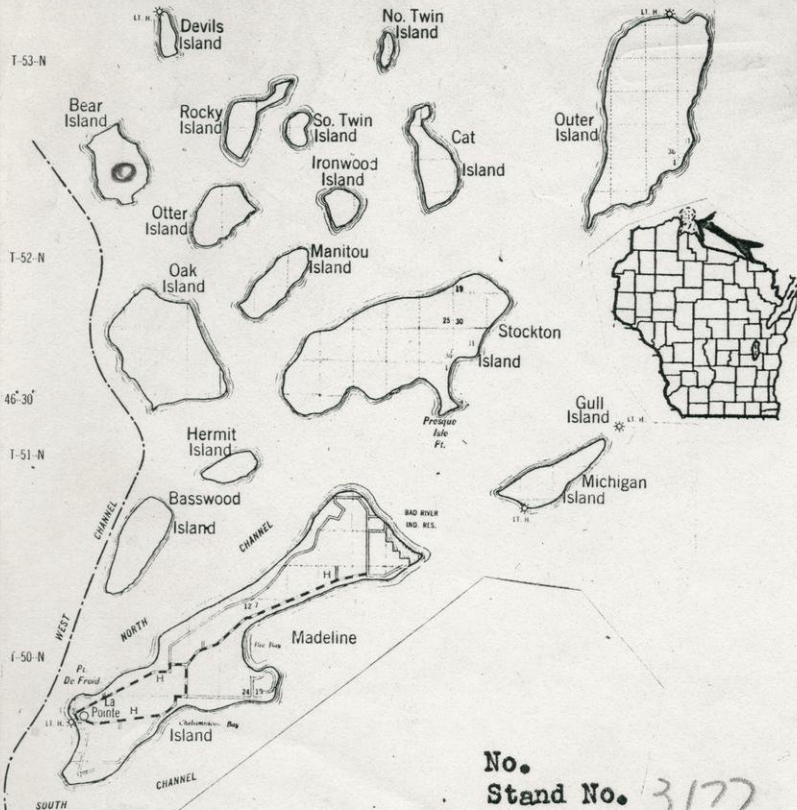
R-3-W

R-2-W

R-1-W

Northern WISCONSIN ASHLAND County

APOSTLE ISLANDS in LAKE SUPERIOR



No.
Stand No. 3177
Date:

Collected by

Grant Cottam
Richard J. Vogl

Plant Ecology Research
TREE DATA SUMMARY SHEET

University of Wisconsin

Northern Pine-Hardwoods

Station Number: 3177

100 160 83 65 12 11, 13, 156

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	5	5	5			168	21	13.5			5.0	3.1	.9	9.0	
Acer rubru	14	16	11	5		987	31	19.9			14.0	10.0	5.6	29.6	
A. sacchar	36	83	41	42		7208	5	32.7			38.0	51.9	40.6	130.5	
A. spicatu															
Betula lut	18	28	3	15	10	764	5	3.2			18.0	17.5	43.1	78.6	
B. papyrif	9	9	6	1	2	1108	15	9.6			9.0	5.6	6.2	20.8	
Carpinus c															
Fagus gran															
Ostrya vir	2	2	2			80	1	.6			2.0	1.2	.4	3.6	
Picea glau															
Pinus Bank															
P. resinosa															
P. Strobus															
Populus ba															
P. grandid															
P. tremulo															
Prunus pen	11	14	14			261	21	13.5			11.0	8.8	1.5	21.3	
Quercus el															
Q. rubra	2	2		2		265	9	5.8			2.0	1.2	1.5	4.7	
Tilia amer															
Tsuga cana	1	1	1			15					1.0	.6	.1	1.7	
Thuja occi							2	1.3							
Ulmus amer															
U. fulva															
								100.1			100.0	99.9	99.9	299.8	

AVE. DIST. BTW'N TREES: 16.4
ave sap. Dist. 15.8

AVE B. A.: 110.9

TREES/ACRE: 162.
174.5DOM./ACRE: 17965.8
124.764

~~1~~

- 2.25	5.01	2.7
- 9.25	68	3.7
+ 5.875	33	1.8
+ 4.875	22.5	1.3

+ 1	1	0.7	4.5
+ 7	49	3.2	
- 4	14	1.1	raspberry
- 4	14	1.1	
		<u>6.1</u>	

70.75	+ 3.25	10.6	1.51
	+ 4.75	76.5	3.49
	- .75	.6	10.2
	+ 6.25	39	1.88
			<u>6.10</u>

POINT RECORD TREES

NORTHERN PINE-HARDWOODS

Stand No. 5

1-10

STATION NO.	1	2	3	4	5	6	7	8	9	10										
Abies balsam						14	19													
Acer rubrum	✓	140		✓	13	3	20	3												
A. sacchar.	120 23	✓ 4	80 40	✓ 2	120 30	✓ 4	70 1	230 130 150	120 70	210 160	✓ 110 24 130 100	100 160	✓ 120 1	170 1						
A. spicatum		✓		✓			✓		✓				✓							
Betula. lut.	32 270			150		220	220							640 100 30						
B. papyrif																				
Carpinus car																				
Fagus gran																				
Ostrya virg																				
Picea glau																				
Pinus Bank																				
P. resinosa																				
P. Strobus																				
Populus bals																				
P. grand																				
P. trem																				
Prunus pen.				29 20																
Quercus ell																				
Q. rubra									125		2		2	1						
Tilia amer																				
Tsuga can																				
Thuja occ																				
Ulmus amer																				
U. fulva																				
SAPLING	20	27	40	13	11	20	7	12	5	8	6	19	10	12	14	13	24	19	28	22
DISTANCE	22	11	16	27	8	60	18	23	4	12.5	30	20	8.5	24	24	37	28	39	31	63
TREE	31	28	7	22	6	28	11	8.5	12	15	7	13	25	12	2.5	11	26	26	14	27
Distance	26	38	9	55	12.5	14.5	5	24	17	28	11	21	12.5	17	2.5	11	10.5	9	29	28

3/2

3/3

70
24

5/1

1/1

1/2

1/1

Stand No.

STATION NO.	1	2	3	4	5	6	7	8	9	10
Abies balsam	1	-	-	i	-	55	1 60	-	-	-
Acer rubrum	1 60	19 140	✓ 110	-	-	-	-	1 12	2	3
A. sacchar.	170 ✓	150	-	90 120	100 ✓	24	2 60	1 120	1 140	90 50
A. spicatum	-	-	-	-	-	-	✓	-	-	-
Betula lut.	580 450	450	60 170	-	410	490 180	580	110	70	-
B. papyrif	90	3	-	17	-	-	-	470	470	1 440 1
Carpinus car	-	-	-	-	-	-	-	-	-	-
Fagus gran	-	-	-	-	-	-	-	-	-	-
Ostrya virg	-	-	-	-	-	-	-	-	-	-
Picea glau	-	-	-	-	-	-	-	-	-	-
Pinus Bank	-	-	-	-	-	-	-	-	-	-
P. resinosa	-	-	-	-	-	-	-	-	-	-
P. Strobus	-	-	-	-	-	-	-	-	-	-
Populus bals	-	-	-	-	-	-	-	-	-	-
P. grand	-	-	-	-	-	-	-	-	-	-
P. trem	-	-	-	-	-	-	-	-	-	-
Prunus pen.	-	14 1	✓ 3	2 12	3	-	1 12	2 20 25	2	20
Quercus ell	-	-	-	-	-	-	-	-	-	-
Q. rubra	-	-	-	1	-	-	-	-	-	-
Tilia amer	-	-	-	-	-	-	-	-	-	-
Tsuga can	-	-	-	-	-	-	-	-	-	-
Thuja occ	2	-	-	-	-	-	-	-	-	-
Ulmus amer	-	-	-	-	-	-	-	-	-	-
U. fulva	-	-	-	-	-	-	-	-	-	-
	4, 9 8, 15	4, 2 3, 6	14, 26 27, 8	2, 3 7, 16	2, 10 10, 12	16, 19 24, 19	21, 16 8, 16	8, 14 9, 4	2, 20 9, 16	3, 6 2, 17
Distance	19, 23 33, 40	15, 15 17, 29	22, 9 19, 20	4, 12 12, 38	13, 30 31, 33	16, 16 23, 25	5, 12 15, 27	4, 13 18, 15	5, 5 9, 38	21, 46 15, 24

POINT RECORD TREES ✓

NORTHERN PINE-HARDWOODS

Stand No. 5

STATION NO.	31	32	33	34	35	36	37	38	39	40
Abies balsam									1	1
Acer rubrum	30			1	1		1			
A. sacchar.	75 50 120	35 80 50	120 50 130	115 2 130	100 2 13	110 2	13 160	40 18 80	22 15	30 25 100
A. spicatum										
Betula lut.				130	1	140 500	340		2	
B. papyrif		16					13	3	16	1
Carpinus car										
Fagus gran										
Ostrya virg			1						30	
Picea glau										
Pinus Bank										
P. resinosa										
P. Strobus										
Populus bals										
P. grand										
P. trem										
Prunus pen.					18 18	2	17		18	
Quercus ell										
Q. rubra			2	1						
Tilia amer										
Tsuga can										
Thuja occ										
Ulmus amer										
U. fulva										
Sap. DIST	9, 23 13, 13	4, 10 6, 9	13, 8 16, 7	18, 22 32, 21	5, 6 16, 6	40, 12 22, 14	4, 4 6, 14	18, 14 12, 4	11, 14 6, 24	5, 9 12, 16
Distance	14, 13 13, 35	13, 20 21, 32	3, 6, 6 9	8, 10 13, 23	3, 12 13, 18	11, 18 22, 5	3, 23 14, 14	6, 22 11, 8	2, 5 8, 19	6, 8 10, 14

1/1

10/27

2/1

3/3

1/1

3/4

STAND # 377

SPECIES	T	H	M	L	O
TAX		 1	 1		92
TO				1	⁵
AS			1		⁶
CC		1			¹³
AC		1			¹²
AR					²
AB					³⁰ 38
	16	62	27	23	

STAND # 3177

BROWSE CONDITION BY SPECIES %

	T	H	M	L	O	TOTAL
TAX	8.7	60.9	22.8	7.6		100.0
TO				20.0	80.0	100.0
AS			16.7	50.0	33.3	100.0
AB		13.3		23.3	63.3	99.9
CC	15.4	7.7	23.1	23.1	30.8	100.1
AC		8.3	16.7	16.7	58.3	100.0
AR					100.0	100.0

% EACH SPECIES CONTRIBUTES TO EACH BROWSE CATEGORY

	TAX	TO	AS	AB	CC	AC	AR	TOTAL
T	80.0				20.0			100.0
H	90.3			6.5	1.6	1.6		100.0
M	77.8		3.7		11.1	7.4		100.0
L	30.4	4.3	13.0	30.4	13.0	8.7		99.8
O		10.5	5.3	50.0	10.5	18.4	5.3	100.0

% EACH CATEGORY CONTRIBUTES TO TOTAL BROWSE - CATEGORY TOTAL / 100

T	H	M	L	O	TOTAL
6.2	38.8	16.9	14.4	23.8	100.1

% BROWSE SPECIES

TAX	TO	AS	AB	CC	AC	AR	TOTAL
57.5	3.1	3.8	18.8	8.1	7.5	1.3	100.1

229.5				304.0				377.5				418.0				377	STAND	BEAR ISLAND
PT #	SP	DIS	CON	SP	DIS	CON	SP	DIS	CON	SP	DIS	CON	SP	DIS	CON	COMMENTS		
1	AS	6.5	L	CC	7.5	O	AS	8.5	O	AC	11	O	YEW SPOTTED - PRESENT GRABSEM MUCH DEAD TAXUS					
2	TAX	3.5	H	TAX	9	H	TAX	12	H	AR	5	O						
3	TAX	5	H	TAX	5	H	CC	6.5	L	AB	14	O						
4	AB	6.5	O	AB	3.5	H	AB	10	L	AB	15	O						
5	AB	8	L	CC	5	M	AB	7	L	CC	12.5	O						
6	CC	5.5	M	AB	5	O	CC	7	L	CC	8	L						
7	AC	4.5	L	AR	3	O	CC	10	O	AB	15	L						
8	TAX	1	H	TAX	6	H	AB	16	L	TAX	4.5	M						
9	TAX	1.5	L	TAX	2.5	L	CC	3.5	O	CC	3	H						
10	TAX	3	H	CC	7	O	TAX	5	H	TAX	4.5	H						
11	TAX	2	M	TO	1-	O	TAX	1-	M	TO	4	L						
12	TAX	2	M	TAX	2	M	TAX	2	M	TAX	3	L						
13	TAX	8	H	TAX	8-	H	TAX	7	H	TAX	8	M						
14	TO	1	O	TAX	7	M	TAX	9	H	TAX	10	H						
15	AB	5	O	AC	4-	O	AC	7	O	AB	10	O						
16	TAX	2	L	TAX	6-	L	TAX	10	M	TAX	12	M						
17	AB	11-	O	AB	14	O	AB	14	O	AB	14	O						
18	TAX	8-	H	AB	9	O	AB	22	O	AB	21	O						
19	TAX	7	M	TAX	6	M	TAX	4	H	TAX	3-	H						
20	TAX	1	L	TAX	4.5	H	TAX	4.5	H	TAX	5	H						
21	CC	3.5	T	TO	7.5	O	TAX	8	M	TAX	8	H						
22	TAX	10-	H	TAX	7	H	TAX	6	H	TO	17	O						
23	TAX	1.5	H	TAX	2.5	H	CC	2.5	T	TAX	3	H						
24	AC	10	H	TAX	15	H	TAX	16.5	H	TAX	5.5	H						
25	TAX	4	H	TAX	3	H	TAX	6	H	TAX	3	H						
26	AC	10	M	AS	5	L	AB	11	O	AB	21	O						
27	AB	3	H	AB	11	O	TAX	11	T	AB	15	H						
28	AB	7	H	AS	7	O	AS	2.5	M	CC	2	M						
29	AB	3.5	O	TAX	21	M	TAX	24	M	TAX	18	H						
30	TAX	6	H	TAX	1	H	TAX	3	H	TAX	2	H						
31	TAX	3	H	TAX	7	T	TAX	9-	T	AB	14	O						
32	AB	14	L	AC	7	M	AC	10	O	TAX	9-	M						
33	TAX	5	H	TAX	9	H	AB	12	O	AS	19	L						
34	TAX	7	T	TAX	17	H	TAX	25	M	TAX	20	M						
35	TAX	4	H	TAX	4	H	TAX	6	H	TAX	11-	T						
36	TAX	4	H	TAX	2	M	TAX	1	H	TAX	4	H						
37	TAX	27-	H	TAX	40	H	TAX	26	H	TAX	20	M						
38	TAX	1	T	TAX	11	H	TAX	12	L	TAX	7-	M						
39	TAX	5	T	AC	3	O	AC	5	O	AC	7	L						
40	TAX	4	T	TAX	4	T	TAX	11	H	AB	30	L						

1329.0

1329.0

AC = Acer Saccharum

Ave dist. 8.3
Browse per acre 632.3

Data Form No. 18

Plant Ecology Research

Univ. of Wisconsin

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No. 5
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
 9, 7 *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
 17, 5 *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
 19 *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>
15 <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</i> sp.	<i>Ribes americanum</i>
<i>Aster macrophyllus</i>	<i>Helianthus strumosus</i>	<i>Rosa</i> sp.
<i>Aster sagittifolius</i>	<i>Hepatica acutiloba</i>	<i>Rubus parviflorus</i>
<i>Athyrium angustum</i>	<i>Hepatica americana</i>	<i>Rubus</i> (blackberry)
<i>Botrychium virginianum</i>	<i>Impatiens biflora</i>	<i>Rubus</i> (dewberry)
<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>	13 <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>	19, 13, 11 <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. 5 21-30

BEAR

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
25 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	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
Dryopteris spinulosa	Polygala pauciflora	Viola pallens
Epifagus virginiana	Polygonatum commutatum	Viola pubescens
Epigaea repens	Polygonatum 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> 10	<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> 5	<i>Solidago ulmifolia</i>
<i>Coptis trifolia</i>	<i>Lysimachia quadrifolia</i>	<i>Streptopus roseus</i>
<i>Corallorrhiza maculata</i>	37 <i>Maianthemum canadense</i> 15 (35, 35, 35)	<i>Taxus canadensis</i> 50
<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> 10	<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>	37 <i>Viola pubescens</i> 5
<i>Epigaea repens</i>	<i>Polygonatum pubescens</i>	<i>Waldsteinia fragarioides</i>

Date Form No. 17

Plant Ecology Research

Univ. of Wisconsin

PRESENCE LIST

NORTHERN PINE-HARDWOODS

STAND NO. 5

X *Abies balsamea*
 X *Acer rubrum*
 X *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
Prunus pennsylvanica
Prunus serotina

Prunus virginiana
Quercus alba
Quercus ellipsoidalis
Quercus macrocarpa
 X *Quercus rubra*
Sorbus decora
 X *Thuja occidentalis*
Tilia americana
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
 X *Aralia nudicaulis*
Aralia racemosa
Arctostaphylos uva-ursi
Arisaema atrorubens
Asarum canadense
Asclepias phyto-laccoides
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 pennsylvanica
Caulophyllum thalictroides
Celastrus scandens
Chimaphila umbellata
Chiogenes hispidula

Circaea alpina
Circaea latifolia
Claytonia caroliniana
Claytonia virginiana
Clintonia borealis
Convolvulus spithameus
Coptis trifolia
Corallorrhiza maculata
Corallorrhiza striata
Cornus alternifolia
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
Dryopteris phegopteris
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
 X *Maianthemum canadense*

Data Form No. 17 (P.2)

Melampyrum lineare
 Mitchella repens
 Mitella diphylla
 Mitella nuda
 Monarda fistulosa
 Moneses uniflora
 Monotropa uniflora
 Myrica asplenifolia
 Onoclea sensibilis
 Oryzopsis asperifolia
 Osmorhiza claytoni
 Osmunda cinnamomea
 Osmunda claytoniana
 Oxalis montana
 Panax quinquefolia
 Parietaria pennsylvanica
 Parthenocissus vitacea
 Pedicularis lanceolata
 Phytolacca leptostachya
 Podophyllum peltatum
 Polemonium reptans
 Polygala pauciflora
 Polygonatum commutatum
 Polygonatum pubescens
 Potentilla simplex
 Prenanthes alba
 Pteris nodulosa
 Pteridium aquilinum

Pyrola elliptica
 Pyrola rotundifolia
 Pyrola secunda
 Ranunculus abortivus
 Ranunculus recurvatus
 Ranunculus septentrionalis
 Rhus radicans
 Rhus typhina
 Ribes americanum
 Ribes cynosbati
 Ribes lacustre
 Ribes triste
 Rubus idaeus
 Rubus parviflorus
 Rubus hispidus
 Rubus - blackberry
 Rubus - dewberry
 Rubus - raspberry
 Sambucus canadensis
 Sambucus pubens
 Sanguinaria canadensis
 Sanicula gregaria
 Schizachne purpurascens
 Scutellaria lateriflora
 Shepherdia canadensis
 Smilacina racemosa
 Smilacina stellata
 Smilax ecirrhata

Smilax herbacea
 Smilax hispida
 Solidago latifolia
 Solidago ulmifolia
 Streptopus amplexifolius
 X Streptopus roseus
 Y Taxus canadensis
 Thalictrum dioicum
 Tiarella cordifolia
 X Trientalis borealis
 Trillium cernuum
 Trillium grandiflorum
 Uvularia grandiflora
 Uvularia sessilifolia
 Vaccinium angustifolium
 Vaccinium pennsylvanicum
 Viburnum acerifolium
 Viburnum affine
 Viburnum lentago
 Viola canadensis
 Viola cucullata
 Viola incognita
 Viola pallens
 Viola pubescens
 Vitis aestivalis
 Vitis riparia
 Waldsteinia fragarioides
 Zanthoxylum americanum

Additional Species: