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Site 3105: Owned by MacGeorge and Gundry, Sawyer County. 1950-07-05

[s.l.]: [s.n.], 1950-07-05

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STAND RECORD

FORESTS

Stand No., 3105

Name: owned by Mrs MacGeorge & Alva Gundry
 County: Sawyer
 Date: July 5, 1950
 Size of Stand: - ? - but large (160Acre?)
 Forest Type: white pine - Red Oak
 Topography: Low
 Locality: T: 37N R: 9W Sec: 20 N 401F
 Observers: Lottam Brown Randall Kinnell
 Size of Area Sampled: 20 Acres
 Soil Type: Chelsea Loams
 Slope: Directions

Condition of Stand: Excellent - no cutting except removal of down
 Trees. Pines absent in some places in the woods - young
 Trees mostly Red oaks & Basswoods

Open Grown Trees: All old Pines open grown
 % Canopy: 65 percent 3, 4, 5, 12, 11, 4

Stumps:

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

Soil Data:

	pH	N	P	K	Ca	Mg	Org. Mat.	Colloids	W.H.C.
Ao									
A1									
A2									
B									

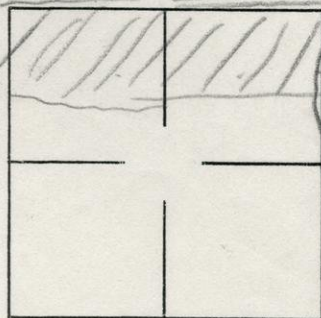
DEPTH

CHARACTERISTICS (Color, Texture, Structure, etc.)

Ao	1/2 - 1 1/2	Deciduous leaves & Pine needles
A1	1/2 - 1 1/2	Black - loam
A2	1/2 - 3	Dark to light gray - silt loam
B		Dark to light brown - loam w/ sand in some places

Parent Material:

Map: Highway 70
 Put Road To Maywood lodge



Prob = .05

distances
3105

1 05
1 45
2 75
2 05
2 40
2 10
2 50
1 80
1 65
2 20
2 35
2 70
1 35
2 15
2 05
2 50
75
1 55
1 70
1 20
2 20
1 40
1 40
25
1 65
1 40
2 20
2 30
1 45
1 50
1 75
1 25
1 05
2 75
90
1 35
80
2 10
1 35
2 05
69 35 *

Red oak

3105

45

60

35

50

90

23

40

40

37

65

30

75

75

1 10

28

75

1 05

40

33

1 65

55

30

22

22

27

1 10

20

16

1 5 23

26

20

35

30

43

70

30

70

65

19

25

50

45

75

1 05

30

77

48

18

30

60

23

60

1 10

85

16

60

15

30

90

2 9 83 *

White pine

3105

1 55

3 20

58

1 95

1 25

4 20

60

3 90

2 10

3 10

2 80

5 00

1 85

5 10

6 60

3 40

3 15

2 15

1 20

3 10

60

60

2 55

1 85

20

3 50

2 90

2 75

2 65

4 60

4 30

60

5 00

88 88

2 10 4 50

9090 2 10

3 90

1 50

2 40

2 25

85

1 65

70

2 40

1 70

85

1 30

27

3 55

3 60

1 80

65

2 20

1 35

5 20

3 65

3 60

60

1 05

1 00

1 55

1 65

1 30

1 95

5 60

2 10

1 10

1 50

1 20

4 70

1 66 15

1 68 25

Red pine
3105

	63	
3	60	
4	23	(=)
3	45	
7	68	*

Jack pine
3105

50

50 *

1 35 *

30

1 25

60

35

55

3 05 ①

55

3 60 *

Poppen
3105

Sugar
maple

3105

15

17

32 ⑥

12

44 *

am ash

3105

43

43①

43✱

am elm

3105

38

38 ①

38 *

bus oak

3105

27

270

40

65

22

154*

Betula

pop

3105

22

22 0

22 *

Tilia

3105

12

33

45 (C)

26

20

14

1 05 *

Red maple

3105

14

23

15

27

79 ⊙

20

17

15

1 31 *

POINT RECORD TREES

NORTHERN PINE-HARDWOODS

Stand No. 3105

STATION NO.	1	2	3	4	5	6	7	8	9	10
<i>Abies balsam</i>										
<i>Acer rubrum</i>	✓ 2	✓ ¹⁴ 2		✓	✓ 3	✓ 3	✓ 1	23 20	17	✓
<i>A. sacchar.</i>		15			(12)	1	2	1		✓
<i>A. spicatum</i>										
<i>Betula lut.</i>										
<i>B. papyrif</i>							22			
<i>Carpinus car</i>		2	1		✓ 1			1		
<i>Fagus gran</i>										
<i>Ostrya virg</i>	2	2		1						
<i>Picea glau</i>										
<i>Pinus Bank</i>										
<i>P. resinosa</i>			(345)							
<i>P. Strobus</i>	155, 320 (450)	58, 195 (210) (390)		125, 420 (150)	60 (240) (225)	390, 210 (85)	310 (165) (70)	280 (240)	500 (170)	185 (85) (130)
<i>Populus bals</i>										
<i>P. grand</i>										
<i>P. trem</i>										
<i>Prunus pen.</i>										
<i>Quercus ell</i>										
<i>Q. rubra</i>	✓		1						45	60
<i>Tilia amer</i>	(26)		12	(20)	2	✓	✓ 1	1	1	✓ 2
<i>Tsuga can</i>										
<i>Thuja occ</i>										
<i>Ulmus amer</i>				3	38					
<i>U. fulva</i>				1						
<i>Prunus virg</i>	✓	✓	✓			✓				✓
<i>Prunus serot</i>								✓		
<i>Fraxinus amer</i>										✓
Distance	10.5	14.5	27.5	20.5	24	21	25	18	16.5	22

$$\frac{26}{9} \frac{13}{9}$$

POINT RECORD TREES

NORTHERN PINE-HARDWOODS

Stand No.

STATION NO.	11	12	13	14	15	16	17	18	19	20
<i>Abies balsam</i>										
<i>Acer rubrum</i>	✓	✓ 15	✓		(15)	✓				
<i>A. sacchar.</i>										
<i>A. spicatum</i>										
<i>Betula lut.</i>										
<i>B. papyrif</i>										
<i>Carpinus car</i>	✓	4	4	1	3	3	3	2	3	2
<i>Fagus gran</i>										
<i>Ostrya virg</i>										
<i>Picea glau</i>										
<i>Pinus Bank</i>										
<i>P. resinosa</i>										
<i>P. Strobus</i>		(27)				510 660				
<i>Populus bals</i>										
<i>P. grand</i>										
<i>P. trem</i>		3055		125						
<i>Prunus pen.</i>										
<i>Quercus ell</i>										
<i>Q. rubra</i>	3550 ✓ 40	✓ 23	(35)	4043 (30)	4037 (70)	✓ 30 (70)	6519 (65)	3075 (25)	7510 (50)	2851 (45)
<i>Tilia amer</i>	(14)						33			
<i>Tsuga can</i>										
<i>Thuja occ</i>										
<i>Ulmus amer</i>										
<i>U. fulva</i>										
<i>Prunus ser.</i>	✓				✓	✓	✓	✓	✓	✓
<i>Q. macroc.</i>	(40)							(65)	(22)	
<i>Q. alba</i>										
Distance	23.5	27	13.5	21.5	20.5	25	7.5	15.5	17	12

$$\frac{3}{2} \frac{2}{1}$$

POINT RECORD TREES

NORTHERN PINE-HARDWOODS

Stand No. 3105

STATION NO.	21	22	23	24	25	26	27	28	29	30
<i>Abies balsam</i>										
<i>Acer rubrum</i>			27							
<i>A. sacchar.</i>	2	1		2	1	2	17	1	2	2
<i>A. spicatum</i>										
<i>Betula lut.</i>										
<i>B. papyrif</i>										
<i>Carpinus car</i>				1			2			
<i>Fagus gran</i>										
<i>Ostrya virg</i>										
<i>Picea glau</i>										
<i>Pinus Bank</i>										
<i>P. resinosa</i>							63			
<i>P. Strobus</i>			353 (360)	340 210 (180) (65)	315	215 (120) (133)	365 (520)	310 (360)	60, 60 (60) (105)	255 (185) (155)
<i>Populus bals</i>										
<i>P. grand</i>										
<i>P. trem</i>	60									
<i>Prunus pen.</i>										
<i>Quercus ell</i>										
<i>Q. rubra</i>	105 (105) (30)	40 33 (7) (45)	165		55 (18) (30)			60		
<i>Tilia amer</i>	2	3	4	1	1			3		
<i>Tsuga can</i>										
<i>Thuja occ</i>										
<i>Ulmus amer</i>										
<i>U. fulva</i>					2					
<i>Fraxinus amer.</i>								43		
<i>Prunus serot</i>									1	
Distance	22	14	14	25	16.5	14	22	23	14.5	15

$$\frac{22 \frac{9}{8}}{6}$$

POINT RECORD TREES

NORTHERN PINE-HARDWOODS

Stand No.

3105

STATION NO.	31	32	33	34	35	36	37	38	39	40
Abies balsam										
Acer rubrum										
A. sacchar.										
A. spicatum										
Betula lut.										
B. papyrif										
Carpinus car										
Fagus gran										
Ostrya virg										
Picea glau										
Pinus Bank										
P. resinosa										
P. Strobus	20		350	290	275	560	460		60	560
Populus bals										
P. grand										
P. trem		35						55		
Prunus pen.										
Quercus ell										
Q. rubra	30	22	22	16		27, 10		20		16
Tilia amer										
Tsuga can										
Thuja occ										
Ulmus amer										
U. fulva										
Prunus ser.	35						2		27	4
Q. macro		2								
Distance	17.5	12.5	10.5	27.5	9	13.5	8	21	13.5	20.5

$$\frac{189}{87}$$

TREE DATA SUMMARY SHEET

Northern Pine-Hardwoods

2 Trees

Prob: .05

Station Number: 3105

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															
Acer rubru	3	3	3			65	31	19.4	12	38	4.8	3.8	0.6	9.2	55
A. sacchar	2	2	2			32	16	100	1		3.2	2.5	0.3	6.0	60
A. spicatu															
Betula lut															
B. papyrif	1	1	1			22	1	0.6	4		1.6	1.3	0.2	3.1	16
Carpinus c							55	34.4	4						
Fagus gran															
Ostrya vir							8	5.0							
Picea glau															
Pinus Bank															
P. resinosa	2	2	1		1	423					3.2	2.5	3.6	9.3	28
P. Strobus	23	34	7	17	10	9090	4	2.5			37.1	42.5	78.3	157.9	790
Populus ba															
P. grandid															
P. tremulo	5	5	4	1		305					8.1	6.3	2.6	17.0	34
Prunus serot							7	4.4	2						
Quercus alba								10.6							
Q. rubra	21	28	23	5		1523	6	3.8	6		33.9	35.0	13.1	82.0	492
Tilia amer	2	2	2			45	24	15.0	3		3.2	2.5	0.4	6.1	49
Tsuga cana															
Thuja occi															
Ulmus amer	1	1	1			38	2				1.6	1.3	0.3	3.2	26
U. fulva							3	1.9			1.6				
Frax am	1	1	1			43	2	1.3	1		1.6	1.3	0.4	3.3	26
Quercus macro	1	1	1			27	2	1.3			1.6	1.3	0.2	3.1	6
Prunus virgin									5						
	62	80	46	23	11	11613	160	100.2			99.9	100.3	100.0	300.2	1582

AVE. DIST. BTW N TREES:

17.4

AVE B. A.:

145.2

TREES/ACRE:

280

DOM. /ACRE:

40,656

1350

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No. 3105
Quadrat No. /

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

Viburnum affine

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No. 3105
Quadrat No. 2

- | | | |
|-----------------------------------|--------------------------------|-----------------------------------|
| Actaea pachypoda | ✓ <i>Fragaria virginiana</i> | <i>Potentilla simplex</i> |
| Actaea rubra | <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</i> sp. | <i>Ribes americanum</i> |
| ✓ <i>Aster macrophyllus</i> | <i>Helianthus strumosus</i> | <i>Rosa</i> sp. |
| <i>Aster sagittifolius</i> | <i>Hepatica acutiloba</i> | <i>Rubus parviflorus</i> |
| <i>Athyrium angustum</i> | ✓ <i>Hepatica americana</i> | <i>Rubus</i> (blackberry) |
| <i>Botrychium virginianum</i> | <i>Impatiens biflora</i> | ✓ <i>Rubus</i> (dewberry) |
| <i>Brachyelytrum erectum</i> | <i>Linnaea borealis</i> | <i>Sambucus pubens</i> |
| <i>Carex albursina</i> | <i>Lonicera oblongifolia</i> | <i>Sanguinaria canadensis</i> |
| <i>Caulophyllum thalictroides</i> | <i>Lupinus perennis</i> | <i>Sanicula gregaria</i> |
| <i>Chimaphila umbellata</i> | <i>Lycopodium annotinum</i> | <i>Smilacina racemosa</i> |
| <i>Circaea alpina</i> | <i>Lycopodium complanatum</i> | <i>Smilacina stellata</i> |
| <i>Circaea latifolia</i> | <i>Lycopodium lucidulum</i> | <i>Smilax ecirrhata</i> |
| <i>Clintonia borealis</i> | <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.
Quadrat No. 3

✓ 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. 3105
Quadrat No. 4

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. 3105
Quadrat No. 5

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

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No.
Quadrat No. 6

3105

✓ 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.

Quadrat No. 7

3105

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

✓ *amphicarpa bracteata*
✓ *osmunda claytoniana*

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. 3105
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 |

✓ Lonicera prolifera

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No. 5105
Quadrat No. 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

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No. 3105
Quadrat No. 10

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: 3105
Quadrat No. 11

<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</i> sp.	<i>Ribes americanum</i>
<i>Aster macrophyllus</i>	<i>Helianthus strumosus</i>	<i>Rosa</i> sp.
<i>Aster sagittifolius</i>	<i>Hepatica acutiloba</i>	<i>Rubus parviflorus</i>
<i>Athyrium angustum</i>	<i>Hepatica americana</i>	<i>Rubus</i> (blackberry)
<i>Botrychium virginianum</i>	<i>Impatiens biflora</i>	✓ <i>Rubus</i> (dewberry)
<i>Brachyelytrum erectum</i>	<i>Linnaea borealis</i>	<i>Sambucus pubens</i>
<i>Carex albursina</i>	<i>Lonicera oblongifolia</i>	<i>Sanguinaria canadensis</i>
<i>Caulophyllum thalictroides</i>	<i>Lupinus perennis</i>	<i>Sanicula gregaria</i>
<i>Chimaphila umbellata</i>	<i>Lycopodium annotinum</i>	<i>Smilacina racemosa</i>
<i>Circaea alpina</i>	<i>Lycopodium complanatum</i>	<i>Smilacina stellata</i>
<i>Circaea latifolia</i>	<i>Lycopodium lucidulum</i>	<i>Smilax ecirrhata</i>
<i>Clintonia borealis</i>	<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>

Desmodium acutum

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No. 3105
Quadrat No. 12

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

Cornus femina
Crataegus sp.
Amelanchier

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No. 3105
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>

Osmunda Clayt.

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No. 3105
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. 3105
Quadrat No. 15

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

Amphicarpa br.

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No. 3105
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
 Cypridium acaule
 ✓ Diervilla lonicera
 Dirca palustris
 Dryopteris linnaeana
 Dryopteris phegopteris
 Dryopteris spinulosa
 Epifagus virginiana
 Epigaea repens

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

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

Galium boreale
 Cornus femina

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No. 3105
Quadrat No. 17

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

Cypripedium parviflorum *Cornus alternifolia*

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No. 310
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

Onopordium acroanthum

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No.

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)*~~ *sp*
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*~~

Salix boreale

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No.

Quadrat No. 20

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

Galium boreale

[illegible]

TABULATION FORM

NORTHERN PINE-HARDWOODS

Stand No. 3105

STATION NO.	P.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Total
<i>Cirsium altissimum</i>																						
<i>Claytonia caroliniana</i>																						
<i>Claytonia virginica</i>																						
<i>Clematis verticillaris</i>																						
<i>Clintonia borealis</i>	L																					1
<i>Comandra richardsiana</i>																						
<i>Comptonia peregrina</i>																						
<i>Convolvulus spithameus</i>																						
<i>Coptis groenlandica</i>																						
<i>Corallorhiza maculata</i>																						
<i>Corallorhiza striata</i>																						
<i>Corallorhiza trifida</i>																						
<i>Coreopsis palmata</i>																						
<i>Cornus alternifolia</i>	L			L														L				3 15
<i>Cornus canadensis</i>																						
<i>Cornus foemina</i>	L		L										L									2 10
<i>Cornus rugosa</i>	L										L											1 5
<i>Corydalis</i> sp.																						
<i>Corylus americana</i>	L	L																				1 5
<i>Corylus cornuta</i>	L	L	L	L	L					L		L	L	L		L	L	L				11 55
<i>Cryptotaenia canadensis</i>																						
<i>Cynoglossum boreale</i>																						
<i>Cypripedium acaule</i>																						
<i>Cypripedium parviflorum</i>	L																	L				1 5
<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		L	L								L					L	L	L			6 30
<i>Dirca palustris</i>	L			L																		1 5
<i>Dryopteris bootii</i>																						
<i>Dryopteris cristata</i>																						
<i>Dryopteris goldiana</i>																						
<i>Dryopteris disjuncta</i>																						
<i>Dryopteris phegopteris</i>																						
<i>Dryopteris spinulosa</i>	L																					1
<i>Epifagus virginiana</i>																						
<i>Epigaea repens</i>																						
<i>Equisetum arvense</i>																						
<i>Equisetum hyemale</i>																						
<i>Equisetum sylvaticum</i>																						
<i>Erigeron philadelphicus</i>																						
<i>Erythronium albidum</i>																						
<i>Erythronium americanum</i>																						
<i>Eupatorium rugosum</i>																						
<i>Festuca obtusa</i>																						
<i>Fragaria virginiana</i>	L		L			L													L	L		4 20

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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>	✓																✓				✓✓✓	3 15
<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>	✓	✓										✓					✓	✓✓✓✓	✓	✓	✓	7 35
<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>	✓		✓															✓			✓	3 15
<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>																						
<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>	✓																					1
<i>Lonicera prolifera</i>	✓								✓													1 5
<i>Lupinus perennis</i>																						
<i>Luzula acuminata</i>																						
<i>Luzula multiflora</i>																						

NORTHERN PINE-HARDWOODS

Stand No. 3105

[illegible]

TABULATION FORM

NORTHERN PINE-HARDWOODS

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STATION NO.	P.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	T	
Prenanthes alba																							
Prunella vulgaris																							
Pteretis pensylvanica																							
Pteridium aquilinum	L																	L		L	2	10	
Pyrola asarifolia																							
Pyrola elliptica	L	L	L						L	L									L		5	55	
Pyrola minor																							
Pyrola rotundifolia																							
Pyrola secunda	L	L	L										L			L					4	50	
Pyrola virens																							
Ranunculus abortivus																							
Ranunculus recurvatus																							
Ranunculus septentrional																							
Rhus radicans	L																					1	
Rhus typhina																							
Ribes americanum																							
Ribes cynosbati	L																					1	
Ribes lacustre																							
Ribes triste																							
Rosa sp.																							
Rubus idaeus sp.	L																		L	L	2	10	
Rubus parviflorus																							
Rubus hispidus																							
Rubus - blackberry	L																			L	1	5	
Rubus - dewberry	L		L	L					L			L	L					L			6	30	
Rubus - raspberry	L																					1	
Salix sp.																							
Sambucus canadensis																							
Sambucus pubens																							
Sanguinaria canadensis																							
Sanicula gregaria	L																					1	
Sanicula marilandica																							
Schizachne purpurascens																							
Scutellaria lateriflora																							
Senecio aureus																							
Shepherdia canadensis																							
Smilacina racemosa	L	L					L	L			L		L			L		L	L	L	9	45	
Smilacina stellata																							
Smilax ecirrhata																							
Smilax herbacea																							
Smilax hispida	L																					1	
Solidago canadensis																							
Solidago flexicaulis																							
Solidago ulmifolia																							
Spiraea alba																							
Stellaria longifolia																							
Streptopus amplexifolius																							
Streptopus roseus	L		L				L				L							L			4	20	
Symphoricarpos albus																							
Taxus canadensis	L																					1	
Thalictrum dioicum	L		L						L	L	L			L		L		L	L	L	L	10	50

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TABULATION FORM

NORTHERN PINE-HARDWOODS

Stand No. 3105

STATION NO.	P.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	T
<i>Trientalis borealis</i>	✓								✓													15
<i>Trillium cernuum</i>																						
<i>Trillium grandiflorum</i>	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	1365
<i>Uvularia grandiflora</i>																						
<i>Uvularia sessilifolia</i>	✓	✓		✓					✓	✓			✓			✓		✓	✓	✓	✓	945
<i>Vaccinium angustifolium</i>	✓												✓									15
<i>Vaccinium myrtilloides</i>																						
<i>Veronicastrum virginicum</i>																						
<i>Viburnum acerifolium</i>	✓																					1
<i>Viburnum rafinesquianum</i>																						
<i>Viburnum lentago</i>																						
<i>Viola adunca</i>																						
<i>Viola blanda</i>																						
<i>Viola canadensis</i>																						
<i>Viola conspersa</i>	✓																					15
<i>Viola cucullata</i>	✓									✓												15
<i>Viola pensylvanica</i>																						
<i>Viola incognita</i>																						
<i>Viola pallens</i>																						
<i>Viola pubescens</i>																						
<i>Viola renifolia</i>																						
<i>Vitis aestivalis</i>																						
<i>Vitis riparia</i>																						
<i>Waldsteinia fragarioides</i>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	1995
<i>Xanthoxylum americanum</i>																						
<i>Zizia aurea</i>																						
Additional species:																						
<i>Viburnum affine</i>	✓	✓																				15
<i>Desmodium acumin.</i>	✓										✓											15
<i>Crataegus</i>	✓											✓										15

315
130
481

PRESENCE LIST

NORTHERN PINE-HARDWOODS

STAND NO. 3105

✓ *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 hispidula

Circaea alpina
Circaea latifolia
Claytonia caroliniana
Claytonia virginiana
 ✓ *Clintonia borealis*
Convolvulus spithameus
Coptis trifolia
Corallorrhiza maculata
Corallorrhiza striata
 ✓ *Cornus alternifolia*
Cornus canadensis
 ✓ *Cornus femina*
 ✓ *Cornus rugosa*
 ✓ *Corylus americana*
 ✓ *Corylus cornuta*
Cryptotaenia canadensis
Cypripedium acaule
Cypripedium pubescens
Cystopteris fragilis
Danthonia spicata
Dentaria diphylla
Desmodium glutinosum
Desmodium nudiflorum
Dicentra canadensis
Dicentra cucullaria
 ✓ *Diervilla lonicera*
 ✓ *Dirca palustris*
Dryopteris linneana
Dryopteris phegopteris
 ✓ *Dryopteris spinulosa*
Epifagus virginiana
Epigaea repens
Equisetum arvense
Erythronium americanum
 ✓ *Fragaria virginiana*
Galium aparine
 ✓ *Galium boreale*
Galium 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
Lycopus americanus
Lycopus uniflora
Lysimachia quadrifolia
 ✓ *Maianthemum canadense*

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

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

Smilax herbacea 3105
 ✓ 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:

Desmodium acuminatum
Viola conspersa
Crataegus
Cypripedium parviflorum

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 1506
Abbreviations in the data sheets refer to the following species:

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

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

(Bryophytes)

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

Ecology Laboratory
University of Wisconsin
Madison

No. trees	1	1	23	3	1	9	2	40												
	Ac rub	Ac sac	Be lut	Be pap	Fa gra	Os vir	Pi ban	Pi res	Pi str	Po gra	Po tre	Pr ser	Qu alb	Qu ell	Qu rub	Ti ame	Ts can	Ul ame	Total	Frequency
An spe													1			1			2	5
↓ Pa chl			1					1	17						3				22	55
Cn con											1					2			3	8
Ce cil									3						1				4	10
Cl con									1										1	3
Cr neg									16		2		1		3	1			23	58
Ev mes									7		1				3				11	28
Le sub											1				4				5	13
Le var			1						6										7	18
↓ Pa cap								1	18		1				6				26	65
Pa rud									14				1		1	1			17	43
Pa s-a											1				2				3	8
Pa s-q									1		2				6				9	23
Pa sul			1						2		1				4				8	20
Pe mut sp.															1				1	3
Ph aip									1		2				2	1			6	15
↓ Ph gri											2		1		1	1			5	13
Ph orb									1		3				5	1			10	25
Py leu													1		1	1			3	8
Ra fas											1				2				3	8
Us flo sp.															1				1	3
Xa fal											1				1	1			3	8
→ Ph cil											1				1				2	5
Ar vimp																1			1	3
↳ Pa andr			3					2	92		20		5		4	12			183	18
An min													1			1			2	5
Brachy											1								1	3
Fr ebo									4		1		1		5	2			13	33
Li aus									1						1				2	5
↓ Pl rep									7						2	2			11	28
Fy sp.											1		1						2	5
Ul cri									12		1								1	3
Or sp.											2				1				3	8
											6		3		9	5			35	

