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Site 3082: Marinette County, Township 35N, Range 20E, Section 16. 1950-06-15

[s.l.]: [s.n.], 1950-06-15

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STAND RECORD

FORESTS

Stand No. 3082

Name:

County: Marinette Co

Date: June 15, 1950

Size of Stand: 40

Forest Type: Jack Pine,

Topography: Rolling

Locality: Amberg Towing Park

T: 35N

R: 20E

Sec: 16

SE 1/4

Observers: Cottam (etal)

Size of Area Sampled: 20 acres

Soil Type: Vilas Fine Sand

Slope:

Directions

Condition of Stand:

about 50 years - a few large white and red
Pines older than this found in one portion of the stand.
Most of Area quite undisturbed currently.

Open Grown Trees:

% Canopy: 45

Stumps: Boring 5

1. Jack Pine 52

4. White Pine 42

7.

10.

2. L.T. Aspen 49

5.

8.

11.

3. White Spruce 43

6.

9.

12.

Soil Data:

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

DEPTH

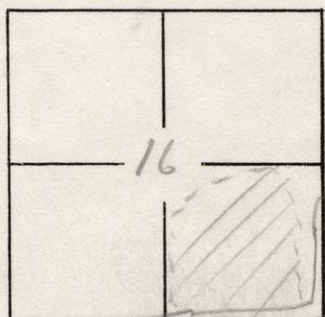
CHARACTERISTICS (Color, Texture, Structure, etc.)

A ₀	1/2 - 1 1/2	Mod. Humus.
A ₁	3/4	
A ₂	1	Greyish
B		Reddish fine sand

Parent Material:

Map:

4, 5, 6, Film 2-



Prob = .65

TREE DATA SUMMARY SHEET

Northern Pine-Hardwoods

Prob. 65

(2 trees)
Station Number: 3082

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	1	1	1			43			1		1.8	1.3	1.2	4.3	30
Acer rubru	1	1	1			202	4	15.5	6		1.8	1.3	0.6	3.7	22
A. sacchar															
A. spicatu															
Betula lut															
B. papyrif	1	1	1			15	10	6.5	3		1.8	1.3	0.4	3.5	18
Carpinus c															
Fagus gran															
Ostrya vir															
Picea glau	2	3	3			107	5	3.2			3.6	3.8	3.0	10.4	64
Pinus Bank	30	51	51			225	3	1.9			54.5	63.8	62.8	181.1	181
P. resinosa	8	9	9			293	46	29.7	1		14.5	11.3	8.2	34.0	102
P. Strobus	11	13	9	4		809	51	32.9	1		20.0	16.3	22.6	58.9	295
Populus ba															
P. grandid							1	0.6							
P. tremulo	1	1	1			45	9	5.8	1		1.8	1.3	1.3	4.4	9
Prunus pen							1	0.6							
Quercus el															
Q. rubra									2						
Tilia amer															
Tsuga cana															
Thuja occi															
Ulmus amer															
U. fulva															
Prunus ser							4	2.6	1						
Quercus el							1	0.6	2						
	55	80	76	4		3582	155	99.9			99.8	100.4	100.1	300.3	721

AVE. DIST. BTW'N TREES:

10.2

AVE B. A.:

44.8

TREES/ACRE:

483

DOM./ACRE:

21,638

650
750

POINT RECORD TREES

NORTHERN PINE-HARDWOODS

Stand No. 3082

STATION NO.	1	2	3	4	5	6	7	8	9	10
<i>Abies balsam</i>										
<i>Acer rubrum</i>	✓	✓	✓							20
<i>A. sacchar.</i>										
<i>A. spicatum</i>										
<i>Betula lut.</i>										
<i>B. papyrif</i>		✓ 2	✓		✓				1	
<i>Carpinus car</i>										
<i>Fagus gran</i>										
<i>Ostrya virg</i>										
<i>Picea glau</i>										
<i>Pinus Bank</i>	21 (40, 20)	25, 42 (35, 40)	22, 40 (32, 42)	30, 60 (26, 38)	45, 32 (40, 43)	65, 60 (29, 44)		34	40, 75 (55)	80, 75 (75)
<i>P. resinosa</i>	1						27 (50)		2 (14)	3 (18)
<i>P. Strobus</i>	2	1		4	3		23, 30 (3)	22, 0 (57)	2	
<i>Populus bals</i>										
<i>P. grand</i>										
<i>P. trem</i>	45	✓	1	4						
<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>										
Distance	14.5	10	9.5	9.5	8	18	6	9.5	9.5	9

$$\frac{29}{9} \frac{14}{8}$$

POINT RECORD TREES

NORTHERN PINE-HARDWOODS

Stand No. 3082

STATION NO.	11	12	13	14	15	16	17	18	19	20
Abies balsam				43						✓
Acer rubrum	✓ 2		2	1					✓ 3	✓
A. sacchar.										
A. spicatum										
Betula lut.										
B. papyrif	2						1	4		
Carpinus car										
Fagus gran										
Ostrya virg										
Picea glau								24, 45		30 (47) 12 2
Pinus Bank	38, 35 (19) (16)	70, 60 (18) (70)	40, 22 (38)	(25)	50, 45 (26)	65, 16 (45)				
P. resinosa		3			13	16	17 (27)	✓ (60)	45 (40) 55 (35) 1	80 7
P. Strobus			(17)	✓ 19 (40)		2	2 (10)	1		1
Populus bals										
P. grand										
P. trem				1				(45)		
Prunus pen.										
Quercus ell										
Q. rubra							✓			
Tilia amer										
Tsuga can										
Thuja occ										
Ulmus amer										
U. fulva										
Prunus americana		1		2						✓
Quercus alba group							✓			✓
Distance	10	7	10.5	15.5	5.5	10	7.5	11.5	14.5	9

$$\frac{189}{66}$$

POINT RECORD TREES

NORTHERN PINE-HARDWOODS

Stand No. 3082

STATION NO.	21	22	23	24	25	26	27	28	29	30
<i>Abies balsam</i>										
<i>Acer rubrum</i>	2		2			2	3		3	2
<i>A. sacchar.</i>			4			4				
<i>A. spicatum</i>										
<i>Betula lut.</i>										
<i>B. papyrif</i>									15	
<i>Carpinus car</i>										
<i>Fagus gran</i>										
<i>Ostrya virg</i>										
<i>Picea glau</i>					1					
<i>Pinus Bank</i>	(55)	50, 75 30	55 40, 65	25, 13 14, 45	45, 35 45	55, 35 60, 17	25, 17 45, 55	45, 60 70, 55	35 35	35, 55 30, 65
<i>P. resinosa</i>	25	1	12	3	1	1	1		(40)	
<i>P. Strobus</i>	17 (250)	1	1	(21)	1	3	18	3		1
<i>Populus bals</i>										
<i>P. grand</i>							1			
<i>P. trem</i>								3		
<i>Prunus pen.</i>								1		
<i>Quercus ell</i>										
<i>Q. rubra</i>										1
<i>Tilia amer</i>										
<i>Tsuga can</i>										
<i>Thuja occ</i>										
<i>Ulmus amer</i>										
<i>U. fulva</i>										
Distance	6	9'	16	6	12.5	10	8	14	14	7

32 15
10 9

POINT RECORD TREES

NORTHERN PINE-HARDWOODS

Stand No. 3082

STATION NO.	31	32	33	34	35	36	37	38	39	40
Abies balsam										
Acer rubrum										2
A. sacchar.										
A. spicatum										
Betula lut.										
B. papyrif										
Carpinus car										
Fagus gran										
Ostrya virg										
Picea glau					1					
Pinus Bank	65 ³⁸ (45)	40 ⁴⁸ (25)(56)	22 ²² (16)			35 ⁴⁰ (24)	33	32 ⁴⁷ (24)	50 ⁴² (33)(30)	48 ⁴³ (33)(34)
P. resinosa	(17)	3	3	2	(48) (30)	18 (140)	3	26 (26)	1	2
P. Strobus			108	2	190 (23)	16 (17)	(24)	26 (14)	12	2
Populus bals										
P. grand										
P. trem										
Prunus pen.										
Quercus ell										
Q. rubra										
Tilia amer										
Tsuga can										
Thuja occ										
Ulmus amer										
U. fulva										
Prunus serotina	1									
Quercus alba										1
Distance	4	12.5	18.5	9	12	12	8.5	14	6.5	11.5

$$\frac{24}{8} \frac{13}{8}$$

white bird
3089

15

15 (1)

15 *

white

spence

3082

24

45

38

1 070

47

12

1 66 *

Abies

3082

43

43 (1)

43 2

red
maple
3882

20

200

20*

Page 1000

3082

45

45 ①

45

90 *

Jack
pine

3082

21

25

42

22

40

30

60

45

32

65

60

40

75

80

65

38

40

48

22

35

80

33

32

50

42

48

13

30

40

65

14

45

45

60

17

45

55

70

55

35

30

65

38

35

60

70

40

22

50

65

16

22 50

40

20

35

40

32

42

26

38

40

43

29

44

34

55

50

75

55

25

13

45

55

65

17

45

60

35

35

55

19

16

18

70

38

85

45

26

45

42 52

43 42

distances
3082

1	45
1	00
	95
	95
	80
1	80
	60
	95
	95
	90
	40
1	25
1	85
	90
1	20
1	20
	85
1	40
	65
1	15
	60
	90
1	60
	60
1	25
1	00
1	40
1	40
	70
1	00
	70
1	05
1	55
	55
1	00
	75
1	15
1	45
	90
4	075

2 Trees

Totals

3082

43

20

15

107

2250

293

809

45

3582

red pine
3082

48
18
25
12
13
17
45
55
60
2 93 (.)
27
50
14
18
17
16
30
1 40 —
26
40
16
27
38
48
1 38 —
9 38 *

Totals

4 Trees

3 082

43
20

15

1 66

4 3 42

9 38

1 2 87

90

6 9 01 *

white
pine
3082

23
30
2 20 ✓
1 10 ✓
1 90 ✓
1 08 ✓
16
26
12
17
18
19
20
8 09 (C)
54
23
17
24
14
2 50 ✓
21
17
40
18
1 287 *

PRESENCE LIST

NORTHERN PINE-HARDWOODS

STAND NO. 3082

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 phytoecoides
 Aster cordifolius
 Aster lateriflorus
 Aster macrophyllus
 Aster prenanthoides
 Aster sagittifolius
 Aster shortii
 Aster umbellatus
 Athyrium angustum
 Aureolaria pedicularia
 Boehmeria cylindrica
 Botrychium virginianum
 Brachyelytrum erectum
 Bromus purgans
 Campanula americana
 Carex albursina
 Carex pensylvanica
 Caulophyllum thalictroides
 Celastrus scandens
 Chimaphila umbellata
 Chiogenes hispidula

Circaea alpina
 Circaea latifolia
 Claytonia caroliniana
 Claytonia virginiana
 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 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
 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	☒ Pyrola elliptica	Smilax herbacea
☒ Mitchella repens	☒ Pyrola rotundifolia	Smilax hispida
Mitella diphylla	Pyrola secunda	Solidago latifolia
Mitella nuda	Ranunculus abortivus	Solidago ulmifolia
Monarda fistulosa	Ranunculus recurvatus	Streptopus amplexifolius
Moneses uniflora	Ranunculus septentrionalis	Streptopus roseus
Monotropa uniflora	Rhus radicans	Taxus canadensis
☒ Myrica asplenifolia	Rhus typhina	Thalictrum dioicum
Onoclea sensibilis	Ribes americanum	Tiarella cordifolia
☒ Oryzopsis asperifolia	Ribes cynosbati	☒ Trientalis borealis
Osmorhiza claytoni	Ribes lacustre	Trillium cernuum
Osmunda cinnamomea	Ribes triste	Trillium grandiflorum
Osmunda claytoniana	Rubus idaeus	Uvularia grandiflora
Oxalis montana	Rubus parviflorus	Uvularia sessilifolia
Panax quinquefolia	Rubus hispidus	☒ Vaccinium angustifolium
Parietaria pennsylvanica	☒ Rubus - blackberry	☒ Vaccinium pennsylvanicum
Parthenocissus vitacea	Rubus - dewberry	Viburnum acerifolium
Pedicularis lanceolata	Rubus - raspberry	Viburnum affine
Phytolacca leptostachya	Sambucus canadensis	Viburnum lentago
Podophyllum peltatum	Sambucus pubens	Viola canadensis
Polemonium reptans	Sanguinaria canadensis	Viola cucullata
☒ Polygala pauciflora	☒ Sanicula gregaria	Viola incognita
Polygonatum commutatum	Schizachne purpurascens	Viola pallens
☒ Polygonatum pubescens	Scutellaria lateriflora	Viola pubescens
Potentilla simplex	Shepherdia canadensis	Vitis aestivalis
Prenanthes alba	☒ Smilacina racemosa	Vitis riparia
Pteris nodulosa	Smilacina stellata	☒ Waldsteinia fragarioides
☒ Pteridium aquilinum	Smilax ecirrhata	Zanthoxylum americanum

Additional Species:

Rosa

Salix

Carex penns.

Comandra umbellata

Viola adunca.

Melampyrum ?

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No.
Quadrat No. 1

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

Narrow leaved umbellum

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No. 3082
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
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*~~

Narrow leaved umbellata

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No. 3082
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*~~
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*~~

Narrow leaved (unknown)

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No.
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*~~

Narrow leaved unknown

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No. 3082
Quadrat No. 5

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

Carex pa.

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No. 3082
Quadrat No. 6

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

Harrow leaves unknown

Carex M.

Schizanthus

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No. 3082
Quadrat No. 7

<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. 3082
Quadrat No. 8

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

Carex pa

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No.
Quadrat No.3082
9

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

Carex pa.

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No.

Quadrat No.

3082

10

<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. 3082
Quadrat No. //

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

Fragaria virginiana
Galium lanceolatum
Galium triflorum
✓ *Gaultheria procumbens*
Gaylussacia baccata
Geranium maculatum
Geum canadense
Gnaphalium obtusifolium
Helianthemum sp.
Helianthus strumosus
Hepatica acutiloba
Hepatica americana
Impatiens biflora
Linnaea borealis
Lonicera oblongifolia
Lupinus perennis
Lycopodium annotinum
Lycopodium complanatum
Lycopodium lucidulum
Lycopodium obscurum
Lysimachia quadrifolia
✓ *Maianthemum canadense*
Mitchella repens
Mitella diphylla
Mitella nuda
Monotropa uniflora
Myrica asplenifolia
Onoclea sensibilis
Oryzopsis asperifolia
Osmorhiza claytoni
Oxalis montana
Phryma leptostachya
✓ *Polygala pauciflora*
Polygonatum commutatum
Polygonatum pubescens

✓ *Lycopodium clavatum*

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. 3082
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*

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No. 3082
Quadrat No. 13

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

Fragaria virginiana
Galium lanceolatum
Galium triflorum
✓ *Gaultheria procumbens*
Gaylussacia baccata
Geranium maculatum
Geum canadense
Gnaphalium obtusifolium
Helianthemum sp.
Helianthus strumosus
Hepatica acutiloba
Hepatica americana
Impatiens biflora
✓ *Linnaea borealis*
Lonicera oblongifolia
Lupinus perennis
Lycopodium annotinum
Lycopodium complanatum
Lycopodium lucidulum
Lycopodium obscurum
Lysimachia quadrifolia
✓ *Maianthemum canadense*
Mitchella repens
Mitella diphylla
Mitella nuda
Monotropa uniflora
Myrica asplenifolia
Onoclea sensibilis
Oryzopsis asperifolia
Osmorhiza claytoni
Oxalis montana
Phryma leptostachya
✓ *Polygala pauciflora*
Polygonatum commutatum
Polygonatum pubescens

Potentilla simplex
Prenanthes alba
✓ *Pteridium aquilinum*
Pyrola elliptica
Pyrola rotundifolia
Pyrola secunda
Ranunculus recurvatus
Rhus radicans
Ribes americanum
Rosa sp.
Rubus parviflorus
Rubus (blackberry)
Rubus (dewberry)
Sambucus pubens
Sanguinaria canadensis
Sanicula gregaria
Smilacina racemosa
Smilacina stellata
Smilax ecirrhata
Solidago ulmifolia
Streptopus roseus
Taxus canadensis
Thalictrum dioicum
✓ *Trientalis borealis*
Trillium grandiflorum
Uvularia grandiflora
Uvularia sessilifolia
✓ *Vaccinium angustifolium*
Vaccinium pennsylvanicum
Viburnum acerifolium
Viola canadensis
Viola cucullata
Viola pallens
Viola pubescens
✓ *Waldsteinia fragarioides*

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No.

Quadrat No. 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. 3082
Quadrat No. 5

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

Vaccinium canadense

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No.

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
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*

Vacc. Canad

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No. 3082
Quadrat No. 17

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

✓ Prunus virg.

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No. 3082
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*

☒ *Equisetum arvense*

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No. 3082
Quadrat No. 19

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
	✓Prunus serotina	✓Viola sp.
	✓Amelanchier sp.	

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No. 3082
Quadrat No. 20

<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>

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																						
Adenocaulon bicolor																						
Adiantum pedatum																						
Agrimonia gryposepala																						
Allium tricoccum																						
Alnus incana																						
Alnus rugosa																						
Amphicarpa bracteata																						
Anemone canadensis	✓																					1
Anemone cylindrica																						
Anemone quinquefolia	✓	✓			✓	✓			✓		✓	✓	✓									6 30
Antennaria sp.	✓																					1
Apocynum androsaemifolium	✓																					1
Apocynum cannabinum																						
Aquilegia canadensis	✓																					1
Aralia hispida																						
Aralia nudicaulis	✓				✓	✓					✓											3 15
Aralia racemosa																						
Arctostaphylos uva-ursi																						
Arisaema atrorubens																						
Asarum canadense																						
Asclepias exaltata																						
Aster cordifolius																						
Aster lateriflorus																						
Aster macrophyllus	✓	✓	✓					✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	12 60
Aster prenanthoides																						
Aster sagittifolius																						
Aster shortii																						
Aster umbellatus																						
Athyrium filix-femina																						
Athyrium thelypteroides																						
Boehmeria cylindrica																						
Botrychium lanceolatum																						
Botrychium matricariaefolium																						
Botrychium virginianum																						
Brachyelytrum erectum																						
Bromus purgans																						
Campanula americana																						
Campanula rotundifolia																						
Cardamine pensylvanica																						
Carex albursina M.L.	✓					✓																1 5
Carex pensylvanica	✓					✓			✓	✓												3 15
Carex plantaginea																						
Caulophyllum thalictroid																						
Ceanothus ovatus																						
Celastrus scandens																						
Chimaphilia umbellata	✓		✓	✓																		2 10
Cicuta maculata																						
Circaea alpina																						
Circaea quadrisulcata																						

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TABULATION FORM

NORTHERN PINE-HARDWOODS

Stand No. 3082

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 hispidula</i>																						
<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>																						
<i>Hackelia virginiana</i>																						
<i>Halenia deflexa</i>																						
<i>Hamamelis virginiana</i>																						
<i>Helianthus strumosus</i>																						
<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 bitermum</i>																						
<i>Krigia biflora</i>																						
<i>Lactuca canadensis</i>																						
<i>Laportea canadensis</i>																						
<i>Lathyrus ochroleucus</i>																						
<i>Lathyrus venosus</i>																						
<i>Ledum groenlandicum</i>																						
<i>Lilium michiganense</i>																						
<i>Linnaea borealis</i>																						
<i>Lithospermum canescens</i>																						
<i>Lobelia inflata</i>																						
<i>Lonicera canadensis</i>																						
<i>Lonicera hirsuta</i>																						
<i>Lonicera oblongifolia</i>																						
<i>Lonicera prolifera</i>																						
<i>Lupinus perennis</i>																						
<i>Luzula acuminata</i>																						
<i>Luzula multiflora</i>																						

11 56 10 1

1 5

3 15

TABULATION FORM

NORTHERN PINE-HARDWOODS

Stand No. 3082-

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TABULATION FORM

NORTHERN PINE-HARDWOODS

Stand No. 3082

STATION NO.	P.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	T	
Trientalis borealis	✓		✓			✓	✓	✓		✓	✓	✓	✓	✓						✓		9	45
Trillium cernuum																							
Trillium grandiflorum	✓																✓	✓				2	10
Uvularia grandiflora																							
Uvularia sessilifolia																							
Vaccinium angustifolium	✓	✓	✓	✓	✓	✓					✓	✓	✓	✓				✓	✓			11	55
Vaccinium myrtilloides																							
Veronicastrum virginicum																							
Viburnum acerifolium	✓							✓											✓			2	10
Viburnum rafinesquianum																							
Viburnum lentago																							
Viola adunca	✓																						
Viola blanda sp.	✓																			✓		1	5
Viola canadensis																							
Viola conspersa																							
Viola cucullata																							
Viola pensylvanica																							
Viola incognita																							
Viola pallens																							
Viola pubescens																							
Viola renifolia																							
Vitis aestivalis																							
Vitis riparia																							
Waldsteinia fragarioides	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	20	100
Xanthoxylum americanum																							
Zizia aurea																							
Additional species:																							
Vaccinium penn.	✓					✓																1	5
Comandra umbellata	✓																						
Myrica asplenifolia	✓																						
Narrow leaved unknown	✓		✓	✓	✓	✓																4	20
Vaccinium canad.	✓																✓	✓				2	10
Prunus Virg.	✓																	✓				1	5
Prunus serotina	✓																			✓		1	5
Amelanchier	✓																			✓		1	5

423

345

168

424

454

437

335

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.....746
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 punctata</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>Campylium 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. <i>austinii</i>
<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>Tetraxis pellucida</i>
<i>Parmelia andreana</i>		<i>Thuidium delicatulum</i>
<i>Parmelia aurulenta</i>		<i>Ulotia 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>		

Ecology Laboratory
University of Wisconsin
Madison

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12 6 10

Stand No.

No. trees							22	6	10	1													
	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	Abies	Total	Frequency		
Al nid							2		1											3	8		
Ba chl							1	1												2	5		
Bu pun							1													1	3		
Cl bot							1													1	3		
Cl chl							8	1	3											12	30		
Cl con							19	3	8											30	75		
Cl cri									1											1	3		
Cr neg							6	2	4										1	13	33		
Ev mes							1													1	3		
Le sub							2		2											4	10		
Pa cap							6	1	3										1	11	28		
Pa phy							3		1											4	10		
Pa rud							3													3	8		
Pa sul							2	1												3	8		
Ps hyp							1													1	3		
us Ap							1													1	3		
							57	9	23										2	91			
Am var											1								1	2	5		
Brachy																							
Br rec							2	v	2											5	13		
Di fla							17	1	4											22	55		
Di mon							3	1	4											8	20		
Di sp.									1											1	3		
En sp.									1											1	3		
Eu str							1	1												2	5		
He hal							11	2	6										1	20	50		
Hy rep							1		4											5	13		
Ja aut									1											1	3		
Lo het							4		6										1	11	28		
Plagio							1	1	1											3	8		
Pt pul							17	6	7										1	31	78		
Te pel							1	1												2	5		
Ch arce											1									1	3		
Fr elo											1									1	3		
							58	14	37		3								4	116			