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Site 6024 (Boreal Stand 24): Tower, Minnesota, St. Louis, Minnesota, Township 62N, Range 15W, Section 32. 1955-07-26

[s.l.]: [s.n.], 1955-07-26

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[Site 6024]

Data Form No. 20

Plant Ecology Research

Univ. of Wisconsin

STAND RECORD

FORESTS

Stand No. 24

Name: *Tower, Minn*County: *St Louis, Minn*Date: *July 26, 1955*Size of Stand: *30 acres*Forest Type: *Spruce-pine-fir-thuja*Topography: *Gently rolling*Locality: *1 Mile E. of Tower on Hy 1*T: *62N* R: *15W* Sec: *32*Observers: *TFM*

Size of Area Sampled:

Soil Type:

Slope:

Directions

Moderate slope to East.

Condition of Stand:

*Old spruce & pine - good condition - never logged but for few large pine
On rock outcrop - large boulders protruding
Stand split in centre by Hy #1
Few pine stumps there are, are charred
Stand located by P.F.M. in route to City.*

Open Grown Trees:

% Canopy:

Stumps:

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

Soil Data:

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

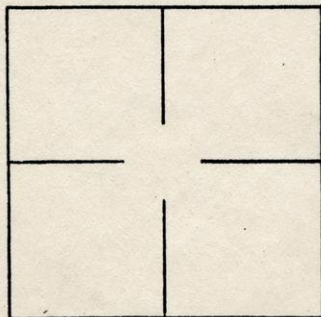
DEPTH

CHARACTERISTICS (Color, Texture, Structure, etc.)

DEPTH	CHARACTERISTICS (Color, Texture, Structure, etc.)
<i>#1 4" - 2" litter</i>	<i>#2 1" - 1" litter</i>
<i>A₀ 2" - 1" litter</i>	<i>#3 2 1/2" - 1 1/2" litter</i>
<i>A₁ 1" - black</i>	<i>2 1/2" crumbly black</i>
<i>A₂ 1" - leached black</i>	<i>2" brown - black - leached</i>
<i>B 1" - crumbly grey clay</i>	<i>1" greyed clay</i>
<i>then bedrock</i>	<i>then boulders</i>

Parent Material:

Map:



*Although on shallow soils - mesic site. Rich in
mosses & liverworts - moisture conditions due to
slope & seepage drainage.*

LICHENS OF GREAT LAKES SPRUCE-FIR COMMUNITIES
MINNESOTA

St. Louis County



1 mile E. of Tower, Hy. 1 - T62N R15W SEC 32.
White spruce, balsam, cedar & white pine.
Gently rolling, on rock outcrop, old stand.

July 26, 1955. Coll. Paul F. Maycock

Plant Ecology Research
TREE DATA SUMMARY SHEET

University of Wisconsin

285.9

Spruce - fir
Northern Pine Hardwoods

✓ Station Number: 24 - 1792

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	26	36				2671	37	23.1		65.0	24.2	22.5	19.3	66.0	462.0
Acer rubru							1	0.6							1.0
A. sacchar															
A. spicatu							15	9.4							1.0
Betula lut															
B. papyrif	1	1				34				2.5	0.9	0.6	0.3	1.8	9.0
Carpinus c															
Fagus gran															
Ostrya vir															
Picea glau	31	52				5337	3	1.9		77.5	28.7	32.5	38.6	99.8	598.8
Picea mar. Pinus Bank	2	2				75	1	0.6		5.0	1.8	1.2	0.5	3.5	7.0
P. resinosa	2	2				159				5.0	1.8	1.2	1.2	4.2	12.6
P. Strobus	16	26				3448	1	0.6		40.0	14.8	16.2	24.9	56.0	280.0
Populus ba	1	1				220	1	0.6		2.5	0.9	0.6	1.6	3.1	6.2
P. grandid															
P. tremulo	4	5				326	2	1.3		10.0	3.7	3.2	2.3	9.2	18.4
Prunus pen							1	0.6							
Quercus el															
Q. rubra															
Tilia amer															
Tsuga cana															
Thuja occi	25	35				1554	98	61.3		62.5	23.2	21.9	11.2	56.4	394.8
Ulmus amer															
U. fulva															
Pyrus amer.															1.0
TOTALS		160				13824	160	100.0		270.0	100.0	100.0	100.0	300.0	1792

AVE. DIST. BTW'N TREES:

9.32

AVE. B. A.:

86.4 sq. m

TREES/ACRE:

501

DOM./ACRE:

43,286

Mid range
Index

594.0

2.0

9.0

18.0

998.0

35.0

29.4

392.0

27.9

73.6

451.2

9.0

2639

N range
Index

528.0

1.0

1.0

16.2

998.0

35.0

25.2

336.0

27.9

82.8

394.8

1.0

2446.9

POINT RECORD TREES

NORTHERN PINE-HARDWOODS

Stand No. 24 (1)

STATION NO.	1	2	3	4	5	6	7	8	9	10
<i>Abies balsam</i>	13' 112	9 1/2 42	8 1/2 63	7 1/2 75	14' 164		3 1/2 22		6 1/2 25	11' 105
<i>Acer rubrum</i>										
<i>A. sacchar.</i>										
<i>A. spicatum</i>										
<i>Betula lut.</i>										
<i>B. papyrif</i>						3 1/2 34				
<i>Carpinus car</i>										
<i>Fagus gran</i>										
<i>Ostrya virg</i>										
<i>Picea glau</i>	12' 250 6' 99		7 1/2 162 17' 108	6' 110 7 1/2 135		10 1/2 180	16' 120 8 1/2 204 4' 100	23' 104 5 1/2 35	3' 64 9 1/2 95	11 1/2 98 3' 42
<i>Pinus Bank</i>										
<i>P. resinosa</i>										
<i>P. Strobus</i>		10' 65 10 1/2 109						7 1/2 125		
<i>Populus bals</i>										
<i>P. grand</i>										
<i>P. trem</i>			8' 55		8 1/2 122 7' 86				12' 42	13 1/2 21
<i>Prunus pen.</i>										
<i>Quercus ell</i>										
<i>Q. rubra</i>										
<i>Tilia amer</i>										
<i>Tsuga can</i>										
<i>Thuja occ</i>	1 1/2 19	7' 32		16' 36		4' 19 3' 22		6' 48		
<i>Ulmus amer</i>										
<i>U. fulva</i>										
<i>Picea mariana</i>					10 1/2 46					
Little	2"	1"	2"	2"	2"	1 1/2	1 1/2	2 1/2	2"	1"
Canopy	50	35	45	50	25	60	55	35	30	0
Distance	32 1/2	37	41	37	40	21	32	42	31	39

POINT RECORD TREES

NORTHERN PINE-HARDWOODS

Stand No. 24 (2)

STATION NO.	1	2	3	4	5	6	7	8	9	10
Abies balsam	12' 58	3' 82	10' 91			14 1/2 165	10 79	11' 72	9 1/2 120	13' 92
Acer rubrum		17 1/2 44	19 1/2 76			20' 115	8 1/2 78		16 86	
A. sacchar.										
A. spicatum										
Betula lut.										
B. papyrif										
Carpinus car										
Fagus gran										
Ostrya virg										
Picea glau				13' 92	16' 94		10 1/2 102	9' 189		15' 64
Pinus Bank							10 1/2 51	13 1/2 148		
P. resinosa										
P. Strobus				1' 35	13' 120	14 1/2 140			8 1/2 135	
Populus bals				13' 195		7' 304				
P. grand				16' 94						
P. trem										
Prunus pen.										
Quercus ell										
Q. rubra										
Tilia amer										
Tsuga can										
Thuja occ	7' 58	2 1/2 168	14 1/2 64		12' 52				9 1/2 46	8 1/2 40
Ulmus amer	12' 72								11 1/2 38	
U. fulva										
Picea mariana								7' 29		
Litter	1 1/2	1 1/2	3"	4"	2 1/2	3"	2"	1"	3"	2"
Canopy	55	50	40	45	2	40	55	55	35	25
Distance	41	27	48 1/2	23	44	56	39 1/2	40 1/2	43 1/2	47 1/2

TREES

DATE STAND NO. 24/3)

STATION N O.
SUBJECT

	1	2	3	4	5	6	7	8	9	10
ABIES BAL		6 1/2 45			4 87	8 1/2 95		13 55		14 1/2 41 20 105
ACER RUB										
A. SACC										
A. SPIC										
BETULA LUT										
B. PAP										
CARPINUS										
FAGU S										
OSTRYA										
PICEA GL.	15 1/2 10	13 28	3 1/2 41	6 8 32	8 1/2 11 1/2 74	7 1/2 94 105	11 46	10 1/2 105 31	12 1/2 87 12 41 102	8 1/2 65
P. MAR.										
PINUS BANK										
P. RES								18 64		
P. S TROB					6 118	8 1/2 120 19			15 94	
POP BALS			13 1/2 220							
P. GRAND										
P. TREM										
PRUNUS PENN										
P. SEROT										
P. VIRG										
QUERCUS ELL										
Q. RUBRA										
Q. MACRO										
T ILIA										
TSUGA										
THUJA	2 1/2 47 74	3 1/2 46	12 58	8 1/2 40 10 35	5 29	10 31	12 1/2 72 12 42			
ULMUS AMER										
U. RUBRA										
LITTER	3"	4"	1 1/2	2 1/2	2 1/2	3 1/2	2"	1 1/2	2 1/2	1 1/2
CANOPY	35	45	55	50	65	45	30	10	55	1
DISTANCE	29 1/2	18	45 1/2	34	26	36	43 1/2	53 1/2	50	51

DATE _____

STAND NO.

24/4

SUBJECT

ABIES BAL.

ACER RUB

A. SACC

A. SPIC

BETULA LUT

B. PAP

CARPINUS

FAGU 3

OSTRYA

PICEA GL.

P. MAR.

PINUS BANK

P. RES

P. S. TROB

POP BALB

P. GRAND

P. TREM

PRUNUS PENN

P. SEROT

P. VIRG

QUERCUS ELL.

Q. RUBRA

Q. MACRO

T ILIA

TSUGA

~~THU A~~

ULMUS AMER

U. RUBRA

~~LITTER~~

~~CANOPY~~

DISTANCE

Av. canopy. 45%

Av. letter - 2.2"

SAPPLINGS										DATE	STAND NO. 24 (1)
SUBJECT	STATION NO	1	2	3	4	5	6	7	8	9	10
ABIE S BALS		14'	6'		15'	5' 4 1/2		1'	9 1/2 12 1/2	5 1/2	3 6 5 1/2
ACER RUB											
A. SACO											
A. SPIC				8'		13 1/2					
BETULA LUT											
B. PAP											
CARPINUS											
FAGUS											
FRAX NIGR											
OSTRYA											
PICEA GL					4'						
P. MAR											
PINUS BANK											
P. RES											
P. STROB											
POP BALS				12'							
P. GRAND											
P. TRIEM											7'
PRUNUS PEN										4'	
P. SEROT											
P. VIRG											
QUERCUS ELL											
Q. MACRO											
Q. RUBRA											
TILIA											
TSUGA											
THUSA		18' 9'	5' 10' 14 1/2	11' 9 1/2	10' 11'	1'	3 1/2 3'	10' 3'	9 1/2	5' 6 1/2	6' 7 1/2
ULMUS A MER											
U. RUBR											
LITTER											
CANOPY											
DISTANCE		62	32 1/2	40 1/2	40	24	16 1/2	23 1/2	33 1/2	23	21 1/2

SAPLINGS										DATE	STAND NO. 54(2)
STATION NO	1	2	3	4	5	6	7	8	9	10	
SUBJECT											
ABIE B BALS	11 1/2 11	12'	11 1/2 15'	16' 21	17	12' 14'		4' 6 1/2	8'		
ACER RUB			6'								
A. SACC											
A. SPIC		3' 4' 10' 2'		5'		2 1/2 8 1/2					
BETULA LUT											
B. PAP											
CARPINUS											
FAGUS											
FRAX NIGR											
OSTRYA											
PICEA GL											
P. MAR											
PINUS BANK											
P. RES											
P. STROB											
POP BALS											
P. GRAND											
P. TREM				24							
PRUNUS PEN											
P. SEROT											
P. VIRG											
QUERCUS ELI											
Q. MACRO											
Q. RUBRA											
TILIA											
TSUGA											
THUJA	19 12				10' 9' 8 1/2 4'		4' 3' 6' 5'	6 1/2 4	8' 12' 11'		
ULMUS A MER											
U. RUBR											
LITTER											
CANOPY											
DISTANCE	53 1/2	29	34 1/2	66	31 1/2	37	16 1/2	21 1/2	24 1/2	37 1/2	

SAFLINGS										DATE	STAND NO. 24(3)
SUBJECT	STATION NO	1	2	3	4	5	6	7	8	9	10
ABIE B BALS		9"	3'-4 1/2"		2 1/2"	4 1/2"	9"				
ACER RUB											
A. SACO											
A. SPIC											
BETULA LUT											
B. PAP											
CARPINUS											
FAGUS											
FRAX NIGR											
OSTRYA											
PICEA GL								3'		5'	
P. MAR			2 1/2"								
PINUS BANK											
P. RES											
P. STROB											
POP BALS											
P. GRAND											
P. TREM											
PRUNUS PEN											
P. SEROT											
P. VIRG											
QUERCUS ELI											
Q. MACRO											
Q. RUBRA											
TILIA											
TSUGA											
THUSA		2 1/2" 5"	1'	8 1/2" 9"	4 1/2" 4"	3 1/2" 4"	4' 4"	10' 2 1/2" 5'	4' 1' 6"	1 1/2" 2'	6 1/2" 4"
ULNUS A MER											
U. RUBR											
LITTER											
CANOPY											
DISTANCE		23	11	33	13 1/2	16	27	19 1/2	20	15 1/2	24 1/2

Plant Ecology Research
TREE DATA SUMMARY SHEET

University of Wisconsin

Record
Northern Pine-Hardwoods

Station Number: 24 (4)

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									7' 11"	3 1/2	7 1/2				10 1/2 11 1/2
Acer rubru															
A. sacchar															
A. spicatu							6 1/2			10'				3' 5' 4	
Betula lut															
B. papyrif															
Carpinus c															
Fagus gran															
Ostrya vir															
Picea glau															
Pinus Bank															
P. resinosa															
P. Strobus						20'									
Populus ba															
P. grandid															
P. tremulo															
Prunus pen															
Quercus el															
Q. rubra															
Tilia amer															
Tsuga cana															
Thuja occi						13' 7 1/2	3' 2 1/2	4' 3" 3' 6"	5' 7 1/2	11 1/2	16' 12' 13'	6' 5" 10' 8"	7' 8 1/2 7 1/2 14	11 1/2	11 1/2
Ulmus amer															
U. fulva															
Distance						45	20	16	30 1/2	30	48 1/2	29	37	23 1/2	45 1/2

AVE. DIST. BTW'N TREES:

AVE. B. A.:

TREES/ACRE:

DOM./ACRE:

Data Form No. 84a
TABULATION FORM

Plant Ecology Research
SPRUCE - FIR, SPRUCE - FIR MIXED HARDWOODS

University of Wisconsin
STAND NO. 24

[illegible]

[illegible]

										10								20	
Desmodium glutinosum																			
Dicentra canadensis																			
Dicentra cucullaria																			
Diervilla lonicera	✓																		1
Dirca palustris																			
Dryopteris boottii																			
Dryopteris cristata																			
Dryopteris disjuncta	✓							✓	✓									2	10
Dryopteris goldiana																			
Dryopteris marginalis																			
Dryopteris noveboracensis																			
Dryopteris phegopteris	✓																		1
Dryopteris spinulosa	✓	✓	✓	✓			✓			✓	✓			✓	✓			8	40
Empetrum nigrum																			
Epifagus virginiana																			
Epigaea repens																			
Epilobium angustifolium																			
Epilobium glandulosum																			
Epilobium strictum																			
Equisetum arvense v. borealis	✓			✓			✓											2	10
Equisetum pratense																			
Equisetum scirpoides																			
Equisetum sylvaticum	✓		✓				✓											2	10
Erigeron annuus																			
Erigeron philadelphicus																			
Erigeron strigosus																			
Erythronium albidum																			
Erythronium americanum																			
Eupatorium maculatum																			
Eupatorium perfoliatum																			
Eupatorium purpureum																			
Fagopyrum sagittatum																			
Festuca obtusa																			
Fragaria vesca	✓		✓			✓	✓	✓		✓	✓	✓		✓		✓	✓	10	50
Fragaria virginiana	✓																		
Galium aparine																			
Galium asprellum	✓																		1
Galium boreale																			
Galium concinnum																			
Galium lanceolatum																			
Galium triflorum	✓	✓			✓		✓		✓	✓				✓				6	30
Gaultheria hispidula																			
Gaultheria procumbens																			
Gaylussacia baccata																			
Gentiana andrewsii																			
Gentiana crinata																			
Gentiana linearis																			
Gentiana quinquefolia																			
Geocaulon lividum																			
Geranium bicknelli																			
Geranium maculatum																			
Geranium robertianum																			

[illegible]

[illegible]

[illegible]

[illegible]

									10								20	
Trifolium pratense																		
Trifolium repens																		
Trillium cernuum	✓									✓							1	5
Trillium erectum																		
Trillium grandiflorum																		
Trillium undulatum																		
Uvularia grandiflora																		
Uvularia sessilifolia																		
Vaccinium angustifolium	✓					✓											1	5
Vaccinium cespitosum																		
Vaccinium corymbosum																		
Vaccinium myrtilloides	✓					✓											2	15
Vaccinium ovalifolium																		
Vaccinium uliginosum																		
Vaccinium vitis-idaea																		
Veronica officinalis																		
Veronica scutellata																		
Veronica serpyllifolia																		
Viburnum acerifolium																		
Viburnum alnifolium																		
Viburnum cassinoides																		
Viburnum edule																		
Viburnum lentago																		
Viburnum rafinesquianum																		
Viburnum trilobum																		
Vicia americana																		
Viola adunca																		
Viola blanda																		
Viola canadensis																		
Viola conspersa																		
Viola cucullata																		
Viola incognita	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓			✓			✓	11 55
Viola nephrophylla																		
Viola pallens																		
Viola papilionacea																		
Viola pubescens																		
Viola renifolia	✓					✓								✓			2	10
Viola selkirkii	✓																	
Viola sororia																		
Vitis riparia																		
Waldsteinia fragarioides																		
Woodsia ilvensis																		
Xanthoxylum americanum																		
Tree Seedlings																		
Abies balsamea	✓	✓	✓	✓	✓	✓		✓		✓	✓	✓		✓	✓	✓	✓	15 75
Acer pensylvanicum																		
Acer rubrum	✓															✓		1 5
Acer saccharum																		
Acer spicatum	✓													✓				1 5

[illegible]

PRESENCE LIST

SPRUCE-FIR - MIXED HARDWOODS

STAND NO. 24

TREES

- ✓ *Abies balsamea*
- Acer pensylvanicum*
- ✓ *Acer rubrum*
- Acer saccharum*
- ✓ *Acer spicatum*
- Amelanchier* spp.
- Betula lutea*
- ✓ *Betula papyrifera*
- Carpinus caroliniana*
- Crataegus* spp.
- Fagus grandifolia*
- Fraxinus americana*

- Fraxinus nigra*
- Fraxinus pennsylvanicum*
- Larix laricina*
- Ostrya virginiana*
- ✓ *Picea glauca*
- ✓ *Picea mariana*
- Pinus banksiana*
- ✓ *Pinus resinosa*
- ✓ *Pinus strobus*
- ✓ *Populus balsamifera*
- Populus grandidentata*
- ✓ *Populus tremuloides*

- Prunus nigra*
- ✓ *Prunus pensylvanica*
- Prunus serotina*
- ✓ *Prunus virginiana*
- ✓ *Pyrus americana*
- ✓ *Pyrus decora*
- Quercus rubra* var. *borealis*
- ✓ *Thuja occidentalis*
- Tilia americana*
- Tsuga canadensis*
- Ulmus americana*
- Ulmus rubra*

SHRUBS

- Alnus crispa*
- ✓ *Alnus rugosa*
- Arctostaphylos uva-ursi*
- Celastrus scandens*
- Chamaedaphne calyculata*
- Comptonia peregrina*
- Cornus alternifolia*
- ✓ *Cornus racemosa*
- Cornus rugosa*
- Cornus stolonifera*
- Corylus americana*
- ✓ *Corylus cornuta*
- ✓ *Diervilla lonicera*
- Dirca palustris*
- Empetrum nigrum*
- Gaylussaccia baccata*
- Hamamelis virginiana*
- Ilex verticillata*
- Juniperus communis*
- Juniperus horizontalis*
- Ledum groenlandicum*
- Lonicera canadensis*
- Lonicera dioica*

- ✓ *Lonicera hirsutum*
- Lonicera involucrata*
- Lonicera oblongifolia*
- Lonicera villosa*
- Parthenocissus quinquefolia*
- Parthenocissus vitacea*
- Prunus pumila*
- Pyrus melanocarpa*
- Rhamnus alnifolia*
- Rhus glabra*
- Rhus typhina*
- Ribes americanum*
- ✓ *Ribes cynosbati*
- Ribes glandulosum*
- Ribes hirtellum*
- Ribes lacustre*
- Ribes oxycanthoides*
- ✓ *Ribes triste*
- ✓ *Rosa* sp.
- Rubus allegheniensis*
- Rubus* (blackberry)
- ✓ *Rubus* (dewberry)
- Rubus* (raspberry)

- ✓ *Rubus idaeus*
- Rubus parviflorus*
- Salix* sp.
- Sambucus canadensis*
- ✓ *Sambucus pubens*
- Shepherdia canadensis*
- Smilax tamnoides* var. *hispida*
- Spiraea alba*
- Spiraea latifolia*
- Symphoricarpos albus*
- Symphoricarpos occidentalis*
- Taxus canadensis*
- ✓ *Vaccinium angustifolium*
- ✓ *Vaccinium myrtilloides*
- Vaccinium vitis-idaea*
- Viburnum acerifolium*
- Viburnum cassinoides*
- Viburnum edule*
- Viburnum lentago*
- Viburnum rafinesquianum*
- Viburnum trilobum*
- Vitis vulpina*
- Zanthoxylum americanum*

HERBS

- ✓ *Achillea millefolium*
- Actaea pachypoda*
- ✓ *Actaea rubra*
- Adiantum pedatum*
- Agrimonia gryposepala*
- Agrostis perennans*
- Allium tricoccum*
- Amphicarpa bracteata*
- ✓ *Anaphalis margaritacea*
- Anemone canadensis*
- Anemone cylindrica*
- ✓ *Anemone quinquefolia*
- Anemone virginiana*
- Antennaria* sp.
- Apocynum androsaemifolium*
- ✓ *Aquilegia canadensis*
- ✓ *Aralia nudicaulis*
- Aralia racemosa*
- Arisaema atrorubens*
- ✓ *Asarum canadense*
- Asclepias exaltata*
- Aster furcatus*
- ✓ *Aster macrophyllus*
- Aster nova-angliae*
- Aster paniculatus*

- Aster puniceus*
- Aster sagittifolius*
- Aster umbellatus*
- ✓ *Athyrium filix-femina*
- Athyrium thelypteroides*
- Botrychium lunaria*
- Botrychium matricariaefolium*
- Botrychium multifidum*
- Botrychium virginianum*
- Calypso bulbosa*
- Campanula rotundifolia*
- ✓ *Carex arctata*
- ✓ *Carex intumescens*
- ✓ *Carex pensylvanica*
- Carex woodii*
- ✓ *Carex* spp.
- ✓ *Chimaphila umbellata*
- Chrysanthemum leucanthemum*
- Chrysosplenium americanum*
- Cinna latifolia*
- ✓ *Circaea alpina*
- Claytonia caroliniana*
- Claytonia virginiana*
- Clematis virginiana*
- Clematis verticillaris*

- ✓ *Clintonia borealis*
- Comandra richardsiana*
- Comandra umbellata*
- ✓ *Coptis groenlandicum*
- Corallorhiza maculata*
- Corallorhiza striata*
- Corallorhiza trifida*
- ✓ *Cornus canadensis*
- Corydalis sempervirens*
- Cynoglossum officinale*
- Cypripedium acaule*
- Cypripedium calceolus* var. *pubescens*
- Cystopteris fragilis*
- Dalibarda repens*
- Desmodium glutinosum*
- Dicentra canadensis*
- Dicentra cucullaria*
- Dryopteris cristata*
- ✓ *Dryopteris disjuncta*
- Dryopteris goldiana*
- Dryopteris marginalis*
- ✓ *Dryopteris phegopteris*
- ✓ *Dryopteris spinulosa*

PRESENCE LIST

SPRUCE-FIR - MIXED HARDWOODS

STAND 24

Epigaea repens
 Epilobium angustifolium
 Epilobium glandulosum
 Epilobium strictum
 Equisetum pratense
 ✓ Equisetum sylvaticum
 Erigeron annuus
 Erigeron philadelphicus
 Erigeron strigosus
 Erythronium albidum
 Erythronium americanum
 ✓ Fragaria vesca
 Fragaria virginiana
 ✓ Galium aparine *asprellum*
 Galium boreale
 Galium concinnum
 Galium lanceolatum
 ✓ Galium triflorum
 Gaultheria hispidula
 Gaultheria procumbens
 Gentiana andrewsii
 Gentiana crinata
 Gentiana quinquefolia
 Geocaulon lividum
 Geranium bicknelli
 Geranium maculatum
 Geum rivale
 Goodyera repens
 Goodyera tessellata
 Habenaria hyperborea
 Habenaria orbiculata
 Habenaria psycodes
 Habenaria viridis
 Halenia deflexa
 Helianthus strumosus
 Hepatica acutiloba
 Hepatica americanum
 Hieracium aurantiacum
 Hieracium canadense
 Hieracium scabrum
 Impatiens capensis
 Iris lacustris
 Isopyrum biternatum
 ✓ Lathyrus ochroleucus
 ✓ Linnaea borealis
 Lobelia inflata
 ✓ Lycopodium annotinum
 Lycopodium clavatum
 Lycopodium clavatum var. megastachyon
 Lycopodium complanatum
 Lycopodium inundatum

Lycopodium lucidulum
 ✓ Lycopodium obscurum
 Lycopodium obscurum var. dendroideum
 Lycopodium selago
 Lycopodium tristachyum
 Lysimachia ciliata
 Lysimachia quadrifolia
 Lysimachia terrestris
 ✓ Maianthemum canadense
 Malaxis unifolia
 Medeola virginiana
 Melampyrum lineare
 Mitchella repens
 Mitella diphylla
 ✓ Mitella nuda
 ✓ Moneses uniflora
 Monotropa hypopithys
 Monotropa uniflorus
 Onoclea sensibilis
 Orchis spectabilis
 Osmorhiza claytoni
 Osmorhiza longistylis
 Osmunda cinnamomea
 ✓ Osmunda claytoniana
 Oxalis montana
 Oxalis stricta
 Panax quinquefolius
 Panax trifolius
 ✓ Petasites palmatus
 Phlox divaricata
 Poa compressa
 Poa pratensis
 Polygala paucifolia
 Polygonatum biflorum
 Polygonatum pubescens
 Polymnia canadensis
 ✓ Polypodium virginianum
 Potentilla norvegica
 Potentilla simplex
 Potentilla tridentata
 Prenanthes alba
 Primula mistassinaca
 Prunella vulgaris
 Pteridium aquilinum
 ✓ Pyrola asarifolia
 Pyrola elliptica
 Pyrola minor
 Pyrola rotundifolia
 ✓ Pyrola secunda
 Pyrola virens
 Ranunculus abortivus

Ranunculus acris
 Ranunculus pensylvanicus
 Ranunculus recurvatus
 Ranunculus repens
 Ranunculus septentrionalis
 Rhus radicans
 ✓ Rubus pubescens
 Sanguinaria canadensis
 Sanicula marilandica
 Satureja vulgaris
 Schizachne purpurascens
 Scutellaria epilobiifolia
 Scutellaria lateriflora
 Smilacina racemosa
 Smilacina stellata
 Smilax herbacea
 Solidago canadensis
 Solidago flexicaulis
 Solidago graminifolia
 Solidago ulmifolia
 Stellaria calycantha
 Streptopus amplexifolius
 ✓ Streptopus roseus
 Taraxacum officinale
 ✓ Thalictrum dioicum
 Thalictrum polygamum
 Tiarella cordifolia
 ✓ Trientalis borealis
 ✓ Trillium cernuum
 Trillium erectum
 Trillium grandiflorum
 Trillium undulatum
 Uvularia grandiflora
 Uvularia sessilifolia
 Vicia americana
 Viola adunca
 Viola blanda
 Viola canadensis
 Viola conspersa
 Viola cucullata
 ✓ Viola incognita
 Viola nephrophylla
 Viola pallens
 Viola papilionacea
 Viola pubescens
 ✓ Viola renifolia
 ✓ Viola selkirkii
 Viola sororia
 Waldsteinia fragarioides

Additional species

Viola sp. - selkirkii incognita

Brachyotum erect

hairy borage - big leaves - Mertensia paniculata

Carex projecta

Equisetum arvense - v. borealis

Mosses

Lichens

Grass sp.

Oryzopsis asperifolia

Carex pedunculata

FREQUENCY DATA
(Common Species)

SPRUCE-FIR - MIXED HARDWOODS

STAND NO. 24 (1)

TREE SEEDLINGS

754321 Abies balsamea 90
Acer pensylvanicum
Acer rubrum
Acer saccharum
Acer spicatum
Betula lutea
Betula papyrifera

2 Amelanchier

Alnus rugosa
Arctostaphylos uva-ursi
Comptonia peregrina
Corylus americana
9 Corylus cornuta
Diervilla lonicera
Dirca palustris
Ilex verticillata
Ledum groenlandicum
Lonicera canadensis

Fagus grandifolia
Larix laricina
Ostrya virginiana
Picea glauca
Picea mariana
Pinus banksiana
Pinus resinosa

Pinus strobus
6 Populus tremuloides
Prunus pensylvanica
Prunus serotina
Thuja occidentalis
Tilia americana
Tsuga canadensis

42 Pinus rig

SHRUBS

Prunus pumila
Pyrus melanocarpa
7 Ribes cynosbati
Ribes glandulosum
Ribes lacustre
Rosa sp.
Rubus (blackberry)
Rubus (dewberry)
Rubus (raspberry)
Rubus idaeus

0 Rubus fruticosus

Rubus parviflorus
Sambucus pubens
Shepherdia canadensis
Spiraea alba
Symphoricarpos occidentalis
Taxus canadensis
5 Vaccinium angustifolium
5 Vaccinium myrtilloides
Viburnum acerifolium
Viburnum trilobum

HERBS

Actaea pachypoda
Actaea rubra
Adiantum pedatum
Anaphalis margaritacea
Anemone cylindrica
6 Anemone quinquefolia
Anemone virginiana
Antennaria spp.
Apocynum androsaemifolium
Aquilegia canadensis
97632 Aralia nudicaulis
Arisaema atrorubens
961 Aster macrophyllus
6 Athyrium filix-femina
Botrychium virginianum
85-52 Carex pensylvanica
Chimaphila umbellata
Chrysanthemum leucanthemum
32 Circaea alpina
Claytonia caroliniana
Claytonia virginiana
9832 Clintonia borealis
0972 Coptis groenlandicum
Corallorhiza maculata
0875321 Cornus canadensis
Cystopteris fragilis
Dicentra canadensis
Dicentra cucullaria
98 Dryopteris disjuncta
Dryopteris phegopteris

7321 Dryopteris spinulosa
Epigaea repens
Epilobium angustifolium
62 Equisetum sylvaticum
Erythronium americanum

097652 Fragaria vesca
097652 Fragaria virginiana
Galium aparine
08641 Galium triflorum
Gaultheria hispidula
Gaultheria procumbens
Gentiana quinquefolia
Geranium maculatum
Goodyera repens
Habenaria obtusata
Halenia deflexa
Hepatica acutiloba
Hepatica americana
Hieracium aurantiacum

954 Linnaea borealis
7 Lycopodium annotinum
Lycopodium clavatum
Lycopodium complanatum
Lycopodium lucidulum
87 Lycopodium obscurum
087642 Maianthemum canadense
Medeola virginiana
Melampyrum lineare
Mitchella repens
Mitella diphylla

9864321 Mitella nuda
Monotropa uniflora
Osmorhiza claytoni
Oxalis montana
Oxalis stricta
Polygala paucifolia
Polygonatum pubescens
Prenanthes alba
Pteridium aquilinum
Pyrola elliptica
Pyrola rotundifolia
9 Pyrola secunda
Ranunculus acris
Rhus radicans
972 Rubus pubescens
Sanguinaria canadensis
Smilacina racemosa
Smilacina stellata
Streptopus roseus
Tiarella cordifolia
8764321 Trientalis borealis
Trillium erectum
Trillium grandiflorum
Uvularia sessilifolia
Viola canadensis
Viola cucullata
Viola pallens
Viola pubescens
5 Viola renifolia
Waldsteinia fragarioides

Additional species

Verba sp. - name 12456789 Lycop. 250 Carex sp. 6 - projecta
Moss 1234567890 Trailing Sorage 2 - det. Pyrola asar. 9
Sichens 23456790 Wide Carex 36 - Carex acutata
Petasites 23 Equisetum - black 37

Carex pedunc. 134890

FREQUENCY DATA
(Common Species)

SPRUCE-FIR - MIXED HARDWOODS

STAND NO. 24(2)

TREE SEEDLINGS

- 098754 Abies balsamea
Acer pensylvanicum
9 Acer rubrum
Acer saccharum
7 Acer spicatum
Betula lutea
5 Betula papyrifera

- Fagus grandifolia
Larix laricina
Ostrya virginiana
Picea glauca
Picea mariana
Pinus banksiana
Pinus resinosa

- 1 Pop. bals.
Pinus strobus
Populus tremuloides
Prunus pensylvanica
Prunus serotina
Thuja occidentalis
Tilia americana
Tsuga canadensis

SHRUBS

- Alnus rugosa
Arctostaphylos uva-ursi
Comptonia peregrina
Corylus americana
Corylus cornuta
Diervilla lonicera
Dirca palustris
Ilex verticillata
Ledum groenlandicum
Lonicera canadensis
1 Lonicera hirsutum

- Prunus pumila
Pyrus melanocarpa
2 Ribes cynosbati
Ribes glandulosum
Ribes lacustre
Rosa sp.
Rubus (blackberry)
Rubus (dewberry)
Rubus (raspberry)
86 Rubus idaeus

- 732 Prunus org.
+ Pyrus americana
Rubus parviflorus
Sambucus pubens
Shepherdia canadensis
Spiraea alba
Symphoricarpos occidentalis
Taxus canadensis
Vaccinium angustifolium
Vaccinium myrtilloides
Viburnum acerifolium
Viburnum trilobum

HERBS

- 8732 Dryopteris spinulosa
Epigaea repens
Epilobium angustifolium
Equisetum sylvaticum
Erythronium americanum

- 0852 Fragaria vesca
Fragaria virginiana
Galium aparine
6 Galium triflorum
Gaultheria hispidula
Gaultheria procumbens
Gentiana quinquefolia
Geranium maculatum
Goodyera repens
Habenaria obtusata
Halenia deflexa
Hepatica acutiloba
Hepatica americana
Hieracium aurantiacum
76 Linnaea borealis
Lycopodium annotinum
Lycopodium clavatum
Lycopodium complanatum
Lycopodium lucidulum
Lycopodium obscurum
975432 Maianthemum canadense
Medeola virginiana
Melampyrum lineare
Mitchella repens
Mitella diphylla

- 631 Mitella nuda
Monotropa uniflora
Osmorhiza claytoni
Oxalis montana
Oxalis stricta
Polygala paucifolia
Polygonatum pubescens
Prenanthes alba
Pteridium aquilinum
Pyrola elliptica
Pyrola rotundifolia
0 Pyrola secunda
Ranunculus acris
Rhus radicans

- 08762 Rubus pubescens
Sanguinaria canadensis
Smilacina racemosa
Smilacina stellata

- 0986 Streptopus roseus
Tiarella cordifolia
763 Trientalis borealis
Trillium erectum
Trillium grandiflorum
Uvularia sessilifolia
Viola canadensis
Viola cucullata
Viola pallens
Viola pubescens
7 Viola renifolia
Waldsteinia fragarioides

2 Trillium cernuum

Additional species

Mosses 1345790
Lichens 124580
Viola sp. 170
Wide Carex 3480 - arcata

Pyrola asarif 5
Lilium sp. 6
Petals 8
Onyxis 0
Carex pedunc. 12346780