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Site 3155: Winnebago County. 1951-06-21

[s.l.]: [s.n.], 1951-06-21

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STAND RECORD

FORESTS

Stand No. 3155

Name:

Locality:

County: Winneshago

T: 20N R: 14E

Sec: 12

SE-NW

Date: June 21, 1951

Observers: Bray & Brown

Size of Stand: 40 acres or larger

Size of Area Sampled: 10

Forest Type: white pine red maple hardwood

Soil Type: podzolized sand

Topography: level

Slope: 1-2°

Directions: rolling

Condition of Stand:

Good, cutting of wind-fallen white pines
no grazing.

Pictures 32, 33, 34

Blood pressure 30, 30, 30

Open Grown Trees:

% Canopy: 80

Stumps:

1. 560 white pine 77 years	4.
2.	5.
3.	6.

7.	10.
8.	11.
9.	12.

Soil Data:

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

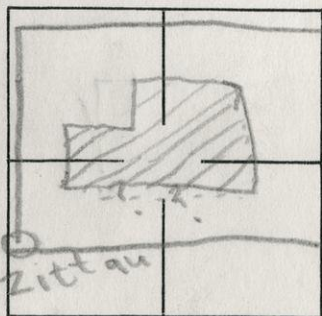
DEPTH

CHARACTERISTICS (Color, Texture, Structure, etc.)

A ₀	1 in	litter
A ₁	1/2 in	humus black sandy
A ₂	1/2 in	podzolized white-grey brown sand
B		brown sand

Parent Material:

Map:



Northern Pine-Hardwoods

Station Number: 3155

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 negundo							1		5						
Acer rubru	28	38	26	11	1	3131	72		5		41.2	47.5	27.7	116.4	815
A. sacchar							1								
Carya Am. bicolor							2								
Betula lut															
B. papyrif	1	1		1		95					1.5	1.3	0.8	3.6	18
Carpinus Carpinus c		1	1			16	1								
Caryocarpus Fagus gran	1	1	1			16	3				1.5	1.3	0.1	2.9	12
Ostrya vir							47		3						
Frax. am Frax. am	1	1		1		215	7		1		1.5	1.3	1.9	4.7	38
Juglans cin Juglans cin	1	1	1			14					1.5	1.3	0.1	2.9	15
Quercus alba Quercus alba	4	4		4		900			2		5.9	5.0	8.0	18.9	76
P. Strobis	22	24	4	16	4	5305			2		32.4	30.0	47.0	109.4	547
Populus ba															
P. grandid	4	4		4		485					5.9	5.0	4.3	15.2	30
Prunus serotina Prunus serotina							21		4						
Prunus virg							3		4						
Quercus el	1	1		1		200					1.5	1.3	1.8	4.6	9
Q. rubra	2	2	1	1		275			3		2.9	2.5	2.4	7.8	47
Tilia amer	2	2	1		1	430	2				2.9	2.5	3.8	9.2	74
Tsuga cana															
Thuja occi															
Ulmus amer	1	1		1		220					1.5	1.3	1.9	4.7	38
U. fulva															
	69	80	35	40	6	11286	160				100.2	100.3	99.8	300.3	1719

AVE. DIST. BTW'N TREES:

AVE B. A.: 146.1

TREES/ACRE:

DOM. /ACRE :

POINT RECORD TREES

NORTHERN PINE-HARDWOODS

Stand No. 3155

STATION NO.	1	2	3	4	5	6	7	8	9	10						
Abies balsam																
Acer rubrum	3	110	18	39 15	3	26	3	125	1	45	11	29	3	22	11	
A. sacchar.																
A. spicatum																
Betula lut.																
B. papyrif																
Carpinus car																
Juglans nigra Fagus gran																14
Ostrya virg		3		1	1	1	1	1	11							
Picea glau																
Pinus Bank																
P. resinosa																
P. Strobus	130 45	65	150		260	70	25	130								490
Populus bals																
P. grand																
P. trem																
Prunus pen. Prunus pen.	1			11												
Quercus ell																
Q. rubra																
Tilia amer																
Tsuga can																
Thuja occ																
Ulmus amer																
U. fulva																
Taxus amer Taxus amer				1												3
Prunus nig Prunus nig																
Acer Negundo Acer Negundo																
Distance	15	23	21	20	11	24	5	10	13	18						

POINT RECORD TREES

NORTHERN PINE-HARDWOODS

Stand No.

3155

STATION NO.	1	2	3	4	5	6	7	8	9	10
<i>Abies balsam</i>										
<i>Acer rubrum</i>	11	60	42	11	11	50 18	20 14	1	40	11 125 4
<i>A. sacchar.</i>								1		
<i>A. spicatum</i>										
<i>Betula lut.</i>										
<i>B. papyrif</i>										95
<i>Carpinus car</i>	1									
<i>Fagus gran</i>										
<i>Ostrya virg</i>	1		11	1	1		111	11	1	
<i>Picea glau</i>										
<i>Pinus Bank</i>										
<i>P. resinosa</i>										
<i>P. Strobis</i>	160		225	270 115			126	220		
<i>Populus bals</i>										
<i>P. grand</i>										
<i>P. trem</i>										
<i>Prunus pen.</i>							1		1	
<i>Quercus ell</i>										
<i>Q. rubra</i>					1		45			
<i>Tilia amer</i>		400						1	1	
<i>Tsuga can</i>										
<i>Thuja occ</i>										
<i>Ulmus amer</i>	220									
<i>U. fulva</i>										
<i>Prunus virg</i>			4				1			
<i>Knox amer</i>				1		1		215		
<i>Quercus alba</i>									255	
Distance	14	30	15	11½	16½	21	10	22½	13	20

POINT RECORD TREES

NORTHERN PINE-HARDWOODS

Stand No.

STATION NO.	1	2	3	4	5	6	7	8	9	10
Abies balsam										
Acer rubrum		11	3	90	1	40	11	32	3	17
A. sacchar.										
A. spicatum										
Betula lut.										
B. papyrif										
Carpinus car										
Cornus Fagus gran		11								
Ostrya virg	11				11	1			1	
Picea glau										
Pinus Bank										
P. resinosa										
P. Strobus		170	390					300		
Populus bals										
P. grand	130		90			125	140			
P. trem										
Prunus pen. Serotina			1	3			1			
Quercus ell alba								160		245
Q. rubra					230					
Tilia amer		30								
Quercus ellipsoidalis Tsuga can				200						
Thuja occ										
Ulmus amer										
U. fulva										
Carya Balan	11	11								
Prunus Vib	1									
Frax one										
Distance	26	16	19½	21	16	12	16	28	14	20

POINT RECORD TREES

NORTHERN PINE-HARDWOODS

Stand No. 3155

STATION NO.	1	2	3	4	5	6	7	8	9	10
<i>Abies balsam</i>										
<i>Acer rubrum</i>	19	110 16	45 2 130	45 1 130		85 120	150 175	18	55	730
<i>A. sacchar.</i>										
<i>A. spicatum</i>										
<i>Betula lut.</i>										
<i>B. papyrif</i>										
<i>Carpinus car</i>										
<i>Fagus gran</i>										
<i>Ostrya virg</i>			3	1	3	4	4	4	2	1
<i>Picea glau</i>										
<i>Pinus Bank</i>										
<i>P. resinosa</i>										
<i>P. Strobis</i>	200			270	580			290	360	270
<i>Populus bals</i>										
<i>P. grand</i>										
<i>P. trem</i>										
<i>Prunus pen.</i> ^{Saxatilis}	4	2		3			1		2	11
<i>Quercus ell alba</i>					240					
<i>Q. rubra</i>										
<i>Tilia amer</i>										
<i>Tsuga can</i>										
<i>Thuja occ</i>										
<i>Ulmus amer</i>										
<i>U. fulva</i>										
<i>Prunus virgin</i>		1								
<i>Carya ovata</i>										1
Distance	17 1/2	27	15	17	22	11	24	14	26	27

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No. 3155
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

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

Alastus

Parthenocissus

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No. 3155
Quadrat No.

<i>Actaea pachypoda</i>	<i>Fragaria virginiana</i>	<i>Potentilla simplex</i>
<i>Actaea rubra</i>	<i>Galium lanceolatum</i>	<i>Prenanthes alba</i>
<i>Adiantum pedatum</i>	<i>Galium triflorum</i>	<i>Pteridium aquilinum</i>
<i>Allium tricoccum</i>	<i>Gaultheria procumbens</i>	<i>Pyrola elliptica</i>
<i>Anemone quinquefolia</i>	<i>Gaylussacia baccata</i>	<i>Pyrola rotundifolia</i>
<i>Aquilegia canadensis</i>	<i>Geranium maculatum</i>	<i>Pyrola secunda</i>
<i>Aralia nudicaulis</i>	<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>mapida (P)</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>

Celastrus

Pasp

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No. 3155
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
 Mitchellia repens
 Mitella diphylla
 Mitella nuda
 Monotropa uniflora
 Myrica asplenifolia
 Onoclea sensibilis
 Oryzopsis asperifolia
 Osmorhiza claytoni
 Oxalis montana
 Phryma leptostachya
 Polygala pauciflora
 Polygonatum commutatum
 Polygonatum pubescens

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

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No. 3155
Quadrat No.

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

Fragaria virginiana
 Galium lanceolatum
 ✓ Galium triflorum
 Gaultheria procumbens
 Gaylussacia baccata
 Geranium maculatum
 Geum canadense
 Gnaphalium obtusifolium
 Helianthemum sp.
 Helianthus strumosus
 Hepatica acutiloba
 Hepatica americana
 Impatiens biflora
 Linnaea borealis
 Lonicera oblongifolia
 Lupinus perennis
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 ✓ Maianthemum canadense
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 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

Rasp
 Festuca obtusa

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No. 3155
Quadrat No.

Actaea pachypoda	Fragaria virginiana	Potentilla simplex
Actaea rubra	Galium lanceolatum	Prenanthes alba (P)
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.
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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

Blackberry

Amphicarpus (P)

Tilia (P)

Crataegus (P)

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No. 3155
Quadrat No.

<i>Actaea pachypoda</i>	<i>Fragaria virginiana</i>	<i>Potentilla simplex</i>
<i>Actaea rubra</i>	<i>Galium lanceolatum</i>	<i>Prenanthes alba</i>
<i>Adiantum pedatum</i>	<i>Galium triflorum</i>	<i>Pteridium aquilinum</i>
<i>Allium tricoccum</i>	<i>Gaultheria procumbens</i>	<i>Pyrola elliptica</i>
<i>Anemone quinquefolia</i>	<i>Gaylussacia baccata</i>	<i>Pyrola rotundifolia</i>
<i>Aquilegia canadensis</i>	<i>Geranium maculatum</i>	<i>Pyrola secunda</i>
<i>Aralia nudicaulis</i>	<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>

Red oak (P)

Carpinus (P)
Crataegus (P)

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No. 3155
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**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**Galatium*

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No.
Quadrat No.

3155

Actaea pachypoda	Fragaria virginiana	Potentilla simplex
Actaea rubra	Galium lanceolatum <i>sp. pink (P)</i>	Prenanthes alba
Adiantum pedatum	Galium triflorum <i>concolor (P)</i>	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

*apocynum androsaemifolium (P)**Carya ovata (P)**Viburnum affinis**Blackberry*

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No. 3155
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

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

Celastrus

Quercus velutina (P)

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No. 3155
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 also (P)	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 small collected

Zanthox

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No. 3155
Quadrat No.

Actaea pachypoda	Fragaria virginiana	Potentilla simplex
Actaea rubra	Galium lanceolatum	Prenanthes alba
Adiantum pedatum	Galium triflorum <i>concolorium</i>	Pteridium aquilinum
Allium tricoccum	Gaultheria procumbens <i>aparine</i>	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 <i>also (P)</i>	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 <i>(P)</i>
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 <i>also (P)</i>
Dryopteris spinulosa	Polygala pauciflora	Viola pallens
Epifagus virginiana	Polygonatum commutatum	Viola pubescens
Epigaea repens	Polygonatum pubescens	Waldsteinia fragarioides

*Pyrus coronaria (P)**Viola pubescens**Trillium cernuum (P)**Podophyllum (P)*

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No. 3155
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

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. 3155
Quadrat No.

Actaea pachypoda
Actaea rubra
Adiantum pedatum
Allium tricoccum
Anemone quinquefolia also (P)
Aquilegia canadensis
Aralia nudicaulis
Aralia racemosa
Arisaema atrorubens
Aster macrophyllus 13
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 (P)
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

Epigaea repens also (P)

Viola canadensis (P)
Oryzopsis asperifolia (P)

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No. 3155
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 *concom*
 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 *herbacea*
 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. 3155
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 *convium*
Gaultheria procumbens
Gaylussacia baccata
✓ Geranium maculatum
Geum canadense
Gnaphalium obtusifolium
Helianthemum sp.
Helianthus strumosus
Hepatica acutiloba
Hepatica americana
Impatiens biflora
Linnaea borealis
Lonicera oblongifolia
Lupinus perennis
Lycopodium annotinum
Lycopodium complanatum
Lycopodium lucidulum
Lycopodium obscurum
Lysimachia quadrifolia
Maianthemum canadense
✓ Mitchellia repens
Mitella diphylla
Mitella nuda
Monotropa uniflora
Myrica asplenifolia
Onoclea sensibilis
Oryzopsis asperifolia
✓ Osmorhiza claytoni
Oxalis montana
✓ Phryma leptostachya
Polygala pauciflora
Polygonatum commutatum
✓ Polygonatum pubescens

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

Carex Small collected

Blackberry

Brachyelytrum
(P)

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No. 3155
Quadrat No.

Actaea pachypoda	Fragaria virginiana	Potentilla simplex
Actaea rubra	Galium lanceolatum	Prenanthes alba
Adiantum pedatum	Galium triflorum <i>concinnum</i>	Pteridium aquilinum
Allium tricoccum	Gaultheria procumbens	Pyrola elliptica
<i>Anemone</i> 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
<i>Aster</i> 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
<i>Circaea</i> 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	<i>Mitchella</i> 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	<i>Osmorhiza</i> 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	<i>Polygonatum</i> pubescens	Waldsteinia fragarioides

Blackberry

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No. 3155
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

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

Panthenocissus

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No. 3155
Quadrat No.

<i>Actaea pachypoda</i>	<i>Fragaria virginiana</i>	<i>Potentilla simplex</i>
<i>Actaea rubra</i>	<i>Galium lanceolatum</i>	<i>Prenanthes alba</i>
<i>Adiantum pedatum</i>	<i>Galium triflorum</i>	<i>Pteridium aquilinum</i>
<i>Allium tricoccum</i>	<i>Gaultheria procumbens</i>	<i>Pyrola elliptica</i>
<i>Anemone quinquefolia</i>	<i>Gaylussacia baccata</i>	<i>Pyrola rotundifolia</i>
<i>Aquilegia canadensis</i>	<i>Geranium maculatum</i>	<i>Pyrola secunda</i>
<i>Aralia nudicaulis</i>	<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. 3155
Quadrat No.

<i>Actaea pachypoda</i>	<i>Fragaria virginiana</i>	<i>Potentilla simplex</i>
<i>Actaea rubra</i>	<i>Galium lanceolatum</i>	<i>Prenanthes alba</i>
<i>Adiantum pedatum</i>	<i>Galium triflorum</i>	<i>Pteridium aquilinum</i>
<i>Allium tricoccum</i>	<i>Gaultheria procumbens</i>	<i>Pyrola elliptica</i>
<i>Anemone quinquefolia</i>	<i>Gaylussacia baccata</i>	<i>Pyrola rotundifolia</i>
<i>Aquilegia canadensis</i>	<i>Geranium maculatum</i>	<i>Pyrola secunda</i>
<i>Aralia nudicaulis</i>	<i>Geum canadense</i>	<i>Ranunculus recurvatus</i>
<i>Aralia racemosa</i>	<i>Cnaphalium 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>

Celastrus

Blackberry
Raspberry

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No. 3155
Quadrat No.

<i>Actaea pachypoda</i>	<i>Fragaria virginiana</i>	<i>Potentilla simplex</i>
<i>Actaea rubra</i>	<i>Galium lanceolatum</i>	<i>Prenanthes alba</i>
<i>Adiantum pedatum</i>	<i>Galium triflorum</i>	<i>Pteridium aquilinum</i>
<i>Allium tricoccum</i>	<i>Gaultheria procumbens</i>	<i>Pyrola elliptica</i>
<i>Anemone quinquefolia</i>	<i>Gaylussacia baccata</i>	<i>Pyrola rotundifolia</i>
<i>Aquilegia canadensis</i>	<i>Geranium maculatum</i>	<i>Pyrola secunda</i>
<i>Aralia nudicaulis</i>	<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>

Blackberry

TABULATION FORM

Plant Ecology Research
NORTHERN PINE-HARDWOODS

STATION NO.	P.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20		
HERBS:																							
<i>Actaea pachypoda</i>																							
<i>Actaea rubra</i>																							
<i>Adenocaulon bicolor</i>																							
<i>Adiantum pedatum</i>																							
<i>Agrimonia gryposepala</i>																							
<i>Allium tricoccum</i>																							
<i>Alnus incana</i>																							
<i>Alnus rugosa</i>																							
<i>Amphicarpa bracteata</i>	✓					✓																	5
<i>Anemone canadensis</i>																							
<i>Anemone cylindrica</i>																							
<i>Anemone quinquefolia</i>	✓													✓			✓						10
<i>Antennaria</i> sp.																							
<i>Apocynum androsaemifolium</i>	✓								✓														5
<i>Apocynum cannabinum</i>																							
<i>Aquilegia canadensis</i>	✓																						1
<i>Aralia hispida</i>																							
<i>Aralia nudicaulis</i>	✓		✓		✓	✓					✓							✓					25
<i>Aralia racemosa</i>	✓														✓					✓			10
<i>Arctostaphylos uva-ursi</i>																							
<i>Arisaema atrorubens</i>	✓											✓								✓			10
<i>Asarum canadense</i>																							
<i>Asclepias exaltata</i>																							
<i>Aster cordifolius</i>																							
<i>Aster lateriflorus</i>																							
<i>Aster macrophyllus</i>	✓				✓			✓	✓						✓		✓						25
<i>Aster prenanthoides</i>																							
<i>Aster sagittifolius</i>																							
<i>Aster shortii</i>																							
<i>Aster umbellatus</i>																							
<i>Athyrium filix-femina</i>	✓					✓																	5
<i>Athyrium thelypteroides</i>																							
<i>Boehmeria cylindrica</i>																							
<i>Botrychium lanceolatum</i>																							
<i>Botrychium matricariaefolium</i>																							
<i>Botrychium virginianum</i>																							
<i>Brachyelytrum erectum</i>	✓															✓			✓				10
<i>Bromus purgans</i>																							
<i>Campanula americana</i>																							
<i>Campanula rotundifolia</i>																							
<i>Cardamine pensylvanica</i>																							
<i>Carex albursina</i>																							
<i>Carex pensylvanica</i>	✓					✓		✓															10
<i>Carex plantaginea</i>																							
<i>Caulophyllum thalictroides</i>																							
<i>Ceanothus ovatus</i>																							
<i>Celastrus scandens</i>	✓	✓	✓					✓		✓										✓			25
<i>Chimaphilia umbellata</i>	✓																						1
<i>Cicuta maculata</i>																							
<i>Circaea alpina</i>	✓											✓											5
<i>Circaea quadrisulcata</i>	✓				✓	✓	✓			✓							✓						25

NORTHERN PINE-HARDWOODS

Stand No.

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

Stand No.

[illegible]

[illegible]

NORTHERN PINE-HARDWOODS

Stand No.

[illegible]

[illegible]

PRESENCE LIST

NORTHERN PINE-HARDWOODS

STAND NO. 3155

Abies balsamea
 ✓ Acer rubrum
 Acer saccharum
 Acer spicatum
 Amelanchier sp.
 ✓ Betula lutea
 ✓ Betula papyrifera
 Caprinus caroliniana
 Carya cordiformis
 Crataegus sp.
 Fagus grandiflora
 ✓ Fraxinus americana
 Fraxinus nigra

Fraxinus pennsylvanica
 ✓ Juglans cinerea
 Larix laricina
 ✓ Ostrya virginiana
 Picea glauca
 Pinus banksiana
 ✓ Pinus resinosa
 Pinus strobus
 Populus balsamifera
 ✓ Populus grandidentata
 Populus tremuloides
 Prunus pennsylvanica
 ✓ Prunus serotina

✓ Prunus virginiana
 ✓ Quercus alba
 Quercus ellipsoidalis
 Quercus macrocarpa
 Quercus rubra
 Sorbus decora
 Thuja occidentalis
 Tilia americana
 Tsuga canadensis
 Ulmus americana
 Ulmus fulva

HERBS AND SHRUBS

Actaea pachypoda
 Actaea rubra
 Adiantum pedatum
 Agrimonia gryposepala
 Allium tricoccum
 Alnus rugosa
 Amphicarpa bracteata
 Anemone canadensis
 Anemone quinquefolia
 Antennaria sp.
 Apocynum androsaemifolium
 Apocynum cannabinum
 ✓ Aquilegia canadensis
 ✓ Aralia nudicaulis
 Aralia racemosa
 Arctostaphylos uva-ursi
 ✓ Arisaema atrorubens
 Asarum canadense
 Asclepias phytolaccoides
 Aster cordifolius
 Aster lateriflorus
 ✓ Aster macrophyllus
 Aster prenanthoides
 Aster sagittifolius
 Aster shortii
 Aster umbellatus
 ✓ Athyrium angustum
 Aureolaria pedicularia
 Boehmeria cylindrica
 Botrychium virginianum
 Brachyelytrum erectum
 Bromus purgans
 Campanula americana
 Carex albursina
 Carex pensylvanica
 Caulophyllum thalictroides
 ✓ Celastrus scandens
 ✓ Chimaphila umbellata
 Chiogenes hispida

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

Galium lanceolatum
 ✓ Galium triflorum
 Gaultheria procumbens
 Gaylussacia baccata
 Geranium maculatum
 Geum canadense
 Gnaphalium obtusifolium
 ✓ Goodyera pubescens
 Goodyera repens
 Habenaria bracteata
 Hamamelis virginiana
 Helianthus strumosus
 Hepatica acutiloba
 Hepatica americana
 Hieracium canadense
 Hydrophyllum virginianum
 Hystrix patula
 Impatiens biflora
 Lactuca canadensis
 Laportea canadensis
 Lappula virginica
 Lathyrus ochroleucus
 Ledum groenlandicum
 Linnaea borealis
 Lonicera canadensis
 Lonicera hirsuta
 ✓ Lonicera oblongifolia
 Lonicera prolifera
 Luzula multiflora
 Lycopodium annotinum
 Lycopodium clavatum
 Lycopodium complanatum
 Lycopodium lucidulum
 ✓ Lycopodium obscurum
 Lycopodium tristachyum
 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 <i>conspicua</i>
Polygonatum commutatum	Schizachne purpurascens	Viola pallens
☒ Polygonatum pubescens	Scutellaria lateriflora	Viola pubescens
Potentilla simplex	Shepherdia canadensis	Vitis aestivalis
Prenanthes alba	Smilacina racemosa	Vitis riparia <i>undulata</i>
Pteris nodulosa	Smilacina stellata	Waldsteinia fragarioides
Pteridium aquilinum	☒ Smilax ecirrhata	☒ Zanthoxylum americanum

Additional Species:

Rosa sp *Blackberry*
aquilegia
Osmorhiza longistylus *Solanum elaeagnifolium*
Festuca obtusa

THE CORTICOLOUS VEGETATION OF THE NORTHERN WISCONSIN UPLAND
Data collected by William L. Culberson, Summers 1952-1953, 1690

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

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

Ecology Laboratory
University of Wisconsin
Madison

Cryptogam Summary. DBH Level ~~BASE~~ W.L.Culberson. Stand No. 3155
 No. trees 28

	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
Ar imp	11																		11	28
Ba chl	6								1										7	18
Cn con	6																		6	15
✓ Cr neg	19								6						1				26	65
Gr scr	16														1				17	43
Pa aur	5														1				6	15
Pa rud	9																		9	23
Pa s-a	1																		1	3
Pa s-q	2																		2	5
Pa sul	1																		1	3
Pe sp.	1																		1	3
Ph aip	2																		2	5
Ph mil	19																		19	48
Px sor	1														1				2	5
Ra fas	1																		1	3
Ri hal															1				1	3
↳ Ri pap	1																		1	3
Cl con									1										1	3
	101								8						5				114	
Di mon									1										1	3
Fr ebo	8														1				9	23
Pl rep	14								1						1				16	40
	22								2						2				26	