

Site 3077. 1950-06-13

[s.l.]: [s.n.], 1950-06-13

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STAND RECORD

FORESTS

Stand No.

3077

Name:

Locality:

County: Marinette

T: 34N R: 21E Sec: 22 NW 1/4

Date: June 13, 1950

Observers: Cottam, Randall, Terner, Brown, McIntosh

Size of Stand: 20 acres

Size of Area Sampled: whole

Forest Type: Pine

Soil Type: Coloma Fine Sand

Topography: slightly rolling

Slope: Directions

Condition of Stand:

Slight Improvement cutting - Spotty under growth
of corylus, red maple. - No large trees.

Open Grown Trees: None

% Canopy: 65

Stumps: Red & white pine

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									

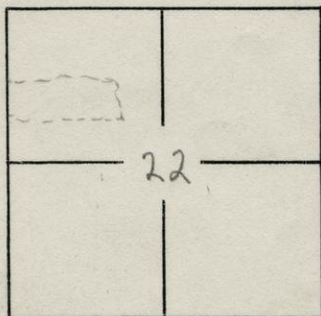
DEPTH

CHARACTERISTICS (Color, Texture, Structure, etc.)

A ₀	2"	Mod humus
A ₁	1"	
A ₂	1.5"	Not clearly marked
B		Reddish sand

Parent Material:

Map:



Prob = .95

POINT RECORD TREES

NORTHERN PINE-HARDWOODS

Stand No. 3077

STATION NO.	1	2	3	4	5	6	7	8	9	10
Abies balsam				1		1	1	1	1	
Acer rubrum	3	3	2	1	2	2	1	1		3
A. sacchar.										
A. spicatum										
Betula lut.										
B. papyrif										
Carpinus car										
Fagus gran										
Ostrya virg										
Picea glau										
Pinus Bank										
P. resinosa					1				1	1
P. Strobus	63, 116 125, 35	65, 65 ✓ 1160	105, 28 75, 15	160, 85 85, 59	160, 55 ✓ 100, 110	60, 160 40, 23	15, 160 ✓ 30, 28	110, 50 24, 50	50, 150 ✓ 109, 75	35, 18 25, 20
Populus bals										
P. grand										
P. trem										
Prunus pen.					✓					
Quercus ell										
Q. rubra		165		1			1			
Tilia amer										
Tsuga can										
Thuja occ										
Ulmus amer										
U. fulva										
Prunus										
Distance	10'	7	17.5	15.5'	15	13	14	7.5	11	13

$$\begin{array}{r} 39.20 \\ 10.10 \end{array}$$

POINT RECORD TREES

NORTHERN PINE-HARDWOODS

Stand No. 3077

STATION NO.	1	2	3	4	5	6	7	8	9	20
Abies balsam										
Acer rubrum	1	2	2	1				3	1	1
A. sacchar.										
A. spicatum										
Betula lut.										
B. papyrif							1			
Carpinus car										
Fagus gran										
Ostrya virg										
Picea glau										
Pinus Bank										
P. resinosa	1		1	1		45	75			
P. Strobus	75	55	30	100	21	10	60	1348	152	38
Populus bals										
P. grand										
P. trem		40								
Prunus pen.										
Quercus ell		35	65		20					
Q. rubra	30							3		
Tilia amer										
Tsuga can										
Thuja occ										
Ulmus amer										
U. fulva										
Prunus	1		1			2				2
Distance	11	8	12	18	17	8	2 1/2	7 1/2	20 1/2	16

$$\frac{31}{10} \frac{17}{10}$$

POINT RECORD TREES

NORTHERN PINE-HARDWOODS

Stand No. 3077

STATION NO.	21	22	23	24	25	26	27	28	29	30
Abies balsam				1		1	1			
Acer rubrum	2	2	1		1	1		1	1	3
A. sacchar.										
A. spicatum										
Betula lut.										
B. papyrif					1					
Carpinus car										
Fagus gran										
Ostrya virg										
Picea glau										
Pinus Bank										
P. resinosa						95,	35 (12)	(16)	(40)	2(15)
P. Strobus	40,150 (24)(65)	50,40 (45)(45)	35,55 (40)(45)	70,30 (70)(40)	210,185 (75)(45)	110 (27)	22 (130)	230, 35 (48)	14,37 (55)	120 (13)
Populus bals										
P. grand										
P. trem										
Prunus pen.										
Quercus ell										
Q. rubra										
Tilia amer										
Tsuga can										
Thuja occ										
Ulmus amer										
U. fulva										
Distance	12	17	6	7	21	16.5	17.5	21.5	14	11

34.18
10 10

POINT RECORD TREES

NORTHERN PINE-HARDWOODS

Stand No. 3077

STATION NO.	31	32	33	34	35	36	37	38	39	40
Abies balsam										
Acer rubrum			1	1	2	1				1
A. sacchar.										
A. spicatum										
Betula lut.										1
B. papyrif			(33)							
Carpinus car										
Fagus gran										
Ostrya virg										
Picea glau										
Pinus Bank										
P. resinosa				1		1		(23)	1	(85)
P. Strobis	32 200 5420	1611 18 H 13	43 33 195	128 138 (26158)	145 138 (13824)	2915 4270	3342 15030	8024 145	17524 14163	(65) 2
Populus bals										
P. grand										
P. trem			1		2					17
Prunus pen.										
Quercus ell										
Q. rubra										70
Tilia amer										
Tsuga can										
Thuja occ										
Ulmus amer										
U. fulva										
Prunus ser			2		1					
Distance	7	11 1/2	10 1/2	15	8 1/2	10 1/2	11 1/2	10	6 1/2	20 1/2

$$\frac{3518}{109}$$

Northern Pine-Hardwoods

Station Number: 3077

AVE. DIST. BTW N TREES:

AVE B. A.:

TREES/ACRE:

DOM./ACRE:

148

72.6

230

16,698

white
birch

3077

33

33 *

prop. term

3077

17

17 ①

40

57 *

blackrock

3077

28

28 ①

35

65

1 28 *

1 54 *

Totals 4/Nov
3077

33

541

9672

57

128

435

10866 *

Totals 2 trees
3077

205
5442
17
28
120
5812*

red oak
3077

50

70

1 20 (1)

50

1 60

1 05

4 35 *

red pine

3077

75

95

35

205

45

112

16

40

15

23

85

541 *

Distances.

3077

1 00
70
1 75
1 55
1 50
1 30
1 40
75
1 10
1 30
1 10
80
1 20
1 80
1 70
80
2 15
75
2 05
1 60
1 20
1 70
60
70
2 10
1 65
1 75
2 15
1 40
1 10
80
1 15
1 05
1 50
85
1 05
1 15
1 00
65
2 05
5 1 90

white pine

3077

	1 25	
	35	
	65	
	65	
	1 05	
	75	
	1 60	
	85	
	1 60	
	55	
	60	
	1 60	
	15	
	1 60	
	1 10	
	50	
	50	
	1 50	
	35	
	18	
	75	
	32	
	55	
	50	
	50	
	1 30	
	55	
	21	
	1 10	
	95	
	60	
	18	
	40	
	1 15	
	70	
	38	
	28	
	40	
	1 50	
	50	
	40	
	35	
	55	
	70	
	30	
	2 10	
	1 85	
	1 10	
	22	
	2 30	
	35	
	14	
	37	
	1 20	
	1 50	
	32	
	2 00	
	16	
	14	
	43	
	23	
	1 25	
	20	
	40	
	1 45	
	29	
	15	
	33	
	42	
	80	
	27	
	1 75	
	20	
5 4	42 (1)	
	65	
	16	
	1 60	
	28	
	15	
	18	
	50	
	1 60	
	1 10	
	40	
	23	
	30	
	28	
	24	
	1 50	
	1 00	
	75	
	50	
	80	
	80	
	20	
	40	
	17	
	23	
	60	
	55	
	50	
	2 90	
	90	
	1 40	
	1 20	
	50	
	47	
	24	
	65	
	45	
	45	
	40	
	45	
	70	
	40	
	75	
	45	
	25	
	27	
	1 30	
	40	
	55	
	13	
	32	
	2 00	
	32	
	2 00	
	24	
	20	
	18	
	19	
	95	
	26	
	1 50	
	38	
	2 30	
	42	
	70	
	1 50	
	1 20	
	45	
	14	
	16	
	65	
9 6	72	

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No.
Quadrat No.

3077

/

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

✓ Pedicularis canadensis
 ✓ Lathyrus ochroleucus

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No. 3077
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
Coralorrhiza 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

Carex pennsylvanica

Lathyrus ochrobaceus
Eriogonum sp.

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No. 3077
Quadrat No. 3

Actaea pachypoda	✓ <i>Fragaria virginiana</i>	<i>Potentilla simplex</i>
Actaea rubra	<i>Galium lanceolatum</i>	<i>Prenanthes alba</i>
Adiantum pedatum	<i>Galium triflorum</i>	✓ <i>Pteridium aquilinum</i>
Allium tricoccum	✓ <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>sp.</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>
✓ <i>Sparganium angustifolium</i>	✓ <i>Pedicularis canad.</i>	
✓ <i>Geranium</i>		

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No. 3077
Quadrat No. 4

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

☒ *Lathyrus ochr.*

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No. 3077
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

✓ *hathyrus ochr.*

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No. 3077
Quadrat No. 6

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* sp.
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

Prunus virginiana

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No.
Quadrat No. 73077

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

Chathymus ochr.
 ✓ Pedicularis Can.

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No. 3077
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

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No. 3077
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*
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

Lathyrus ochroleucus

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. 3077
Quadrat No. 90

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

✓ raspberry
✓ amelanchier seedling

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No. 3071
Quadrat No. 11

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. 3077
Quadrat No. 12

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
Cornus femina

Lathraea

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No. 3077
Quadrat No. 13

<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>

Cornus femina

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No. 3077
Quadrat No. 14

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

Lathyrus ochr.
Sedum sp.

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No. 3077
Quadrat No. 15

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

Lathyrus ochr.

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No. 3077
Quadrat No. 16

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. 3077
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>

Lathyrus ven.

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No. 307 /
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

Satherus ochr

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No. 3077
Quadrat No. 19

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

Shizachne

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No. 3077
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

Amelanchier

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

Vac. Can.

TABULATION FORM

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:																						
<i>Actaea pachypoda</i>																						
<i>Actaea rubra</i>																						
<i>Adenocaulon bicolor</i>																						
<i>Adiantum pedatum</i>																						
<i>Agrimonia gryposepala</i>																						
<i>Allium tricoccum</i>																						
<i>Alnus incana</i>																						
<i>Alnus rugosa</i>																						
<i>Amphicarpa bracteata</i>																						
<i>Anemone canadensis</i>	✓																					1
<i>Anemone cylindrica</i>																						
<i>Anemone quinquefolia</i>	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	17.85
<i>Antennaria sp.</i>	✓																					1
<i>Apocynum androsaemifolium</i>	✓		✓	✓																		1.5
<i>Apocynum cannabinum</i>																						
<i>Aquilegia canadensis</i>	✓	✓			✓	✓									✓							3.15
<i>Aralia hispida</i>																						
<i>Aralia nudicaulis</i>	✓					✓	✓	✓								✓	✓	✓	✓	✓	✓	7.35
<i>Aralia racemosa</i>	✓																					
<i>Arctostaphylos uva-ursi</i>																						
<i>Arisaema atrorubens</i>																						
<i>Asarum canadense</i>																						
<i>Asclepias exaltata</i>	✓																					1
<i>Aster cordifolius</i>																						
<i>Aster lateriflorus</i>																						
<i>Aster macrophyllus</i>	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	19.95
<i>Aster prenanthoides</i>																						
<i>Aster sagittifolius</i>																						
<i>Aster shortii</i>																						
<i>Aster umbellatus</i>																						
<i>Athyrium filix-femina</i>																						
<i>Athyrium thelypteroides</i>																						
<i>Boehmeria cylindrica</i>																						
<i>Botrychium lanceolatum</i>																						
<i>Botrychium matricariaefolium</i>																						
<i>Botrychium virginianum</i>																						
<i>Brachyelytrum erectum</i>																						
<i>Bromus purgans</i>																						
<i>Campanula americana</i>																						
<i>Campanula rotundifolia</i>																						
<i>Cardamine pensylvanica</i>																						
<i>Carex albursina</i>																						
<i>Carex pensylvanica</i>	✓		✓																			1.5
<i>Carex plantaginea</i>																						
<i>Caulophyllum thalictroides</i>																						
<i>Ceanothus ovatus</i>																						
<i>Celastrus scandens</i>																						
<i>Chimaphilia umbellata</i>	✓									✓												1.5
<i>Cicuta maculata</i>																						
<i>Circaea alpina</i>																						
<i>Circaea quadrisulcata</i>																						

TABULATION FORM

NORTHERN PINE-HARDWOODS

Stand No. 3077

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>Cirsium altissimum</i>																							
<i>Claytonia caroliniana</i>																							
<i>Claytonia virginica</i>																							
<i>Clematis verticillaris</i>																							
<i>Clintonia borealis</i>																							
<i>Comandra richardsiana</i>	✓			L																		1	5
<i>Comptonia peregrina</i>																							
<i>Convolvulus spithameus</i>	✓																					1	
<i>Coptis groenlandica</i>																							
<i>Corallorhiza maculata</i>																							
<i>Corallorhiza striata</i>																							
<i>Corallorhiza trifida</i>																							
<i>Coreopsis palmata</i>																							
<i>Cornus alternifolia</i>																							
<i>Cornus canadensis</i>	✓																						
<i>Cornus foemina</i>	✓												L	L								2	10
<i>Cornus rugosa</i>																							
<i>Corydalis sp.</i>																							
<i>Corylus americana</i>																							
<i>Corylus cornuta</i>	✓				L	L	L	L				L		L	L	L		L		L		10	50
<i>Cryptotaenia canadensis</i>																							
<i>Cynoglossum boreale</i>																							
<i>Cypripedium acaule</i>																							
<i>Cypripedium parviflorum</i>																							
<i>Cypripedium pubescens</i>																							
<i>Cystopteris fragillis</i>																							
<i>Danthonia spicata</i>																							
<i>Dentaria diphylla</i>																							
<i>Desmodium glutinosum</i>																							
<i>Desmodium nudiflorum</i>																							
<i>Dicentra canadensis</i>																							
<i>Dicentra cucullaria</i>																							
<i>Diervilla lonicera</i>	✓				L																	1	5
<i>Dirca palustris</i>																							
<i>Dryopteris boottii</i>																							
<i>Dryopteris cristata</i>																							
<i>Dryopteris goldiana</i>																							
<i>Dryopteris disjuncta</i>																							
<i>Dryopteris phegopteris</i>																							
<i>Dryopteris spinulosa</i>																							
<i>Epifagus virginiana</i>																							
<i>Epigaea repens</i>	✓																					1	
<i>Equisetum arvense</i>																							
<i>Equisetum hyemale</i>																							
<i>Equisetum sylvaticum</i>																							
<i>Erigeron philadelphicus</i>	✓			L																		1	5
<i>Erythronium albidum</i>																							
<i>Erythronium americanum</i>																							
<i>Eupatorium rugosum</i>																							
<i>Festuca obtusa</i>																							
<i>Fragaria virginiana</i>	✓			L				L									L					3	15

Stand No. 3077

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>Fragaria vesca</i>																						
<i>Galium aparine</i>																						
<i>Galium boreale</i>																						
<i>Galium circaezans</i>																						
<i>Galium concinnum</i>																						
<i>Galium lanceolatum</i>																						
<i>Galium triflorum</i>																						
<i>Gaultheria procumbens</i>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	1260
<i>Gaylussacia baccata</i>	✓																					
<i>Geranium maculatum</i>																						
<i>Gerardia pedicularia</i>																						
<i>Geum canadense</i>																						
<i>Geum rivale</i>																						
<i>Gnaphalium obtusifolium</i>																						
<i>Goodyera oblongifolia</i>																						
<i>Goodyera pubescens</i>																						
<i>Goodyera repens</i>																						
<i>Habenaria bracteata</i>																						
<i>Habenaria orbiculata</i>	✓																					1
<i>Hackelia virginiana</i>																						
<i>Halenia deflexa</i>																						
<i>Hamamelis virginiana</i>																						
<i>Helianthus strumosus</i>	✓																					1
<i>Hepatica acutiloba</i>																						
<i>Hepatica americana</i>																						
<i>Heuchera richardsonii</i>																						
<i>Hieracium canadense</i>																						
<i>Hieracium scabrum</i>																						
<i>Hydrophyllum virginianum</i>																						
<i>Hystrix patula</i>																						
<i>Ilex verticillata</i>																						
<i>Impatiens biflora</i>																						
<i>Impatiens pallida</i>																						
<i>Isopyrum biternatum</i>																						
<i>Krigia biflora</i>																						
<i>Lactuca canadensis</i>																						
<i>Laportea canadensis</i>																						
<i>Lathyrus ochroleucus</i>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	1155
<i>Lathyrus venosus</i>																						
<i>Ledum groenlandicum</i>																						
<i>Lilium michiganense</i>																						
<i>Linnaea borealis</i>	✓																					1
<i>Lithospermum canescens</i>																						
<i>Lobelia inflata</i>																						
<i>Lonicera canadensis</i>																						
<i>Lonicera hirsuta</i>	✓																					1
<i>Lonicera oblongifolia</i>																						
<i>Lonicera prolifera</i>																						
<i>Lupinus perennis</i>																						
<i>Luzula acuminata</i>																						
<i>Luzula multiflora</i>																						

TABULATION FORM

NORTHERN PINE-HARDWOODS

Stand No. 3077

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	✓																					1
Lycopodium complanatum	✓																					1
Lycopodium lucidulum																						
Lycopodium obscurum	✓													✓		✓				✓		3 15
Lycopodium tristachyum																						
Lycopus americanus																						
Lycopus uniflorus																						
Lysimachia ciliata																						
Lysimachia quadrifolia																						
Maianthemum canadense	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	17 75
Malaxis unifolia																						
Medeola virginiana																						
Melampyrum lineare																						
Menispermum canadense																						
Milium effusum																						
Mitchella repens	✓	✓		✓	✓	✓	✓	✓	✓					✓	✓			✓	✓	✓	✓	12 60
Mitella diphylla	✓																✓					1 5
Mitella nuda																						
Monarda fistulosa																						
Moneses uniflora																						
Monotropa hypopithys																						
Monotropa uniflora																						
Nemopanthus mucronata																						
Onoclea sensibilis																						
Orchis spectabilis																						
Oryzopsis asperifolia	✓		✓	✓						✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	9 45
Oryzopsis racemosa sp.	✓					✓																1 5
Osmorhiza claytoni	✓																✓					1 5
Osmunda claytoniana					✓																	
Osmunda cinnamomea																						
Osmunda regalis																						
Oxalis montana																						
Panax quinquefolius																						
Panax trifolius																						
Panicum latifolium	✓																					1
Parietaria pensylvanica																						
Parthenocissus inserta																						
Pedicularis lanceolata	✓																					1
Phlox divaricata																						
Phlox pilosa																						
Phyrma leptostachya																						
Pilea pumila																						
Podophyllum peltatum																						
Polemonium reptans																						
Polygala paucifolia	✓			✓				✓						✓	✓		✓					5 25
Polygonatum canaliculatu																						
Polygonatum pubescens	✓					✓																1 5
Polypodium virginianum																						
Potentilla arguta																						
Potentilla simplex	✓																					1

390

[illegible]

Stand No. 3077

$$\begin{array}{r} 423 \\ 315 \\ \hline 738 \\ \times \\ 299 \\ \hline 454 \\ 335 \\ \hline 738 \end{array}$$

PRESENCE LIST

NORTHERN PINE-HARDWOODS

STAND NO. 3077

~~Abies balsamea~~
~~Acer rubrum~~
 Acer saccharum
 Acer spicatum
~~Amelanchier sp.~~
 Betula lutea
~~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
~~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 phytolaccoides~~
 Aster cordifolius
 Aster lateriflorus
~~Aster macrophyllus~~
 Aster prenanthoides
 Aster sagittifolius
 Aster shortii
 Aster umbellatus
 Athyrium angustum
 Aureolaria pedicularia
 Boehmeria cylindrica
 Botrychium virginianum
 Brachyelytrum erectum
 Bromus purgans
 Campanula americana
 Carex albursina
~~Carex pensylvanica~~
 Caulophyllum thalictroides
 Celastrus scandens
~~Chimaphila umbellata~~
 Chiogenes hispida

Circaea alpina
 Circaea latifolia
 Claytonia caroliniana
 Claytonia virginiana
 Clintonia borealis
~~Convolvulus spithameus~~
 Coptis trifolia
 Corallorrhiza maculata
 Corallorrhiza striata
 Cornus alternifolia
~~Cornus canadensis~~
 Cornus femina
 Cornus rugosa
 Corylus americana
~~Corylus cornuta~~
 Cryptotaenia canadensis
 Cypridium acaule
 Cypridium 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 circaeans
 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
 Lycopodium americanus
 Lycopodium 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:

Viola adunca
 Quercus velutina.
 antennaria
 Erigeron philadelphicus
 Panicum latifolia.
 Habenaria orbiculata.
 Sanicula marilandica.

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 1455.....
Abbreviations in the data sheets refer to the following species:

<i>Alectoria nidulifera</i>	<i>Parmelia saxatilis</i>	(Bryophytes)
<i>Allarthonia caesia</i>	<i>Parmelia subaurifera</i>	
<i>Anaptychia palmatula</i>	<i>Parmelia subquercifolia</i>	<i>Amblystegium varium</i>
<i>Anaptychia speciosa</i>	<i>Parmelia sulcata</i>	<i>Anomodon attenuatus</i>
<i>Arthonia radiata</i>	<i>Parmelia trichotera</i>	<i>Anomodon minor</i>
<i>Bacidia chlorococca</i>	<i>Parmeliopsis ambigua</i>	<i>Anomodon rostratus</i>
<i>Bacidia fuscorubella</i>	<i>Parmeliopsis hyperopta</i>	<i>Anomodon tristis</i>
<i>Bacidia</i> sp.	<i>Parmeliopsis placorodia</i>	<i>Bazzania trilobata</i>
<i>Buellia punotata</i>	<i>Peltigera canina</i>	<i>Brachythecium</i> sp.
<i>Buellia stillingiana</i>	<i>Pertusaria</i> sp.	<i>Brotherella recurvans</i>
<i>Caloplaca aurantiaca</i>	<i>Physcia aipolia</i>	<i>Campyllum hispidulum</i>
<i>Caloplaca cerina</i>	<i>Physcia ascendens</i>	<i>Chamberlainia acuminata</i>
<i>Caloplaca</i> sp.	<i>Physcia ciliata</i>	<i>Dicranum flagellare</i>
<i>Candelaria concolor</i>	<i>Physcia grisea</i>	<i>Dicranum montanum</i>
<i>Candelaria fibrosa</i>	<i>Physcia millegrana</i>	<i>Dicranum</i> sp.
<i>Cetraria atlantica</i>	<i>Physcia orbicularis</i>	<i>Entodon</i> sp.
<i>Cetraria ciliaris</i>	<i>Physcia syncolla</i>	<i>Eurhynchium serrulatum</i>
<i>Cetraria fendleri</i>	<i>Physcia tribacoides</i>	<i>Eurhynchium strigosum</i>
<i>Cetraria oakesiana</i>	<i>Pyrenula leucoplaca</i>	<i>Frullania asagrayana</i>
<i>Cetraria pinastri</i>	<i>Pyrenula nitida</i>	<i>Frullania bolanderi</i>
<i>Cladonia botrytes</i>	<i>Pyxine soorediata</i>	<i>Frullania eboracensis</i>
<i>Cladonia cenotea</i>	<i>Ramalina fastigiata</i>	<i>Heterophyllum</i>
<i>Cladonia chlorophaea</i>	<i>Ramalina pollinaria</i>	haldanianum
<i>Cladonia coniocraea</i>	<i>Rinodina halei</i>	<i>Hypnum reptile</i>
<i>Cladonia cristatella</i>	<i>Rinodina papillata</i>	<i>Hypnum</i> sp.
<i>Cladonia verticillata</i>	<i>Rinodina</i> sp.	<i>Jamesoniella autumnalis</i>
<i>Collema subfurvum</i>	<i>Trypethelium virens</i>	<i>Leskea</i> sp.
<i>Conotrema urceolatum</i>	<i>Usnea</i> sp.	<i>Leucodon sciuroides</i>
<i>Evernia mesomorpha</i>	<i>Xanthoria fallax</i>	<i>Lindbergia brachyptera</i>
<i>Graphis scripta</i>	<i>Xanthoria polycarpa</i>	var. austinii
<i>Lecanora pallida</i>		<i>Lophocolea heterophylla</i>
<i>Lecanora subfusca</i>		<i>Mnium cuspidatum</i>
<i>Lecanora varia</i>		<i>Mnium spinulosum</i>
<i>Lecidea berengeriana</i>		<i>Neckera pennata</i>
<i>Lecidea nylanderii</i>		<i>Orthotrichum</i> sp.
<i>Lecidea vernalis</i>		<i>Plagiochila asplenioides</i>
<i>Lepraria aeruginosa</i>		<i>Plagiothecium</i> sp.
<i>Leptorhaphis epidermidis</i>		<i>Platygyrium repens</i>
<i>Le sym</i> = unknown crustose		<i>Porella platy-</i>
<i>Lobaria pulmonaria</i>		phylloidea
<i>Lobaria quercizans</i>		<i>Ptilidium pulcherrimum</i>
<i>Normandina pulchella</i>		<i>Pylasia</i> sp.
<i>Ochrolechia pallescens</i>		<i>Radula complanata</i>
<i>Opegrapha varia</i>		<i>Tetraphis pellucida</i>
<i>Parmelia andreana</i>		<i>Thuidium delicatulum</i>
<i>Parmelia aurulenta</i>		<i>Ulota crispa</i>
<i>Parmelia borrieri</i>		
<i>Parmelia caperata</i>		
<i>Parmelia cetrarioides</i>		
<i>Parmelia crinita</i>		
<i>Parmelia physodes</i>		
<i>Parmelia rudecta</i>		

No. trees	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	Tl ame	Ts can	Ul ame	Total	Frequency
Al nid									1										1	3
An spe																			1	3
Ar imp								1							1				1	3
Ba chl								3	35										38	95
Bu sti									4										4	10
Ce atl									6										6	15
Ce cil									18										18	45
Cr neg								1	29										30	75
Ev mes									23										23	58
Le sub									23										23	58
Le sym									7										7	18
Le var									7										7	18
Li ver									2										2	5
Pa aur																			1	3
Pa cap								2	35						1				38	95
Pa phy									20										20	50
Pa rud									21										21	53
Pa s-a									3										3	8
Pa s-q															1				1	3
Pe mul sp									4										4	10
Pe pus									3										3	8
Px sor															1				1	3
Us con									4										4	10
Us fle sp									6										6	15
Pa sul									21						1				22	55
Li nyl									1										1	3
								7	266						6				279	
Di mon									1										1	3
Fr ebo									1						1				2	5
Pl rep									4										4	10
Pt pul									1										1	3
Ul cri								0	7						1				1	3
															2				9	

No. trees	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
Ba chl								3	14										17	43
Ce atl									4										4	10
Ce cil									1										1	3
Ce oak									1										1	2
Ce pin									1										1	3
Cl bot									1										1	3
Cl chl									24						1				25	63
Cl con								2	32						1				35	88
Cl cri								2	10										12	30
Cr neg								2	19						1				22	55
Ev mes									8										8	20
Gr scr									3										3	8
Le sub									5										5	13
Le var								1	2										3	8
Li nyl								1											1	3
Oc pal									2										2	5
Pa cap								32	32										32	80
Pa phy									18										18	45
Pa rud									11										11	28
Pa sax									1										1	3
Pa sul								1	18										19	48
Us com sp.								1	2										3	8
								13	20						3				22	55
Di fla									4										4	10
Di mon									23						1				24	60
Di sp.									2										2	5
En sp.															1				1	3
Hy rep								1	7						1				9	23
Ja aut									3										3	8
Lo het								1	1										2	5
Pl rep									2										2	5
Pt pul									35										35	88
								2	11						3				82	200