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Site 6023 (Boreal Stand 23): Dahlberg's Woods or What Was, St. Louis County, Minnesota, Township 62N, Range 20W, Section 12. 1955-07-25

[s.l.]: [s.n.], 1955-07-25

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[Site 6023]

Data Form No. 20

Plant Ecology Research

Univ. of Wisconsin

STAND RECORD

FORESTS

Stand No. 23

Name: *Dahlberg's Woods or What Was*

Locality:

County: *St. Louis*T: *62*R: *20*Sec: *NW 12*Date: *July 25, 1955*

Observers:

Size of Stand: *40 acres, some logged* *PFM*

Size of Area Sampled:

Forest Type: *spruce-fir-aspen*

Soil Type:

Topography: *Gently rolling*

Slope:

Directions

gradual slope to S. to Littlefork River

Condition of Stand:

*What has not been logged is in good condition
 Good representative of spruce-fir type in N.E. Minnesota
 Beautiful large spruce balsam - stand fully mature
 1/2 Stand clear cut by Karl Dahlberg - Donahew, Wisc. - owner
 Stand reported by Forester Francis Moore - with M.T. Salisbury Co, Grand
 Rapids, Minn.*

Open Grown Trees:

% Canopy:

Stumps:

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

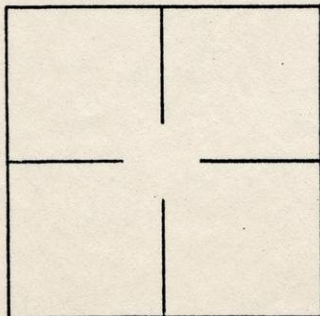
Soil Data:

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

	DEPTH	CHARACTERISTICS (Color, Texture, Structure, etc.)	
	#1	#2	#3
	3 1/2" - 1 1/2" - litter	4 1/2" - 2" - litter	4 1/2" - 1 1/2" - litter
Ao	1" - 2" - ferment	4" - 3" - ferment	3" - 1 1/2" - ferment
A1	1" - black crumbly	1" - black crumbly	1/2" - black - sandy
A2	1 1/2" - 2" black-grey leached	1 1/2" - black-grey leached	1" - black-grey sandy
B	6" - grey-black crumbly	6" - grey crumbly	6" - grey-brown clay loam
	clay	clay	or sand deposit on top of clay
Parent Material:			

Parent Material:

Map:



LICHENS OF GREAT LAKES SPRUCE-FIR COMMUNITIES

MINNESOTA

St. Louis County



20 miles N.W. of Cook. T62N R20W SEC 12.

White spruce, balsam & aspen. Gently rolling, gradual S. slope to Littlefork River.

Mature spruce fir apparently reproducing.

July 25, 1955. Coll. Paul F. Maycock

Plant Ecology Research
TREE DATA SUMMARY SHEET

University of Wisconsin

225.1

~~Spruce-fir~~
~~Northern Pine-Hardwoods~~

Station Number: 23 - 1652

N Limit
Index

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	29	57				5229	83	51.9		72.5	30.5	35.6	32.5	98.6	690.2
Acer rubru															1.0
A. sacchar															
A. spicatu							4	2.5							1.0
Betula lut															
B. papyrif	6	6				405	4	2.5		15.0	6.3	3.7	2.5	12.5	62.5
Carpinus c															
Fagus gran															
Ostrya vir															
Picea glau	36	71				7121	36	22.5		90.0	37.9	44.4	44.2	126.5	759.0
Pinus Bank															
P. resinosa															
P. Strobus															
Populus ba	5	5				648	5	3.1		12.5	5.3	3.2	4.0	12.5	25.0
P. grandid															
P. tremulo	18	20				2654	6	3.8		45.0	18.9	12.5	16.5	47.9	95.8
Prunus virg							5	3.1							1.0
Quercus el															
Q. rubra															
Tilia amer															1.0
Tsuga cana															
Thuja occi															
Ulmus amer															
U. fulva	1	1				38	5	3.1		2.5	1.0	0.6	0.3	2.0	16.0
Prunus serot.							4	2.5							
Amelanchier							7	4.4							1.0
Alnus rug							1	0.6							
TOTALS		160				16,095	160	100.0		237.5	100.0	100.0	100.0	300.0	1652

AVE. DIST. BTW'N TREES:

10.4

AVE B. A.:

100.6

TREES/ACRE:

403

DOM./ACRE:

40,542

2805

2728.9

STATION NO. SUBJECT	TREES										DATE	STAND NO. 23 (1)	
	L	2	3	4	5	6	7	8	9	10			
ABIE S BAL	4 1/2 8	38 168	12 1/2 90 6 1/2 45 9 108	10 129	20 1/2 138	97 160	8 173	8 1/2 7	57 70	3 1/2 51 6 97 13 42	11 88		
ACER RUB													
A. S ACC													
A. SPIC													
BETULA LUT													
B. PAP													
CARPINUS													
FAG US													
OSTRYA						12 1/2 235						15 104	
PICEA GL	4 25	21 158	11 13	119 46	23 186	12 1/2 22 119 108	9 12	24 92	10 1/2 11	68 52	15 9 1/2	42 55	6 9 1/2 76 96
P. MAR													
PINUS BANK													
P. RES													
P. S TRO													
POP BALS			13 111	6 74									
P. GRAND													
P. TREM	9 1/2 119					8 1/2 140	5 1/2 97		7 1/2 76	10 1/2 152	1 128		
PRUNUS PEN													
P. S EROT													
P. VIRG													
QUERCUS ELL													
Q. MAC RO													
Q. RUB													
TILIA													
TSUGA													
THUJA													
ULMUS AMER													
U. RUB													
LITTER	4"	3 1/2	2 1/2	4"	2 1/2	4"	3"	4"	2 1/2	4"			
CANOPY	45	25	40	2	8	50	60	50	8	20			
DI STANCE	26	49	47	63	65	34 1/2	37	30	46	32 1/2			

STATION NO. SUBJECT	TREES										DATE	STAND NO. 23 (2)					
	L	2	3	4	5	6	7	8	9	10							
ABIE S BAL		11'	75	18 1/2	120	18 1/2 13 1/2 27 205					11 1/2	102					
ACER RUB																	
A. S ACC																	
A. SPIC																	
BETULA LUT																	
B. PAP	10'	108	11 1/2	52		6'	58										
CARPINUS																	
FAG US																	
OSTRYA	5'	46			19'	73		19'	85	7 1/2	128	10	150				
PICEA GL	10 1/2 10	96 27	14 1/2 5 1/2	66 77	8 1/2 6	110 61	13' 13 1/2	75 125	7 1/2 238	15' 8'	111 87	67 1/2 12 1/2	43 94	17 1/2 8 1/2	123 105	13' 17	162 25
P. MAR									4'	86							
PINUS BANK																	
P. RES																	
P. S TRO																	
POP BALS						8'	192								6 1/2	145	
P. GRAND																	
P. TREM				4'	220					7 1/2	65	7 1/2	128				
PRUNUS PEN																	
P.S EROT																	
P. VIRG																	
QUERCUS ELL																	
Q. MAC RO																	
Q. RUB																	
TILIA																	
TSUGA																	
THUJA																	
ULMUS AMER																	
U. RUB				13'	38												
LITTER	4"	2 1/2	4"	3"	3 1/2	3"	2 1/2	4"	3"	3 1/2							
CANOPY	35	20	55	15	50	10	25	14	40	15							
DI STANCE	35 1/2	42 1/2	37	58 1/2	28 1/2	64 1/2	36	34 1/2	33	48							

TREES

DATE STAND NO. 23 (3)

STATION N O.
SUBJECT

	1	2	3	4	5	6	7	8	9	10	
ABIES BAL	11' 19'	101 120	7' 37 16' 68 10 1/2 150	2' 4' 102 96		6' 11 1/2 101 40	9' 136	14' 75 12 1/2 64	8 1/2 95 11 1/2 75	6 1/2 82 13 1/2 41	19' 122 6 1/2 82 7' 72
ACER RUB											
A. SACC											
A. SPIC											
BETULA LUT											
B. PAP	9 1/2 83			11' 18'							
CARPINUS											
FAGU S											
OSTRYA											
PICEA GL.	8' 58	16' 88	6 1/2 74	8' 182 16' 144	6 1/2 90 74	15' 55 10 1/2 156	8' 65 8 1/2 22	12' 28	7 1/2 11	70 50	
P. MAR.											
PINUS BANK											
P. RES											
P. S TROB											
POP BALS											
P. GRAND											
P. TREM			7' 155	12' 65		8 1/2 42		3 1/2 110		16' 149	
PRUNUS PENN											
P. SEROT											
P. VIRG											
QUERCUS ELL											
Q. RUBRA											
Q. MACRO											
T ILIA											
TSUGA											
THUJA											
ULMUS AMER											
U. RUBRA											
LITTER	4"	3 1/2	3"	3"	3 1/2	4"	3 1/2	4"	3 1/2	2 1/2	
CANOPY	40	50	25	10	55	45	20	15	20	40	
DISTANCE	47 1/2	49 1/2	19 1/2	47	27	43	43	35 1/2	38 1/2	48 1/2	

TREES										DATE	STAND NO.	23 (4)
STATION N O.	1	2	3	4	5	6	7	8	9	10		
SUBJECT												
ABIES BAL	8' 145	10' 225	12' 77	8 1/2 58	11 1/2 52	12 1/2 61	12' 68	13 7 1/2 96	6' 57	6' 57		
ACER RUB												
A. SACC												
A. SPIC												
BETULA LUT												
B. PAP						21' 86						
CARPINUS												
FAGU S												
OSTRYA												
PICEA GL.	8 1/2 245	9' 120	11' 49	11 1/2 34	13' 124	12' 156	8 1/2 74		8 1/2 152	12 1/2 250		
P. MAR.	11 58	11 1/2 235				9 1/2 224	9 1/2 75		5' 68	10' 120		
PINUS BANK												
P. RES												
P. S TROB												
POP BALS				16' 126								
P. GRAND												
P. TREM	17' 65				16' 258	10' 120	8' 105			8 1/2 205		
PRUNUS PENN										2 1/2 215		
P. SEROT												
P. VIRG												
QUERCUS ELL												
Q. RUBRA												
Q. MACRO												
T ILIA												
TSUGA												
THUJA												
ULMUS AMER												
U. RUBRA												
LITTER	2 1/2	2 1/2	3"	4"	4"	3 1/2	2 1/2	2"	4"	3"		
CANOPY	20	10	40	8	2	1	20	45	55	25		
DISTANCE	44 1/2	37 1/2	35	47 1/2	51 1/2	40	38	36 1/2	26 1/2	59		

Av. canopy - 35%

Av litter - 3.3"

STATION NO.	SAPLINGS										DATE	STAND NO.	23 (1)
	1	2	3	4	5	6	7	8	9	10			
SUBJECT													
ABIES BAL	7' 6" 16'		25' 25"	27' 3"	6' 7" 2 1/2	17'	17' 30"	7' 22" 13'	3' 22" 9' 26"	20'			
ACER RUB													
A. SACC													
A. SPIC													
BETULA LUT													
B. PAP													
CARPINUS													
FAGUS													
FRAX NIG													
OSTRYA													
PICEA GL		20' 29'	30'	23'	20'	15'	7 1/2'			25'			
PICEA MAR													
PINUS BANK													
P. RES													
P. STROB													
POP BALS	7'	4'											
P. GRAND													
P. TREM													
PRUNUS PEN													
P. SEROT				6'									
P. VIRG								10'		12'			
QUERCUS ELL													
Q. MACRO													
Q. RUB													
TILIA													
TSUGA													
THUJA													
ULMUS AMER													
U. RUB		28'				17'				28'			
Amelanchier			16'			3 1/2'	4'						
LITTER													
CANOPY													
DIS TANCE	36	81	96	59	35 1/2	52 1/2	58 1/2	52	60	85			

SAPPLINGS						DATE		STAND NO. 23 (2)			
STATION NO SUBJECT	1	2	3	4	5	6	7	8	9	10	
ABIE S BALS	9' 14 1/2	24' 22'	20	33' 26'	13 1/2	62' 8 1/2 10		23' 12 1/2	33'	6 1/2 25' 26'	
ACER RUB											
A. SACC											
A. SPIC											
BETULA LUT											
B. PAP										27 1/2	
CARPINUS											
FAGUS											
FRAX NIGR											
OSTRYA											
PICEA GL		20'	16 1/2	11' 29'	21 21		13 1/2 11' 9 1/2 50	22' 7 1/2	22'		
P. MAR											
PINUS BANK											
P. RES											
P. STROB											
POP BALS			7'								
P. GRAND											
P. TREM											
PRUNUS PEN											
P. SEROT	2 1/2	14'			16'						
P. VIRG			13'						17'		
QUERCUS ELL											
Q. MACRO											
Q. RUBRA											
TILIA											
TSUGA											
THUGA											
ULMUS A MER											
U. RUBR									33'		
<i>Amelanchier</i>	17'										
<i>Alnus rugosa.</i>						7 1/2					
LITTER											
CANOPY											
DISTANCE	43	80	56 1/2	99	71 1/2	32 1/2	83 1/2	65	105	85	

SAPLINGS										DATE	STAND NO.	23 (4)			
STATION NO	1	2	3	4	5	6	7	8	9	10					
SUBJECT															
ABIE S BALS	15" 11"	19"	25"	12"	18" 27"	14" 6"	5"	4 1/2"	36"	20"	25" 28"	15" 16"	19"	10" 9"	12" 8"
ACER RUB															
A. SACC															
A. SPIC															
BETULA LUT															
B. PAP			35												
CARPINUS															
FAGUS															
FRAX NIGR															
OSTRYA															
PICEA GL	12"	17"	11" 23"			5"	11"	20"			20"				
P. MAR															
PINUS BANK															
P. RES															
P. STROB															
POP BALS															
P. GRAND															
P. TREM		1" 18 1/2"						7"			14"				
PRUNUS PEN															
P. SEROT															
P. VIRG					1"										
QUERCUS ELL															
Q. MACRO															
Q. RUBRA															
TILIA															
TSUGA															
THUFA															
ULMUS A MER															
U. RUBR															
Amelanchier				9 1/2"				14 1/2"	7"						
LITTER															
CANOPY															
DISTANCE	57	61 1/2	81	68 1/2	8	56 1/2	61 1/2	75	69	39					

[illegible]

	P.									10.							20.			
Carex disperma																				
Carex eburnea																				
Carex intumescens																				
Carex leptalea																				
Carex pedunculata																				
Carex pensylvanica	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓		✓		✓	✓	✓	✓	15	75
Carex projecta																				
Carex woodii																				
Carex spp.	✓																			1
Caulophyllum thalictroides																				
Celastrus scandens																				
Chamaedaphne calyculata																				
Chimaphila umbellata																				
Chrysanthemum leucanthemum																				
Chrysosplenium americanum																				
Cicuta maculata																				
Cinna latifolia																				
Circaea alpina																				
Cirsium altissimum																				
Cirsium arvense																				
Cirsium vulgare																				
Claytonia caroliniana																				
Claytonia virginica																				
Clematis virginiana																				
Clematis verticillaris																				
Clintonia borealis	✓								✓										1	5
Comandra richardsoniana																				
Comandra umbellata																				
Comptonia peregrina																				
Convolvulus spithameus																				
Coptis groenlandicum																				
Corallorhiza maculata																				
Corallorhiza striata																				
Corallorhiza trifida																				
Cornus alternifolia	✓										✓				✓	✓	✓		3	15
Cornus canadensis	✓	✓						✓			✓	✓			✓	✓	✓		7	35
Cornus racemosa	✓																✓		1	5
Cornus rugosa																				
Cornus stolonifera																				
Corydalis sempervirens																				
Corylus americana																				
Corylus cornuta	✓			✓													✓		2	10
Cryptotaenia canadensis																				
Cynoglossum boreale																				
Cynoglossum officinale																				
Cypripedium acaule																				
Cypripedium arietinum																				
Cypripedium calceolus																				
Cypripedium reginae																				
Cystopteris bulbifera																				
Cystopteris fragilis																				
Dalibarda repens																				

[illegible]

	P.									10.								20.		
Geum aleppicum																				
Geum canadense																				
Geum rivale																				
Glyceria striata																				
Goodyera obtusifolia																				
Goodyera pubescens																				
Goodyera repens																				
Goodyera tessellata																				
Habenaria clavellata																				
Habenaria hyperborea																				
Habenaria obtusata																				
Habenaria orbiculata																				
Habenaria psycodes																				
Habenaria viridis																				
Hackelia virginiana																				
Halenia deflexa																				
Hamamelis virginiana																				
Helianthus strumosus																				
Hepatica acutiloba																				
Hepatica americanum	✓																			1
Heracleum maximum	✓																			1
Heuchera richardsonii																				
Hieracium aurantiacum																				
Hieracium canadense																				
Hieracium pratense																				
Hieracium scabrum																				
Ilex verticillata																				
Impatiens capensis																				
Iris lacustris																				
Isopyrum bitermum																				
Juniperus communis																				
Juniperus horizontalis																				
Lactuca canadensis																				
Laportea canadensis																				
Lathyrus ochroleucus	✓																			1
Ledum groenlandicum																				
Lichens spp.	✓	✓	✓	✓			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	15 75
Lilium michiganense	✓																			1
Linnaea borealis	✓																			1
Listera auriculata																				
Listera borealis																				
Listera convallarioides																				
Listera cordata																				
Lobelia inflata																				
Lonicera canadensis	✓																			1
Lonicera dioica																				
Lonicera hirsuta																				
Lonicera involucrata																				
Lonicera oblongifolia																				
Lonicera prolifera																				
Lonicera villosa																				
Luzula acuminata																				

omit
slough

[illegible]

[illegible]

	P.									10							20		
Rubus (dewberry)																			
Rubus (raspberry)																			
Rumex acetosella																			
Salix spp.																			
Sambucus canadensis																			
Sambucus pubens																			
Sanguinaria canadensis																			
Sanicula gregaria																			
Sanicula marilandica	✓					✓								✓				2	10
Satureja vulgaris																			
Saxifraga pensylvanica																			
Schizachne purpurascens																			
Scutellaria epilobiifolia																			
Scutellaria lateriflora																			
Senecio aureus																			
Shepherdia canadensis																			
Sium suave																			
Smilacina racemosa																			
Smilacina stellata																			
Smilacina trifolia																			
Smilax herbacea curvata	✓																		1
Smilax tamnoides var hispida																			
Spiranthes gracilis																			
Spiranthes romanzoffiana																			
Solidago canadensis																			
Solidago flexicaulis																			
Solidago gigantea																			
Solidago graminifolia																			
Solidago hispida																			
Solidago juncea																			
Solidago lepida	✓					✓								✓				2	10
Solidago macrophylla																			
Solidago rugosa																			
Solidago ulmifolia																			
Spiraea alba																			
Spiraea latifolia																			
Stachys palustris																			
Stellaria calycantha																			
Stellaria longifolia																			
Stellaria palustris																			
Streptopus amplexifolius																			
Streptopus roseus	✓					✓				✓	✓			✓				6	30
Symphoricarpos albus	✓													✓	✓			2	10

	P.									10.								20		
Trifolium pratense																				
Trifolium repens																				
Trillium cernuum	✓																			1
Trillium erectum																				
Trillium grandiflorum																				
Trillium undulatum																				
Uvularia grandiflora																				
Uvularia sessilifolia	✓		✓							✓								2		10
Vaccinium angustifolium																				
Vaccinium cespitosum																				
Vaccinium corymbosum																				
Vaccinium myrtilloides																				
Vaccinium ovalifolium																				
Vaccinium uliginosum																				
Vaccinium vitis-idaea																				
Veronica officinalis																				
Veronica scutellata																				
Veronica serpyllifolia																				
Viburnum acerifolium																				
Viburnum alnifolium																				
Viburnum cassinoides																				
Viburnum edule																				
Viburnum lentago	✓																			1
Viburnum rafinesquianum	✓					✓												1		5
Viburnum trilobum	✓																			1
Vicia americana	✓																			1
Viola adunca																				
Viola blanda																				
Viola canadensis																				
Viola conspersa	✓					✓												1		5
Viola cucullata																				
Viola incognita	✓				✓					✓								2		10
Viola nephrophylla																				
Viola pallens																				
Viola papilionacea																				
Viola pubescens	✓																			1
Viola renifolia	✓																			1
Viola selkirkii	✓																			3
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	✓			✓								✓	✓						3	15

	P.								10.							20	
Amelanchier spp.	✓			✓						✓	✓	✓					4 20
Betula lutea																	
Betula papyrifera	✓												✓				1 5
Carpinus caroliniana																	
Crataegus spp.																	
Fagus grandifolia																	
Fraxinus americana																	
Fraxinus nigra	✓			✓					✓		✓	✓	✓				5 25
Fraxinus pennsylvanicum																	
Larix laricina																	
Ostrya virginiana																	
Picea glauca																	
Picea mariana																	
Pinus banksiana																	
Pinus resinosa																	
Pinus strobus																	
Populus balsamifera	✓														✓		1 5
Populus grandidentata																	
Populus tremuloides	✓	✓											✓				2 10
Prunus nigra																	
Prunus pensylvanica																	
Prunus serotina																	
Prunus virginiana	✓		✓	✓		✓					✓			✓	✓	✓	7 35
Pyrus americana																	
Pyrus decora																	
Quercus rubra																	
Thuja occidentalis																	
Tilia americana																	
Tsuga canadensis																	
Ulmus americana																	
Ulmus rubra																	
Ulmus thomasi																	
Liverworts	✓																1
Bromus ciliatus	✓		✓	✓	✓		✓	✓	✓		✓						7 35

PRESENCE LIST

SPRUCE-FIR - MIXED HARDWOODS

STAND NO. 23

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 oxyacanthoides*
- ✓ *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 23

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
 ✓ Galium boreale
 Galium concinnum
 Galium lanceolatum
 ✓ Galium triflorum
 Gaultheria hispidula
 Gaultheria procumbens
 Gentiana andrewsii
 Gentiana crinata
 Gentiana quinquefolia
 Geocaulon lividum
 Geranium bicknellii
 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
 Smilacina trifolia
 ✓ 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 - small leaves
 ✓ 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

Mosses
 Sclerites
 Liverworts
 Dryopteris apiculata
 Harding borage - Mertensia paniculata
 Hieracium magnifolium
 Lysimachia ciliata
 Urtica sp. - incognita
 Bromus ciliatus
 Equisetum blakei - arvense var. boreale
 Lilium michiganense

FREQUENCY DATA
(Common Species)

SPRUCE-FIR - MIXED HARDWOODS

STAND NO. 23(1)

TREE SEEDLINGS

876543/ *Abies balsamea*
Acer pensylvanicum
 0 *Acer rubrum*
Acer saccharum
 4 *Acer spicatum*
Betula lutea
Betula papyrifera
 4 *Amelanchier*

Fagus grandifolia
Larix laricina
Ostrya virginiana
Picea glauca
Picea mariana
Pinus banksiana
Pinus resinosa
 05 *Frax. nig*

Pinus strobus
 1 *Populus tremuloides*
Prunus pensylvanica
Prunus serotina
Thuja occidentalis
Tilia americana
Tsuga canadensis
 853 *Prunus nig*

SHRUBS

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

Prunus pumila
Pyrus melanocarpa
 71 *Ribes cynosbati*
Ribes glandulosum
Ribes lacustre
 65431 *Rosa sp.*
Rubus (blackberry)
Rubus (dewberry)
Rubus (raspberry)
Rubus idaeus

Rubus parviflorus
Sambucus pubens
Shepherdia canadensis
Spiraea alba
Symphoricarpos occidentalis
Taxus canadensis
Vaccinium angustifolium
Vaccinium myrtilloides
Viburnum acerifolium
Viburnum trilobum
 6 *Vib. rafinesquianum*

HERBS

Actaea pachypoda
Actaea rubra
Adiantum pedatum
Anaphlis margaritacea
Anemone cylindrica
 53 *Anemone quinquefolia*
Anemone virginiana
Antennaria spp.
 053 *Apocynum androsaemifolium*
Aquilegia canadensis
 876543/ *Aralia nudicaulis*
Arisaema atrorubens
 987534/ *Aster macrophyllus* 0
Athyrium filix-femina
Botrychium virginianum
 875432/ *Carex pensylvanica* 90
Chimaphila umbellata
Chrysanthemum leucanthemum
Circaea alpina
Claytonia caroliniana
Claytonia virginiana
 8 *Clintonia borealis*
Coptis groenlandicum
Corallorhiza maculata
 71 *Cornus canadensis*
Cystopteris fragilis
Dicentra canadensis
Dicentra cucullaria
Dryopteris disjuncta
Dryopteris phegopteris

Dryopteris spinulosa
Epigaea repens
Epilobium angustifolium
 643 *Equisetum sylvaticum*
Erythronium americanum
 0986532/ *Fragaria vesca*
Fragaria virginiana
Galium aparine
 061 *Galium triflorum*
Gaultheria hispidula
Gaultheria procumbens
Gentiana quinquefolia
Geranium maculatum
Goodyera repens
Habenaria obtusata
Halenia deflexa
Hepatica acutiloba
Hepatica americana
Hieracium aurantiacum
Linnaea borealis
Lycopodium annotinum
Lycopodium clavatum
Lycopodium complanatum
Lycopodium lucidulum
Lycopodium obscurum
 824 *Maianthemum canadense*
Medeola virginiana
Melampyrum lineare
Mitchella repens
Mitella diphylla

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
 0985432/ *Rubus pubescens*
Sanguinaria canadensis
Smilacina racemosa
Smilacina stellata
 0652 *Streptopus roseus*
Tiarella cordifolia
Trientalis borealis
Trillium erectum
Trillium grandiflorum
 3 *Uvularia sessilifolia*
Viola canadensis
Viola cucullata
Viola pallens
Viola pubescens
Viola renifolia
Waldsteinia fragarioides

Additional species

Mosses 1234567890
Lichens 123456789
Asarum 1237
Petantes 2345780

Pyrola asarifolia 2389
Healing borage 2-*Mertensia*
Salix boreale 23457890
Solidago sp 3-*lepta*

Erans sp 345890
Symmachia ulsata 3
Sanicula mar 5
Vicia sp. same 5-*incognita*
Viola conspersa 6

Malicium divi 6

FREQUENCY DATA
(Common Species)

SPRUCE-FIR - MIXED HARDWOODS

STAND NO. 23 (2)

TREE SEEDLINGS

- 875321 *Abies balsamea*
Acer pensylvanicum
Acer rubrum
Acer saccharum
 43 *Acer spicatum*
Betula lutea
 5 *Betula papyrifera*
 431 *Amelanchier*

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

543 *Frax. nigra*

SHRUBS

- Alnus rugosa*
Arctostaphylos uva-ursi
Comptonia peregrina
Corylus americana
 8 *Corylus cornuta*
 0976541 *Diervilla lonicera*
Dirca palustris
Ilex verticillata
Ledum groenlandicum
Lonicera canadensis
 873 *Cornus alternifolia*
 8 *Cornus racemosa*

- Prunus pumila*
Pyrus melanocarpa
 1 *Ribes cynosbati*
Ribes glandulosum
Ribes lacustre
 9 *Rosa* sp.
Rubus (blackberry)
Rubus (dewberry)
Rubus (raspberry)
Rubus idaeus

HERBS

- Actaea pachypoda*
 53 *Actaea rubra*
Adiantum pedatum
Anaphalis margaritacea
Anemone cylindrica
Anemone quinquefolia
Anemone virginiana
Antennaria spp.
 65 *Apocynum androsaemifolium*
Aquilegia canadensis
 94321 *Aralia nudicaulis*
Arisaema atrorubens
 0986421 *Aster macrophyllus*
Athyrium filix-femina
Botrychium virginianum
 098753 *Carex pensylvanica*
Chimaphila umbellata
Chrysanthemum leucanthemum
Circaea alpina
Claytonia caroliniana
Claytonia virginiana
Clintonia borealis
Coptis groenlandicum
Corallorhiza maculata
 87643 *Cornus canadensis*
Cystopteris fragilis
Dicentra canadensis
Dicentra cucullaria
Dryopteris disjuncta
Dryopteris phegopteris

- Dryopteris spinulosa*
Epigaea repens
Epilobium angustifolium
 0 *Equisetum sylvaticum*
Erythronium americanum
 0987652 *Fragaria vesca*
 09755 *Fragaria virginiana*
Galium aparine
 0421 *Galium triflorum*
Gaultheria hispidula
Gaultheria procumbens
Gentiana quinquefolia
Geranium maculatum
Goodyera repens
Habenaria obtusata
Halenia deflexa
Hepatica acutiloba
Hepatica americana
Hieracium aurantiacum
Linnaea borealis
Lycopodium annotinum
Lycopodium clavatum
Lycopodium complanatum
Lycopodium lucidulum
Lycopodium obscurum
 082 *Maianthemum canadense*
Medeola virginiana
Melampyrum lineare
Mitchella repens
Mitella diphylla

8Pop bals.

- Pinus strobus*
 5 *Populus tremuloides*
Prunus pensylvanica
Prunus serotina
Thuja occidentalis
Tilia americana
Tsuga canadensis

0984 *Pinus virginiana*

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

- 93 *Mitella nuda*
Monotropa uniflora
Osmorhiza claytoni
Oxalis montana
Oxalis stricta
Polygala paucifolia
Polygonatum pubescens
Prenanthes alba
 9 *Pteridium aquilinum*
 52 *Pyrola elliptica*
Pyrola rotundifolia
Pyrola secunda
Ranunculus acris
Rhus radicans
 09876432 *Rubus pubescens*
Sanguinaria canadensis
Smilacina racemosa
Smilacina stellata
 31 *Streptopus roseus*
Tiarella cordifolia
Trientalis borealis
Trillium erectum
Trillium grandiflorum
 5 *Uvularia sessilifolia*
Viola canadensis
Viola cucullata
Viola pallens
Viola pubescens
Viola renifolia
Waldsteinia fragarioides

Additional species

Morus 12456789
Lichnes 12456789
Viola sp. 1 - incognita
 09430 *Populus nigra* 1690

Solidago sp. 2 - *lepidota*
Boragin *thunb.* 26 - *Mertensia*
Petasites 35670
Pyrola *asarif* 3458

Asterum *can* 3
Galium *boreale* 3680
Grass 3 - *Bromus*
Sambuca *mar* 5

Androctum durum 67890