

Site 3140: Iron County. 1950-08-03

[s.l.]: [s.n.], 1950-08-03

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STAND RECORD

FORESTS

Stand No. 3140

Name:

Locality:

County: Iron Co.

T: 42 N R: 4 E Sec: 16

Date: Aug 3, 1950

Observers: Cottam et al

Size of Stand: 40 acres

Size of Area Sampled:

Forest Type: Pine

Soil Type: Plainfield Sand and Peat

Topography: level.

Slope: Directions

Condition of Stand:

Rather sparse stand but no signs of cutting.
Heavy undergrowth of Hazel in spots.
Fire scars on red pines

Open Grown Trees:

% Canopy: 50%

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									

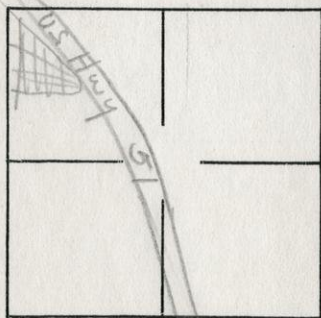
DEPTH

CHARACTERISTICS (Color, Texture, Structure, etc.)

A ₀	1-2"	Mo	
A ₁	1/2"	Black Sandy loam	
A ₂	2"	Grey sand	
B		Red sand	

Parent Material:

Map:



Quadrats 26-30:
Figures in red go with all other quadrats
Figs. in black are small special patch

Prob = .026

balsam
fir

3140

45

30

75 *

2 Trees

3140

38 68

41 65

14 15

94 48 *

4 Trees

3140

75

35

7976

8215

2743

19044

Picea
glauca

3140 ³⁵
35*

3140

distances

1 90

1 30

1 90

2 20

1 15

1 55

3 35

~~4 7~~

~~4 7~~

4 70

1 20

3 40

1 40

1 55

85

3 10

1 10

1 65

1 65

1 45

1 65

1 55

1 85

2 20

1 70

2 80

2 70

~~80~~

~~80~~

1 50

2 20

1 30

1 55

2 00

1 25

1 45

3 75

1 30

1 00

1 80

2 10

1 50

1 80

7 4 35 *

Pop
trem

3140

60
23
35
55
1 45
50
85
1 15
22
2 10
1 95
~~17~~
~~17~~
50
50
70
75
35
55
50
35
55
1 4 70 0
60
1 00
83
26
60
60
60
~~1 40~~
~~1 50~~
~~1 35~~
~~70~~
~~1 40~~
~~1 50~~
~~1 35~~
~~70~~
45
70
90
90
29
19
55
1 15
1 20
65
35
21
70
2 7 4 3 *

Red Pine

3140

1	10	-
1	20	-
1	15	-
	90	-
1	90	-
2	00	-
	37	
1	50	-
1	50	-
1	00	-
2	40	-
	23	
1	80	-
2	00	-
1	05	-
1	00	-
1	25	-
	40	
1	50	-
1	50	-
	85	-
1	90	-
2	10	-
1	80	-
	60	
2	00	-
1	90	-
1	50	-
	28	
3	8	68
	1	50
		73
1	70	-
2	00	-
1	90	-
2	25	-
2	30	-
1	50	-
2	60	-
2	00	-
2	10	-
2	40	-
1	65	-
1	50	-
	40	
1	80	-
1	45	-
2	60	-
2	00	-
2	00	-
1	30	-
1	30	-
2	10	-
7	9	76 *

White
Pine

3140

	25
	60
1	30
2	75
1	80
1	00
	58
1	65
2	90
1	70
2	00
	35
1	30
	60
	60
	85
1	60
1	60
	45
	65
1	80
	24
1	40
2	50
	25
	13
2	30
1	50
1	50
1	30
2	20
2	00
4	1 65
	1 50
	70
1	40
1	45
2	35
2	75
1	50
1	40
1	50
1	35
	70
	85
1	05
	30
	15
	23
	60
1	30
	85
1	00
2	70
1	15
	85
1	60
2	05
1	40
	27
	95
	75
1	75
1	05
1	20
1	85
8	2 15 *

POINT RECORD TREES

NORTHERN PINE-HARDWOODS

Stand No.

3140

STATION NO.	1	2	3	4	5	6	7	8	9	10
<i>Abies balsam</i>										
<i>Acer rubrum</i>		2				12	✓			2
<i>A. sacchar.</i>										
<i>A. spicatum</i>										
<i>Betula lut.</i>										
<i>B. papyrif</i>										
<i>Carpinus car</i>										
<i>Fagus gran</i>										
<i>Ostrya virg</i>										
<i>Picea glau</i>										
<i>Pinus Bank</i>										
<i>P. resinosa</i>	110, 120	115 (150)			90 (73) (170)		190	200 260 (190)	(225)	37
<i>P. Strobus</i>	(150) (70)	25 (140)	60 130 (145) (235)	225, 180	100	58, 165 (275) (150)		290		170
<i>Populus bals</i>										
<i>P. grand</i>										
<i>P. trem</i>			1	60 (100)		60 (33) (20)	1	23, 35 (60)	2	60 (60)
<i>Prunus pen.</i>										
<i>Quercus ell</i>										
<i>Q. rubra</i>										
<i>Tilia amer</i>										
<i>Tsuga can</i>										
<i>Thuja occ</i>										
<i>Ulmus amer</i>			1			✓	✓			
<i>U. fulva</i>										
<i>Prunus serot</i>			1			✓	3	2	2	1
<i>Prunus nig.</i>					✓	✓	✓			✓
Distance	19	13	19	22	11.5	15.5	33.5	47	12	34

$\frac{13}{7}$ $\frac{2}{6}$
 $\frac{14}{8}$ $\frac{10}{7}$

POINT RECORD TREES

NORTHERN PINE-HARDWOODS

Stand No. 3140

STATION NO.	1	2	3	4	5	6	7	8	9	10
<i>Abies balsam</i>										(45)
<i>Acer rubrum</i>			1		1					
<i>A. sacchar.</i>										
<i>A. spicatum</i>										
<i>Betula lut.</i>										
<i>B. papyrif</i>				4						
<i>Carpinus car</i>										
<i>Fagus gran</i>										
<i>Ostrya virg</i>										
<i>Picea glau</i>										
<i>Pinus Bank</i>										
<i>P. resinosa</i>		150,	230	150		100 (150)	240	260	(200)	23
<i>P. Strobis</i>	200,35 (140,150)	130,70 (135)	60,60 (65)	70,30 (15,23)	85,160 (15,23)	160,60	45,30 (30,65)	65,100 (100)	24,170 (270)	250
<i>Populus bals</i>										
<i>P. grand</i>										
<i>P. trem</i>				55 1						(45)
<i>Prunus pen.</i>					3				3	
<i>Quercus ell</i>										
<i>Q. rubra</i>		1	1							
<i>Tilia amer</i>										
<i>Tsuga can</i>										
<i>Thuja occ</i>										
<i>Ulmus amer</i>						2				
<i>U. fulva</i>										
<i>P. tenu</i>										
Distance	14.0	15.5	8.5	31.0	11.0	16.5	16.5	14.5	16.5	15.5

$\frac{9}{8} \frac{5}{5}$
 $\frac{2814}{16}$
 $\frac{1}{9}$

No Ref.

X

POINT RECORD TREES

NORTHERN PINE-HARDWOODS

Stand No.

3140

STATION NO.	21	22	23	24	25	26	27	28	29	30
<i>Abies balsam</i>	2			4	2	21 26 (17)	15 30 (30)	22, 12 (12)	15, 17 (15) (30)	3
<i>Acer rubrum</i>			2					1		
<i>A. sacchar.</i>										
<i>A. spicatum</i>										
<i>Betula lut.</i>										
<i>B. papyrif</i>										
<i>Carpinus car</i>										
<i>Fagus gran</i>										
<i>Ostrya virg</i>										
<i>Picea glau</i>					1	1	1	45		
<i>Pinus Bank</i>										
<i>P. resinosa</i>	180 210	200	105 (240)	165		170 180 (150)	30 23, 40 (205)	40	150, 150 (180)	130 85, 190 (145)
<i>P. Strobus</i>	115	85		25	13	230 (160)	205			140
<i>Populus bals</i>										
<i>P. grand</i>										
<i>P. trem</i>	145	2 50 70	85 90	115 90	22 20 (19)		25 55	210 195 (115)	120	17 26 (32)
<i>Prunus pen.</i>										
<i>Quercus ell</i>										
<i>Q. rubra</i>										
<i>Tilia amer</i>										
<i>Tsuga can</i>										
<i>Thuja occ</i>										
<i>Ulmus amer</i>										
<i>U. fulva</i>										
<i>Prunus serot</i>		4	2		1	1	2		1	
<i>Prunus vitg.</i>									2	
Distance	18.5	22	17	28	27	8	29	12.5	11	17.5

15 22 13 15.5 20

$$\begin{array}{r} 17 \\ 9 \end{array} \frac{10}{7}$$

$$\begin{array}{r} 8 \\ 7 \end{array} \frac{3}{3}$$

POINT RECORD TREES

NORTHERN PINE-HARDWOODS

Stand No. **3140**

STATION NO.	31	32	33	34	35	36	37	38	39	40
<i>Abies balsam</i>	(30)			4						
<i>Acer rubrum</i>										
<i>A. sacchar.</i>										
<i>A. spicatum</i>										
<i>Betula lut.</i>										
<i>B. papyrif</i>										
<i>Carpinus car</i>										
<i>Fagus gran</i>										
<i>Ostrya virg</i>										
<i>Picea glau</i>					(35)					
<i>Pinus Bank</i>										
<i>P. resinosa</i>			(260)	(100) 210	180	(200)	60 (130)	200 190	150 (130, 210)	28
<i>P. Strobus</i>	150/50 (27)			130 (95)	220 (75)	(75)	105 (150)	120 (185)	200	
<i>Populus bals</i>										
<i>P. grand</i>										
<i>P. trem</i>		50/50 (65, 35)	20/70 (75)			35/50	50		35/50 (70, 0)	
<i>Prunus pen.</i>										
<i>Quercus ell</i>										
<i>Q. rubra</i>				2						
<i>Tilia amer</i>										
<i>Tsuga can</i>										
<i>Thuja occ</i>										
<i>Ulmus amer</i>										
<i>U. fulva</i>										
<i>Prunus var</i>	2									
Distance	12.5	14.5	37.5	13.0	10.0	35.5	18.0	21.0	15.0	18.0

~~C~~ ~~11~~ ~~11~~
~~M~~ ~~11~~ ~~11~~
~~11~~ ~~11~~ ~~11~~
 $\frac{13}{8} \frac{7}{6}$
 $\frac{12}{7} \frac{5}{4}$

TREE DATA SUMMARY SHEET

Northern Pine-Hardwoods

2 Trees

Prob. 026

Station Number: 3140

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							12	14.3							
Acer rubru							9	10.7	3						
A. sacchar															
A. spicatu															
Betula lut															
B. papyrif							4	4.8	1						
Carpinus c															
Fagus gran															
Ostrya vir															
Picea glau							1	1.2							
Pinus Bank															
P. resinosa	24	29	5	24		3868					39.3	36.3	40.9	116.5	350
P. Strobus	23	32	11	21		4165			2		37.7	40.0	44.1	121.8	609
Populus ba															
P. grandid															
P. tremulo	14	19	4	5		1475	15	17.9	3		22.9	23.8	15.0	161.7	123
Prunus pen							9	10.7	2						
Quercus el							1	1.2							
Q. rubra							5	6.0							
Tilia amer															
Tsuga cana															
Thuja occi															
Ulmus amer							3	3.6	2						
U. fulva															
Prunus							21	25.0	1						
Prunus							4	4.8	4						
	61	80	30	50		9448	84	100.2			99.9	100.1	100.0	300.0	1082

AVE. DIST. BTW'N TREES:

28.6

AVE B. A.:

118.1

TREES/ACRE:

614

DOM./ACRE:

7204

950
1200

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No. , 3140
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

✓ Antennaria sp.

✓ Amelanchier canadensis

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. 3140
Quadrat No. 2

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
 Cypridium 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

✓ Anemone cylindrica

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No. 3140
Quadrat No. 3

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
 Cypridium 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

apocynum androsaemifolium
Schizachne purpureascens

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No.
Quadrat No. 4

3140

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. 3140
Quadrat No. 5

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

Amelanchier canadensis

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No.
Quadrat No. 6

3140

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
 Ocotilla 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

✓ Anemone cylindrica
 ✓ Schizachne purpureascens

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No. 3140
Quadrat No. 7

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. 3140
Quadrat No. 8

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

✓ Convolvulus spithameus
✓ Anemone cylindrica
✓ Schizachne purpurea

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No. 3140
Quadrat No. 9

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
 Mitchellia 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

✓ Viola incognita
 ✓ Convolvulus sp. thameus
 ✓ Microstylis unifolia
 ✓ Schizachne purpurea

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No. 3140
Quadrat No. 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
 Cypridium 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

✓ Anemone cylindrica
 ✓ Apocynum androsaemifolium

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No.
Quadrat No. //

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

3140

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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 canadense~~
~~Vaccinium pennsylvanicum~~
 Viburnum acerifolium
 Viola canadensis
 Viola cucullata
 Viola pallens
 Viola pubescens
 Waldsteinia fragarioides

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No.
Quadrat No.3140
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<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. 3140
Quadrat No. 14

Actaea pachypoda	Fragaria virginiana	Potentilla simplex
Actaea rubra	Galium lanceolatum	Prenanthes alba
Adiantum pedatum	Galium triflorum	Pteridium aquilinum
Allium tricoccum	Gaultheria procumbens	Pyrola elliptica
Anemone quinquefolia	Gaylussacia baccata	Pyrola rotundifolia
Aquilegia canadensis	Geranium maculatum	Pyrola secunda
Aralia nudicaulis	Geum canadense	Ranunculus recurvatus
Aralia racemosa	Gnaphalium obtusifolium	Rhus radicans
Arisaema atrorubens	Helianthemum sp.	Ribes americanum
Aster macrophyllus	Helianthus strumosus	Rosa sp.
Aster sagittifolius	Hepatica acutiloba	Rubus parviflorus
Athyrium angustum	Hepatica americana	Rubus (blackberry)
Botrychium virginianum	Impatiens biflora	Rubus (dewberry)
Brachyelytrum erectum	Linnaea borealis	Sambucus pubens
Carex albursina	Lonicera oblongifolia	Sanguinaria canadensis
Caulophyllum thalictroides	Lupinus perennis	Sanicula gregaria
Chimaphila umbellata	Lycopodium annotinum	Smilacina racemosa
Circaea alpina	Lycopodium complanatum	Smilacina stellata
Circaea latifolia	Lycopodium lucidulum	Smilax ecirrhata
Clintonia borealis	Lycopodium obscurum	Solidago ulmifolia
Coptis trifolia	Lysimachia quadrifolia	Streptopus roseus
Corallorrhiza maculata	Maianthemum canadense	Taxus canadensis
Cornus alternifolia	Mitchella repens	Thalictrum dioicum
Cornus canadensis	Mitella diphylla	Trientalis borealis
Cornus rugosa	Mitella nuda	Trillium grandiflorum
Corylus americana	Monotropa uniflora	Uvularia grandiflora
Corylus cornuta	Myrica asplenifolia	Uvularia sessilifolia
Cypripedium acaule	Onoclea sensibilis	Vaccinium angustifolium
Diervilla lonicera	Oryzopsis asperifolia	Vaccinium pennsylvanicum
Dirca palustris	Osmorhiza claytoni	Viburnum acerifolium
Dryopteris linnaeana	Oxalis montana	Viola canadensis
Dryopteris phegopteris	Phryma leptostachya	Viola cucullata
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. 3140
Quadrat No. 15

Actaea pachypoda	<u>Fragaria virginiana</u>	Potentilla simplex
Actaea rubra	Galium lanceolatum	Prenanthes alba
Adiantum pedatum	Galium triflorum	<u>Pteridium aquilinum</u>
Allium tricoccum	Gaultheria procumbens	Pyrola elliptica
Anemone quinquefolia	Gaylussacia baccata	Pyrola rotundifolia
<u>Aquilegia canadensis</u>	Geranium maculatum	Pyrola secunda
Aralia nudicaulis	Geum canadense	Ranunculus recurvatus
Aralia racemosa	Gnaphalium obtusifolium	Rhus radicans
Arisaema atrorubens	Helianthemum sp.	Ribes americanum
<u>Aster macrophyllus</u>	Helianthus strumosus	Rosa sp.
Aster sagittifolius	Hepatica acutiloba	Rubus parviflorus
Athyrium angustum	<u>Hepatica americana</u>	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	<u>Maianthemum canadense</u>	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
<u>Diervilla lonicera</u>	Oryzopsis asperifolia	Vaccinium pennsylvanicum ^{canadense}
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	<u>Viola pubescens</u>
Epigaea repens	Polygonatum pubescens	Waldsteinia fragarioides

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No. 3140
Quadrat No. 6

<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., 31.0
Quadrat No. 17

<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. 3140
Quadrat No. 18

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. 3140
Quadrat No. 19

<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</i> <i>aquilinum</i>
<i>Allium tricoccum</i>	<i>Gaultheria procumbens</i>	<i>Pyrola elliptica</i>
<i>Anemone</i> <i>quinquefolia</i>	<i>Gaylussacia baccata</i>	<i>Pyrola rotundifolia</i>
<i>Aquilegia canadensis</i>	<i>Geranium maculatum</i>	<i>Pyrola secunda</i>
<i>Aralia</i> <i>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</i> <i>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>	<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</i> <i>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</i> <i>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</i> <i>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>

Isopyrum

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No. 3140
Quadrat No. 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
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

THE CORTICOLOUS VEGETATION OF THE NORTHERN WISCONSIN UPLAND
Data collected by William L. Culberson, Summers 1952-1953.

From a 40-tree sample, the continuum index of this stand is.....¹¹³⁶
Abbreviations in the data sheet refer to the following species:

Alectoria nidulifera
Allarthonia caesia
Anaptychia palmatula
Anaptychia speciosa
Arthonia radiata
Bacidia chlorococca
Bacidia fuscorubella
Bacidia sp.
Buellia punctata
Buellia stillingiana
Caloplaca aurantiaca
Caloplaca cerina
Caloplaca sp.
Candelaria concolor
Candelaria fibrosa
Cetraria atlantica
Cetraria ciliaris
Cetraria fendleri
Cetraria oakesiana
Cetraria pinastri
Cladonia botrytes
Cladonia cenotea
Cladonia chlorophaea
Cladonia coniocraea
Cladonia cristatella
Cladonia verticillata
Collema subfurvum
Conotrema urceolatum
Evernia mesomorpha
Graphis scripta
Lecanora pallida
Lecanora subfusca
Lecanora varia
Lecidea berengeriana
Lecidea nylanderii
Lecidea vernalis
Lepraria aeruginosa
Leptorhaphis epidermidis
Le sym = unknown crustose
Lobaria pulmonaria
Lobaria quercizans
Normandina pulchella
Ochrolechia pallescens
Opegrapha varia
Parmelia andreana
Parmelia aурulenta
Parmelia borrieri
Parmelia caperata
Parmelia cetrarioides
Parmelia crinita
Parmelia physodes
Parmelia rudecta

Parmelia saxatilis
Parmelia subaurifera
Parmelia subquercifolia
Parmelia sulcata
Parmelia trichotera
Parmeliopsis ambigua
Parmeliopsis hyperopta
Parmeliopsis placodidia
Peltigera canina
Pertusaria sp.
Physcia aipolia
Physcia ascendens
Physcia ciliata
Physcia grisea
Physcia millegrana
Physcia orbicularis
Physcia syncolla
Physcia tribacoides
Pyrenula leucoplaca
Pyrenula nitida
Pyxine sorediata
Ramalina fastigiata
Ramalina pollinaria
Rinodina halei
Rinodina papillata
Rinodina sp.
Trypethelium virens
Usnea sp.
Xanthoria fallax
Xanthoria polycarpa

(Bryophytes)
Amblystegium varium
Anomodon attenuatus
Anomodon minor
Anomodon rostratus
Anomodon tristis
Bazzania trilobata
Brachythecium sp.
Brotherella recurvans
Campylium hispidulum
Chamberlainia acuminata
Dicranum flagellare
Dicranum montanum
Dicranum sp.
Entodon sp.
Eurhynchium serrulatum
Eurhynchium strigosum
Frullania asagrayana
Frullania bolanderi
Frullania eboraensis
Heterophyllum
 haldanianum
Hypnum reptile
Hypnum sp.
Jamesoniella autumnalis
Leskea sp.
Leucodon sciuroides
Lindbergia brachyptera
 var. austinii
Lophocolea heterophylla
Mnium cuspidatum
Mnium spinulosum
Neckera pennata
Orthotrichum sp.
Plagiochila asplenioides
Plagiothecium sp.
Platygyrium repens
Porella platy-
 phylloidea
Ptilidium pulcherrimum
Pylasia sp.
Radula complanata
Tetraphis pellucida
Thuidium delicatulum
Ulota crispa

Ecology Laboratory
University of Wisconsin
Madison

No. trees																			40	
	Ac rub	Ac sac	Be lut	Be pap	Fa gra	Os vir	Pi ban	Pi res	Pi str	Po gra	Po tre	Pr ser	Qu alb	Qu ell	Qu rub	Ti ame	Ts can	Ul ame	Total	Frequency
Al nid								4	9		4								13	33
An spe											4								4	10
Ba chl								16	17		1								34	85
Bu pun								1											1	3
Ca cer											1								1	3
Ce atl								1	2										3	8
Ce cil								6	11										17	43
Ce pin								3											3	8
Cl con									1										1	3
Cr neg								15	17		1								33	83
Ev mes								15	15		2	1							33	83
Le sub								1	5										6	15
Le var								1	2			1							4	10
Li nyl								4											4	10
Li ver									1										1	3
Oc pal											1								1	3
Pa and									2										2	5
Pa aur											1								1	3
Pa cap								6	16		2								24	60
Pa phy								15	16		1	1							33	83
Pa rud								1	2		1								4	10
Pa sax									6										6	15
Pa s-a								6	5			1							12	30
Pa s-q											1								1	3
Pa sul								14	17		3	1							35	88
Pe sp.									2										2	5
Ph aip											6								6	15
Ph asc											1								1	3
Ph cil											3								3	8
Ph gri											4								4	10
Ph orb											5								5	13
Ra fas									3			1							4	10
Us sp.								6	16			1							23	58
Xa pol									2										2	5
								115	161		38	7							327	
Di mon								1	3										4	10
Fr ebo									1		5								6	15
Or sp.									2		4								4	10
Pl rep									2										2	5
Pt pul								2	4										6	15
Py sp.									2		3								3	8
Ul cri									2		3								3	8
								3	10		15	0							28	

STATION NO.	P.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Total
HERBS:																						
Actaea pachypoda																						
Actaea rubra	✓														✓							1 5
Adenocaulon bicolor																						
Adiantum pedatum																						
Agrimonia grypsossepala																						
Allium tricoccum																						
Alnus incana																						
Alnus rugosa																						
Amphicarpa bracteata																						
Anemone canadensis																						
Anemone cylindrica	✓	✓				✓		✓		✓												4 20
Anemone quinquefolia	✓	✓		✓	✓	✓		✓		✓	✓						✓		✓	✓		11 53
Antennaria sp.	✓	✓																				1 5
Apocynum androsaemifolium	✓			✓							✓											2 10
Apocynum cannabinum																						
Aquilegia canadensis	✓		✓													✓						2 10
Aralia hispida																						
Aralia nudicaulis	✓										✓				✓					✓	✓	4 20
Aralia racemosa																						
Arctostaphylos uva-ursi																						
Arisaema atrorubens																						
Asarum canadense																						
Asclepias exaltata																						
Aster cordifolius																						
Aster lateriflorus																						
Aster macrophyllus	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	18 90
Aster prenanthoides																						
Aster sagittifolius																						
Aster shortii	✓																					1
Aster umbellatus																						
Athyrium filix-femina																						
Athyrium thelypteroides																						
Boehmeria cylindrica																						
Botrychium lanceolatum																						
Botrychium matricariaefol																						
Botrychium virginianum																						
Brachyelytrum erectum	✓						✓	✓														2 10
Bromus purgans																						
Campanula americana																						
Campanula rotundifolia																						
Cardamine pensylvanica																						
Carex albursina																						
Carex pensylvanica																						
Carex plantaginea																						
Caulophyllum thalictroid																						
Ceanothus ovatus																						
Celastrus scandens																						
Chimaphilia umbellata																						
Cicuta maculata																						
Circaea alpina																						
Circaea quadrisulcata																						

TABULATION FORM

NORTHERN PINE-HARDWOODS

Stand No. 3140

STATION NO.	P.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	T	
Cirsium altissimum																							
Claytonia caroliniana																							
Claytonia virginica																							
Clematis verticillaris																							
Clintonia borealis																							
Comandra richardsiana																							
Comptonia peregrina																							
Convolvulus spithameus	✓								✓	✓												2	10
Coptis ^{trifolia} groenlandica	✓							✓										✓				2	10
Corallorhiza maculata	✓																					1	
Corallorhiza striata	✓																					1	
Corallorhiza trifida																							
Coreopsis palmata																							
Cornus alternifolia	✓																					1	
Cornus canadensis	✓							✓										✓	✓			3	15
Cornus foemina																							
Cornus rugosa																							
Corydalis sp.																							
Corylus americana																							
Corylus cornuta	✓	✓		✓	✓			✓			✓			✓	✓	✓						9	45
Cryptotaenia canadensis																							
Cynoglossum boreale	✓																					1	
Cypripedium acaule																							
Cypripedium parviflorum																							
Cypripedium pubescens																							
Cystopteris fragilis																							
Danthonia spicata																							
Dentaria diphylla																							
Desmodium glutinosum																							
Desmodium nudiflorum																							
Dicentra canadensis																							
Dicentra cucullaria																							
Diervilla lonicera	✓					✓	✓	✓			✓		✓	✓	✓	✓	✓	✓	✓			8	40
Dirca palustris																							
Dryopteris bootii																							
Dryopteris cristata																							
Dryopteris goldiana																							
Dryopteris disjuncta																							
Dryopteris phegopteris																							
Dryopteris spinulosa																							
Epifagus virginiana																							
Epigaea repens																							
Equisetum arvense																							
Equisetum hyemale																							
Equisetum sylvaticum																							
Erigeron philadelphicus																							
Erythronium albidum																							
Erythronium americanum																							
Eupatorium rugosum																							
Festuca obtusa																							
Fragaria virginiana	✓			✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓						11	55

Stand No. 3140

[illegible]

TABULATION FORM

NORTHERN PINE-HARDWOODS

Stand No. 3140

STATION NO.	P.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	T
Lycopodium annotinum																						
Lycopodium clavatum																						
Lycopodium complanatum																						
Lycopodium lucidulum																						
Lycopodium obscurum																						
Lycopodium tristachyum																						
Lycopus americanus																						
Lycopus uniflorus																						
Lysimachia ciliata																						
Lysimachia quadrifolia																						
Maianthemum canadense	✓						✓						✓	✓	✓	✓	✓	✓	✓	✓	✓	9 45
Malaxis unifolia																						
Medeola virginiana																						
Melampyrum lineare	✓																					1
Menispermum canadense																						
Milium effusum																						
Mitchella repens	✓							✓														1 5
Mitella diphylla																						
Mitella nuda																						
Monarda fistulosa																						
Moneses uniflora																						
Monotropa hypopithys																						
Monotropa uniflora																						
Nemopanthus mucronata																						
Onoclea sensibilis																						
Orchis spectabilis																						
Oryzopsis asperifolia	✓	✓			✓			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	15 45
Oryzopsis racemosa																						
Osmorhiza claytoni																						
Osmunda claytoniana					✓																	
Osmunda cinnamomea																						
Osmunda regalis																						
Oxalis montana																						
Panax quinquefolius																						
Panax trifolius																						
Panicum latifolium																						
Parietaria pensylvanica																						
Parthenocissus inserta																						
Pedicularis lanceolata																						
Phlox divaricata																						
Phlox pilosa																						
Phyrma leptostachya																						
Pilea pumila																						
Podophyllum peltatum																						
Polemonium reptans																						
Polygala paucifolia	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	11 55
Polygonatum canaliculatu																						
Polygonatum pubescens																						
Polypodium virginianum																						
Potentilla arguta																						
Potentilla simplex																						

Stand No. 3140

[illegible]

TABULATION FORM

NORTHERN PINE-HARDWOODS

Stand No. 3140

STATION NO.	P.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	T	
<i>Trientalis borealis</i>	✓							✓			✓				✓		✓	✓				7	36
<i>Trillium cernuum</i>																							
<i>Trillium grandiflorum</i>																							
<i>Uvularia grandiflora</i>																							
<i>Uvularia sessilifolia</i>	✓			✓		✓		✓			✓						✓					5	25
<i>Vaccinium angustifolium</i>	✓	✓	✓								✓											3	15
<i>Vaccinium myrtilloides</i>																							
<i>Veronicastrum virginicum</i>																							
<i>Viburnum acerifolium</i>																							
<i>Viburnum rafinesquianum</i>																							
<i>Viburnum lentago</i>																							
<i>Viola adunca</i>																							
<i>Viola blanda</i>																							
<i>Viola canadensis</i>																							
<i>Viola conspersa</i>																							
<i>Viola cucullata</i>	✓					✓	✓															2	10
<i>Viola pennsylvanica</i>																							
<i>Viola incognita</i>	✓									✓												1	5
<i>Viola pallens</i>																							
<i>Viola pubescens</i>	✓																✓					1	5
<i>Viola renifolia</i>																							
<i>Vitis aestivalis</i>																							
<i>Vitis riparia</i>																							
<i>Waldsteinia fragarioides</i>																							
<i>Xanthoxylum americanum</i>																							
<i>Zizia aurea</i>																							
Additional species:																							
- <i>Microstylis unifolia</i>	✓									✓												1	5
- <i>Vaccinium canad.</i>	✓											✓										1	5
- <i>Amelanchier canad.</i>	✓	✓				✓																2	10

215
424
436

PRESENCE LIST

NORTHERN PINE-HARDWOODS

STAND NO. 3140

~~Abies balsamea~~
~~Acer rubrum~~
~~Acer saccharum~~
~~Acer spicatum~~
~~Amelanchier sp.~~
~~Betula lutea~~
~~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~~
~~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~~
~~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 pensylvanica~~
~~Caulophyllum thalictroides~~
~~Celastrus scandens~~
~~Chimaphila umbellata~~
~~Chionogenes 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~~
~~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~~
~~Lycopodium lucidulum~~
~~Lycopodium obscurum~~
~~Lycopodium tristachyum~~
~~Lycopus americanus~~
~~Lycopus uniflora~~
~~Lysimachia quadrifolia~~
~~Maianthemum canadense~~

✓ 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
 Phyrma leptostachya
 Podophyllum peltatum
 Polemonium reptans
 ✓ Polygala pauciflora
 Polygonatum commutatum
 Polygonatum pubescens
 Potentilla simplex
 Prenanthes alba
 Pteretis 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
 ✓ Streptopus roseus
 Taxus canadensis
 ✓ Thalictrum dioicum
 Tiarella cordifolia
 ✓ 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:

cynoglossum boreale
 microstylis unifolia.
 anemone cylindrica. ?