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Site 6022 (Boreal Stand 22): Linden Grove, St. Louis County, Minnesota, Township 62N, Range 20W, Section 14. 1955-07-24

[s.l.]: [s.n.], 1955-07-24

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[= site 6022]

Data Form No. 20

Plant Ecology Research

Univ. of Wisconsin

STAND RECORD

FORESTS

Stand No. 22

Name: Linden Grove.

County: St. Louis, Minn.

Date: July 24, 1953

Size of Stand: 40 acres.

Forest Type: Balsam-birch spruce.

Topography: rolling

Locality:

T: 62

R: 20

Sec: 14

Observers:

PFM.

Size of Area Sampled:

Soil Type:

Slope:

Directions

Slight slope to W.

Condition of Stand:

fine condition - never logged - Old mature popple + Jack pine
 contains *Picea mariana* on upland site although may be a perched
 water table as indicated by a sphagnum pit in one location.
 However no accumulation of atmospheric water is evident.
 Good mesic site

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									

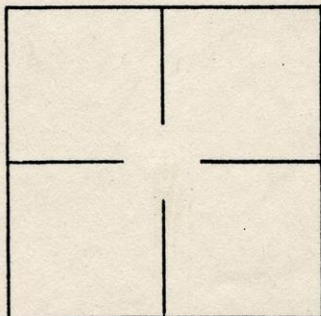
DEPTH

CHARACTERISTICS (Color, Texture, Structure, etc.)

A ₀	#1 1/2 - 2" litter 3/2 - 1 1/2 ferment	#2 1" litter 3" - 2 ferment	#3 4" - 2" litter 2" - ferment
A ₁	1/2 - black	1 1/2 - black	1 1/2 - black - crumbly
A ₂	1-2" grey brown leach	1-2" grey - brown leach	2" - brown - grey - leached
B	-4" + crumbly brown - grey clay	6" + crumbly brown grey clay	8" + crumbly brown - black grey clay loam

Parent Material:

Map:



LICHENS OF GREAT LAKES SPRUCE-FIR COMMUNITIES
MINNESOTA

St. Louis County



2 miles S.W. of Linden Grove T62N R20W SEC 14
Balsam, aspen, white birch & white spruce.
Rolling, slight slope to W. Immature stand, in
good condition.

July 24, 1955. Coll. Paul F. Maycock

Plant Ecology Research
TREE DATA SUMMARY SHEETMesic
University of Wisconsin
183.3~~Northern Pine-Hardwoods~~
Spruce-fir

✓ Station Number: 22 - 1482

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	37	82				4340	120	75.0		92.5	34.6	57.2	37.7	123.5	864.5
Acer rubru							1	0.6							1.0
A. sacchar															
A. spicatu							4	2.5							1.0
Betula lut															
B. papyrif	16	17				748	11	6.9		40.0	14.9	10.6	6.5	32.0	160.0
Carpinus c															
Fagus gran															
Ostrya vir															
Picea glau	8	11				1148				20.0	7.5	6.9	10.0	24.4	146.4
Pinus Bank	4	4				260				10.0	3.7	2.5	2.3	8.5	8.5
P. resinosa															
P. Strobus	3	3				485				7.5	2.8	1.9	4.2	8.9	44.5
Populus ba	6	7				552				15.0	5.6	4.4	4.8	14.8	29.6
P. grandid															
P. tremulo	19	22				3358	6	3.8		47.5	17.8	13.7	29.2	60.7	121.4
Prunus pen							5	3.1							1.0
Quercus el															
Q. rubra															1.0
Tilia amer															
Tsuga cana															
Thuja occi															1.0
Ulmus amer															
U. fulva	3	3				109	5	3.1		7.5	2.8	1.9	0.9	5.6	44.8
Picea mar.	9	9				466	1	0.6		22.5	8.4	5.6	4.0	18.0	36.0
Frax. nig	2	2				41	5	3.1		5.0	1.9	1.3	0.4	3.6	21.6
Prunus virg							1	0.6							
Amelanchier							1	0.6							
TOTALS		160				11,507	160	100.0		267.5	100.0	100.0	100.0	300.0	1482

AVE. DIST. BTW'N TREES:

9.0

AVE. B. A.:

71.9

TREES/ACRE:

538

DOM./ACRE:

38,682

N. range
Index

988.0

1.0

1.0

288.0

244.0

68.0

53.4

133.2

546.3

1.0

1.0

1.0

39.2

180.0

25.2

2570.3

Midrange
Index

1111.5

2.0

9.0

320.0

244.0

68.0

62.3

133.2

485.6

5.0

8.0

22.4

180.0

21.6

2673

STATION NO. SUBJECT	TREES										DATE	STAND NO. 22(1)	
	L	2	3	4	5	6	7	8	9	10			
ABIE S BAL	8' 46 7' 75	12' 31 4' 42 10 1/2 37	8' 59 11' 40	5 1/2 32 4' 52 10 1/2 64	7' 20 8' 65	14 1/2 44 8' 28	15' 54 14' 36 7' 40	7 1/2 38 4' 22	8 1/2 55 10' 64	11 1/2 38 3' 59			
ACER RUB													
A. S AGG													
A. SPIC													
BETULA LUT													
B. PAP		21 58	1' 65		3 1/2 104			7' 21					
CARPINUS													
FAG US													
OSTRYA													
PICEA GL	7' 281					9 1/2 126							
P. MAR					13' 74					3 1/2 34			
PINUS BANK													
P. RES													
P. S TRO													
POP BALS	9 1/2 171			11 1/2 80									
P. GRAND													
P. TREM									3' 160	7' 31			
PRUNUS PEN													
P.S EROT													
P. VING													
QUERCUS ELL													
Q. MAG RO													
Q. RUB													
TILIA													
TSUGA													
THUJA													
ULMUS AMER													
U. RUB						18' 46	9' 27		10' 36				
<i>Frax. nigra</i>			9' 22					8' 19					
LITTER	4"	3"	3"	4"	3"	3"	3"	2 1/2	3"	2"			
CANOPY	65	35	45	55	40	20	65	30	25	60			
DI STANCE	3 1/2	4 1/2	29	3 1/2	3 1/2	50	45	26 1/2	3 1/2	25			

STATION NO. SUBJECT	TREES										DATE	STAND NO. 22 (3)						
	1	2	3	4	5	6	7	8	9	10								
ABIE S BAL	3 1/2 12 1/2	39 65	3 1/2 19	20 156	7 1/2 8	4 1/2 155	4 1/2 29	3 1/2 8	6 1/2 52	10 6 1/2	35 52	14 1/2 3	66 52	11 9 1/2	175 96	10 76	17 7 1/2	48 92
ACER RUB					4 1/2 16 1/2	55 34	4 3	3 1/2 8	6 52	40 6 1/2	4 3	31 52						
A. S AGG																		
A. SPIC																		
BETULA LUT																		
B. PAP	9'	36	11 1/2	21	13 1/2	29						3'	31	13 1/2	29	12'	46	
CARPINUS																		
FAG US																		
OSTRYA																		
PICEA GL	4'	102	6 1/2	100														
P. HAR																		
PINUS BANK													8'	104				
P. RES																		
P. S TRO												13'	105					
POP BALS																		
P. GRAND																		
P. TREM					7 1/2	115			8'	177	11'	205		11'	154			
PRUNUS PEN																		
P. S ENOT																		
P. VING																		
QUERCUS ELI.																		
Q. MAG RO																		
Q. RUB																		
TILIA																		
TSUGA																		
THUJA																		
ULMUS AMER																		
U. RUB																		
LITTER	2"	2 1/2	2 1/2	3 1/2	1 1/2	2 1/2	3"	2 1/2	3 1/2	2"								
CANOPY	55	35	5	50	45	25	30	25	15	20								
DI STANCE	29	40 1/2	36 1/2	24	24 1/2	30 1/2	32 1/2	36 1/2	42 1/2	48 1/2								

STATION NO. SUBJECT	TIMES										DATE	STAND NO. 22 (4)				
	1	2	3	4	5	6	7	8	9	10						
ABIE S BAL	2 1/2 17	7 1/2 16	15 17	20 1/4 16	4 1/2 37	16 5	16 20	10 145	17 7	5 1/2 19	13 1/2 7	29 65	9 1/2 1	27 24	4 1/2 9	22 76
ACER RUB																
A. S AGG																
A. SPIG																
BETULA LUT																
B. PAP								10 1/2 52								
CARPINUS																
FAG US																
OSTRYA		1 7	36 12													
PICEA GL								9 1/2 142								
P. MAR				2 46					6 42		14 1/2 42					
PINUS BANK	3 38		14 46													
P. RES																
P. S TIO			1 175													
POP BALS										9 1/2 55		3 1/2 10	86 74			
P. GRAND																
P. TREM	11 82			10 11	154 165	7 1/2 6 1/2	206 155	8 1/2 140	11 155						5 185	
PRUNUS PEN																
P.S EROT																
P. VING																
QUERCUS ELL																
Q. MAG RO																
Q. RUB																
TILIA																
TSUGA																
THUJA																
ULMUS AMER																
U. RUB																
LITTER	4"	2"	3"	2 1/2	3"	3"	3	2 1/2	4"	3"						
CANOPY	45	3	45	20	40	45	25	35	5	50						
DI STANCE	33 1/2	34	35	31	25	38 1/2	41	44 1/2	29	31 1/2						

Av. canopy. 35%

Av. litter - 2.8"

SAMPLING S											DATE	STAND NO	22 (1)
STATION NO	1	2	3	4	5	6	7	8	9	10			
SUBJECT													
ABIES S BAL	7' 14" 13 1/2	4' 3 1/2	4' 4 1/2	13 1/2	11' 7" 9"	15' 15" 13	11' 10 1/2	4 1/2' 14"	11' 3"	16' 13" 19"	12' 11 1/2	6' 8 1/2	
ACER RUB													
A. SACC													
A. SPIC		1'	4'										
BETULA LUT													
B. PAP					10'								
CARPINUS													
FAGUS													
FRAX NIG			2 1/2			13 1/2	6' 8"	7'					
OSTR YA													
PICEA GIL													
P. MAR													
PINUS BANK													
P. RES													
P. STR O													
POP BALS													
P. GRAND													
P. TREM													
PR UNUS PEN													
P. SEROT													
P. VINO													
QUERCUS E LL													
Q. MACRO													
Q. R UBRA													
TILIA													
TSUGA													
TRUJA													
ULMUS AMER													
U. RUBRA													
LITTER													
CANOPY													
DISTANCE	50 1/2	20 1/2	15	31	37	56 1/2	35 1/2	36 1/2	51	38			

SAPLING S										
STATION NO	1	2	3	4	5	6	7	8	9	10
SUBJECT										
ABIES BAL	1' 2"	4'	4' 10 1/2"	17 1/2"	13 1/2"	12"	6' 10"	13' 14"	10' 2"	14 1/2" 10"
ACER RUB										
A. SACO										
A. SPIC		10 1/2"								
BETULA LUT										
B. PAP			9'			17'		4'		
CARPINUS										
FAGUS										
FRAX NIG										
OSTR YA										
PICEA GL										
P. MAR				3'						
PINUS BANK										
P. RES										
P. STR O										
POP BALS										
P. GRAND										
P. TREM					1'			12 1/2"		
PR UNUS PEN						18'	10 1/2"			
P. SEROT										
P. VIRG										
QUERCUS E LL										
Q. MACRO										
Q. R UBRA										
TILIA										
TSUGA										
THUJA										
ULMUS AMER										
U. RUBRA		18'								
Amelanchier						4'				
LITTER										
CANOPY										
DISTANCE	13	35 1/2	28 1/2	34 1/2	51 1/2	51	30 1/2	43 1/2	51	46

STATION NO SUBJECT	SAPLING S										DATE	STAND NO	22(3)
	1	2	3	4	5	6	7	8	9	10			
ABIES BAL	3' 6" 10"	3' 13"	12' 15" 13' 11"	15' 9 1/2"	11 1/2' 9' 2 1/2"	5' 2' 7"	12' 11 1/2"	7' 4' 6"	7' 12' 11"	7' 6 1/2' 1 1/2"			
ACER RUB													
A. SACC													
A. SPIC									4'				
BETULA LUT													
B. PAP		9 1/2'		18'				5 1/2'					
CARPINUS													
FAGUS													
FRAX NIG													
OSTR YA													
PICEA GIL													
P. MAR													
PINUS BANK													
P. RES													
P. STR O													
POP BALS													
P. GRAND													
P. TREM													
PR UNUS PEN													
P. SEROT													
P. VIRG													
QUERCUS E LL													
Q. MACRO													
Q. R UBRA													
TILIA													
TSUGA													
THUJA													
ULMUS AMER													
U. RUBRA	7'	5'		10'			4'						
LITTER													
CANOPY													
DISTANCE	26	30 1/2	51 1/2	52 1/2	26 1/2	16	32 1/2	22 1/2	34	22 1/2			

SAPLINGS										DATE	STAND NO.	22 (14)
STATION NO.	1	2	3	4	5	6	7	8	9	10		
SUBJECT												
ABIES BAL	5 1/2 2 1/2 7 13 1/2	18 16	20	9 1/2 7	3 1/2 9 8 10	28 8 1/2 11 1/2	7 6 1/2 14 1/2	16 5 4 1/2	3 12 1/2	12 9 7		
ACER RUB												
A. SACO												
A. SPIC												
BETULA LUT												
B. PAP			15				4 1/2	11 1/2		23		
CARPINUS												
FAGUS												
FRAX NIG												
OSTRYA												
PICEA OL												
PICEA MAR												
PINUS BANK												
P. RES												
P. STROB												
POP BALS												
P. GRAND												
P. TREM		14 20	2	7								
PRUNUS PEN			5			16						
P. SEROT												
P. VIRE									8			
QUERCUS ELL												
Q. MACRO												
Q. RUB												
TILIA												
TSUGA												
THUJA												
ULMUS AMER												
U. RUB												
<i>Amelanchier</i>												
LITTER												
CANOPY												
DIS TANCE	28	68	42	35	30 1/2	64	32 1/2	37	35	51		

Data Form No. 84a
TABULATION FORM

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

University of Wisconsin
STAND NO. 22

	P.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	TOTAL	F
Achillea millefolium																							
Actaea pachypoda																							
Actaea rubra	✓																						1
Adiantum pedatum																							
Agastache foeniculum																							
Agrimonia gryposepala																							
Agrostis perennans																							
Allium tricoccum																							
Alnus crispa																							
Alnus rugosa	✓																						1
Amphicarpa bracteata																							
Anaphlis margaritacea																							
Anemone canadensis																							
Anemone cylindrica																							
Anemone quinquefolia	✓	✓							✓					✓					✓	✓		5	25
Anemone virginiana																							
Antennaria spp.																							
Apocynum androsaemifolium	✓								✓													1	5
Aquilegia canadensis	✓																						1
Aralia hispida																							
Aralia nudicaulis	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	19	95
Aralia racemosa																							
Arctostaphylos uva-ursi																							
Arenaria lateriflora	✓																						1
Arisaema atrorubens																							
Asarum canadense	✓							✓					✓	✓	✓						✓	5	25
Asclepias exaltata																							
Aster acuminatus																							
Aster ciliolatus																							
Aster furcatus																							
Aster lateriflorus																							
Aster macrophyllus	✓		✓	✓		✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	17	85
Aster nova-angliae																							
Aster paniculatus																							
Aster puniceus																							
Aster sagittifolius																							
Aster umbellatus																							
Athyrium filix-femina	✓			✓																		1	5
Athyrium thelypteroides																							
Botrychium lanceolatum																							
Botrychium lunaria																							
Botrychium matricariaefolium																							
Botrychium multifidum																							
Botrychium virginianum	✓																						1
Brachyelytrum erectum	✓																						1
Caltha palustris																							
Calypso bulbosa																							
Campanula rotundifolia																							
Carex arctata	✓																						1
Carex aurea																							
Carex brunnescens																							
Carex canescens																							

[illegible]

[illegible]

[illegible]

	P.									10							20	
Luzula multiflora																		
Lycopodium annotinum	✓																	1
Lycopodium clavatum																		
Lycopodium complanatum																		
Lycopodium inundatum																		
Lycopodium lucidulum																		
Lycopodium obscurum	✓					✓											1	5
Lycopodium sabinaefolium																		
Lycopodium selago																		
Lycopodium tristachyum																		
Lycopus americanus																		
Lycopus uniflorus																		
Lysimachia ciliata																		
Lysimachia quadrifolia																		
Lysimachia terrestris																		
Maianthemum canadense	✓				✓		✓	✓		✓				✓	✓		✓	8 40
Malaxis unifolia																		
Medeola virginiana																		
Melampyrum lineare																		
Menispermum canadense																		
Mertensia paniculata																		
Milium effusum																		
Mitchella repens																		
Mitella diphylla																		
Mitella nuda	✓		✓	✓	✓	✓	✓	✓		✓							✓	✓ 9 45
Moneses uniflora																		
Monotropa hypopithys	✓																	1
Montropa uniflora	✓																	1
Mosses spp.	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓ 17 85
Nemopanthus mucronata																		
Onoclea sensibilis																		
Orchis spectabilis																		
Oryzopsis asperifolia	✓			✓						✓								2 10
Oryzopsis racemosa																		
Osmorhiza claytoni																		
Osmorhiza longistylis																		
Osmunda claytoniana																		
Osmunda cinnamomea																		
Osmunda regalis																		
Oxalis montana																		
Oxalis stricta																		
Panax quinquefolius																		
Panax trifolius																		
Parthenocissus inserta																		
Parthenocissus quinquefolia																		
Petasites palmatus	✓		✓			✓	✓	✓									✓	5 25
Phleum pratense																		
Phlox divaricata																		
Phryma leptostachya																		
Plantago major																		
Poa compressa																		
Poa pratensis																		

[illegible]

[illegible]

	P									10									20	
Trifolium pratense																				
Trifolium repens																				
Trillium cernuum	✓																			1
Trillium erectum																				
Trillium grandiflorum																				
Trillium undulatum																				
Uvularia grandiflora																				
Uvularia sessilifolia																				
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																				
Viburnum rafinesquianum	✓																			1
Viburnum trilobum																				
Vicia americana																				
Viola adunca																				
Viola blanda																				
Viola canadensis																				
Viola conspersa																				
Viola cucullata																				
Viola incognita	✓				✓	✓			✓	✓	✓	✓	✓	✓	✓					7 35
Viola nephrophylla																				
Viola pallens																				
Viola papilionacea																				
Viola pubescens																				
Viola renifolia																				
Viola selkirkii																				
Viola sororia																				
Vitis riparia																				
Waldsteinia fragarioides																				
Woodsia ilvensis																				
Xanthoxylum americanum																				
Tree Seedlings																				
Abies balsamea	✓	✓			✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	14 70
Acer pensylvanicum																				
Acer rubrum																				
Acer saccharum																				
Acer spicatum	✓									✓		✓		✓						3 15

	P.									10							20.			
Amelanchier spp.	✓																	1	5	
Betula lutea																				
Betula papyrifera																				
Carpinus caroliniana																				
Crataegus spp.																				
Fagus grandifolia																				
Fraxinus americana																				
Fraxinus nigra	✓	✓			✓					✓								3	15	
Fraxinus pennsylvanicum																				
Larix laricina																				
Ostrya virginiana																				
Picea glauca																				
Picea mariana																				
Pinus banksiana																				
Pinus resinosa																				
Pinus strobus																				
Populus balsamifera																				
Populus grandidentata																				
Populus tremuloides	✓								✓									1	5	
Prunus nigra																				
Prunus pensylvanica																				
Prunus serotina																				
Prunus virginiana	✓		✓		✓												✓	3	15	
Pyrus americana																				
Pyrus decora																				
Quercus rubra																				
Thuja occidentalis																				
Tilia americana																				
Tsuga canadensis																				
Ulmus americana																				
Ulmus rubra																				
Ulmus thomasi																				
Grass sp.	✓				✓			✓			✓	✓					✓	✓	6	30

PRESENCE LIST

SPRUCE-FIR - MIXED HARDWOODS

STAND NO. 22

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 22

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
 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

moss
 Lichens
 Oxyglossis asper.
 Brachyletium erect.
 Viola incognita
 Isopyrum biternatum
 Arenaria lateriflora
 Carex pedunculata
 Carex prostrata

Solidago. lepida
 Liliun michiganense
 Stachys palustris

FREQUENCY DATA
(Common Species)

SPRUCE-FIR - MIXED HARDWOODS

STAND NO. 22 (1)

TREE SEEDLINGS

097651 Abies balsamea
Acer pensylvanicum
Acer rubrum
Acer saccharum
Acer spicatum
Betula lutea
Betula papyrifera

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

51 max. mg

SHRUBS

Alnus rugosa
Arctostaphylos uva-ursi
Comptonia peregrina
Corylus americana
0653 Corylus cornuta
096 Diervilla lonicera
Dirca palustris
Ilex verticillata
Ledum groenlandicum
Lonicera canadensis
6 Lonicera linearis

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

Pinus strobus
8 Populus tremuloides
Prunus pensylvanica
Prunus serotina
Thuja occidentalis
Tilia americana
Tsuga canadensis
52 Prunus nigra
Rubus parviflorus
Sambucus pubens
Shepherdia canadensis
Spiraea alba
Symphoricarpos occidentalis
Taxus canadensis
Vaccinium angustifolium
Vaccinium myrtilloides
Viburnum acerifolium
Viburnum trilobum

HERBS

Actaea pachypoda
Actaea rubra
Adiantum pedatum
Anaphalis margaritacea
Anemone cylindrica
81 Anemone quinquefolia
Anemone virginiana
Antennaria spp.
8 Apocynum androsaemifolium
Aquilegia canadensis
876532 Aralia nudicaulis 90
Arisaema atrorubens
9876532 Aster macrophyllus 0
3 Athyrium filix-femina
Botrychium virginianum
876532 Carex pensylvanica 0
Chimaphila umbellata
Chrysanthemum leucanthemum
Circaea alpina
Claytonia caroliniana
Claytonia virginiana
09875 Clintonia borealis
Coptis groenlandicum
3 Coralorrhiza maculata
042 Cornus canadensis
Cystopteris fragilis
Dicentra canadensis
Dicentra cucullaria
2 Dryopteris disjuncta
Dryopteris phegopteris

5432 Dryopteris spinulosa
Epigaea repens
Epilobium angustifolium
5 Equisetum sylvaticum
Erythronium americanum
0987542 Fragaria vesca
Fragaria virginiana
1 Galium aparine
051 Galium triflorum
Gaultheria hispidula
Gaultheria procumbens
Gentiana quinquefolia
Geranium maculatum
Goodyera repens
Habenaria obtusata
Halenia deflexa
Hepatica acutiloba
09 Hepatica americana
Hieracium aurantiacum
0 Linnaea borealis
Lycopodium annotinum
Lycopodium clavatum
Lycopodium complanatum
Lycopodium lucidulum
5 Lycopodium obscurum
9764 Maianthemum canadense
Medeola virginiana
Melampyrum lineare
Mitchella repens
Mitella diphylla

765432 Mitella nuda
Monotropa uniflora
Osmorhiza claytoni
Oxalis montana
Oxalis stricta
Polygala paucifolia
Polygonatum pubescens
1 Prenanthes alba
Pteridium aquilinum
Pyrola elliptica
Pyrola rotundifolia
Pyrola secunda
Ranunculus acris
Rhus radicans
065432 Rubus pubescens
Sanguinaria canadensis
Smilacina racemosa
Smilacina stellata
862 Streptopus roseus
Tiarella cordifolia
7 Trientalis borealis
Trillium erectum
Trillium grandiflorum
Uvularia sessilifolia
Viola canadensis
Viola cucullata
Viola pallens
Viola pubescens
Viola renifolia
Waldsteinia fragarioides

Additional species

Moss 13457890
Hickory 13490
Potamogeton 2567
Caulophila 13490

Oryzopsis 39
Carex intumescens 4
Saxifraga 49
Viola sp. 560 in cog.

Grass sp. 58
Galium boreale 68
Asarum 7
Pyrola dohrnii 7

Samolus mar 0

FREQUENCY DATA
(Common Species)

SPRUCE-FIR - MIXED HARDWOODS

STAND NO. 22 (2)

TREE SEEDLINGS

654321 *Abies balsamea* 90
Acer pensylvanicum
Acer rubrum
Acer saccharum
 531 *Acer spicatum*
Betula lutea
Betula papyrifera
 5 *Amelanchier*

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

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

SHRUBS

Alnus rugosa
Arctostaphylos uva-ursi
Comptonia peregrina
Corylus americana
 0954 *Corylus cornuta*
 765421 *Diervilla lonicera*
Dirca palustris
Ilex verticillata
Ledum groenlandicum
 0 *Lonicera canadensis*

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

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

HERBS

Actaea pachypoda
Actaea rubra
Adiantum pedatum
Anaphalis margaritacea
Anemone cylindrica
 983 *Anemone quinquefolia*
Anemone virginiana
Antennaria spp.
Apocynum androsaemifolium
Aquilegia canadensis
 7654321 *Aralia nudicaulis* 90
Arisaema atrorubens
 8765431 *Aster macrophyllus* 90
Athyrium filix-femina
Botrychium virginianum
 874521 *Carex pensylvanica* 90
Chimaphila umbellata
Chrysanthemum leucanthemum
Circaea alpina
Claytonia caroliniana
Claytonia virginiana
 875431 *Clintonia borealis* 90
Coptis groenlandicum
Corallorhiza maculata
 095432 *Cornus canadensis*
Cystopteris fragilis
Dicentra canadensis
Dicentra cucullaria
Dryopteris disjuncta
Dryopteris phegopteris

8 *Dryopteris spinulosa*
Epigaea repens
Epilobium angustifolium
 98 *Equisetum sylvaticum*
Erythronium americanum
 985421 *Fragaria vesca*
Fragaria virginiana
Galium aparine
 53 *Galium triflorum*
Gaultheria hispidula
Gaultheria procumbens
Gentiana quinquefolia
Geranium maculatum
Goodyera repens
Habenaria obtusata
Halenia deflexa
Hepatica acutiloba
 6 *Hepatica americana*
Hieracium aurantiacum
 51 *Linnaea borealis*
Lycopodium annotinum
Lycopodium clavatum
Lycopodium complanatum
Lycopodium lucidulum
Lycopodium obscurum
 0641 *Maianthemum canadense*
Medeola virginiana
Melampyrum lineare
Mitchella repens
Mitella diphylla

091 *Mitella nuda*
Monotropa uniflora
Osmorhiza claytoni
Oxalis montana
Oxalis stricta
Polygala paucifolia
Polygonatum pubescens
Prenanthes alba
Pteridium aquilinum
 8 *Pyrola elliptica*
Pyrola rotundifolia
Pyrola secunda
Ranunculus acris
Rhus radicans
 698654321 *Rubus pubescens*
Sanguinaria canadensis
Smilacina racemosa
Smilacina stellata
 0764 *Streptopus roseus*
Tiarella cordifolia
Trientalis borealis
Trillium erectum
Trillium grandiflorum
Uvularia sessilifolia
Viola canadensis
Viola cucullata
Viola pallens
Viola pubescens
Viola renifolia
Waldsteinia fragarioides

Additional species

Morus 12345690
Lichens 123456890
Viola 1357 *integrifolia*
Pyrus asar 234

Asarum 2340
Grass - 2389
Sambucus 235
Galium boreale 6

Potamogeton 9
Thalictrum flavum 0