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Site 6011 (Boreal Stand 11): Sorensen's Woods - near Herbster, Bayfield County, Township 50N, Range 7W, Section 10. 1955-07-08

[s.l.]: [s.n.], 1955-07-08

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[= site 6011]

Data Form No. 20

Plant Ecology Research

Univ. of Wisconsin

STAND RECORD

FORESTS

Stand No. 11

Name: *Sorensens Woods - Near Webster*

Locality:

*Edith Sprague - part owner
Herbster*County: *Bayfield*T: *50N*R: *7W*Sec: *10*Date: *July 8, 1955*Observers: *PFM*Size of Stand: *20 acres*

Size of Area Sampled:

Forest Type: *spruce-fir*

Soil Type:

Topography: *gently rolling around - steep ravine*

Slope:

Directions

Condition of Stand:

*Only fir - some popple + birch removed in a few places
Logged for pine
Situating in a protected ravine - surrounding is agricultural land
which has protected stand from burning
Stand encountered by PFM.*

*steep - centrally to small spring - feeding
Cranberry River*

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									

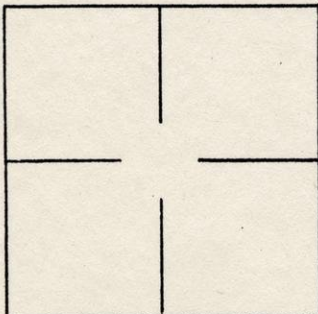
DEPTH

CHARACTERISTICS (Color, Texture, Structure, etc.)

	#1		#2		#3
A ₀	1" litter - aspen + birch leaves spruce needles		1 1/2" - 2" 1" litter - pine needles + spruce 1-1 1/2" duff		1 1/2" - 1" litter 1" duff
A ₁	1-1 1/2" A ₁ - black		1" - black - brown		1/4" - black
A ₂	2 1/2" grey - light brown - heavy leaching		2" - grey - brown - light leaching		2" grey - brown - leached
B	4" light brown - clay loam at 9" heavy red clay		at 5" red clay - crumbly 1/2" faster down stiff		10" crumbly red clay
Parent Material:					

Parent Material:

Map:



spruce - fir
Northern Pine-Hardwoods

Station Number: 11 - 1677

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	34	67				4071	54	33.8		85.0	30.9	41.9	32.0	104.8	733.6
Acer rubru															
A. sacchar															
A. spicatu	1	1				14	31	19.4		2.5	0.9	0.6	0.2	1.7	10.2
Betula lut															
B. papyrif	21	23				1371	34	21.3		52.5	19.2	14.4	10.8	44.4	222.0
Carpinus c															
Fagus gran															
Ostrya vir															
Picea glau	26	34				4172	8	5.0		65.0	23.6	21.2	32.8	77.6	465.6
Pinus Bank															
P. resinosa	1	1				140				2.5	0.9	0.6	1.1	1.6	4.8
P. Strobus	5	5				790	1	0.6		12.5	4.5	3.2	6.2	13.9	69.5
Populus ba															
P. grandid															
P. tremulo	17	22				1525	16	10.0		42.5	15.4	13.7	12.0	41.1	82.2
Prunus pen							1	0.6							
Quercus el															
Q. rubra															
Tilia amer															
Tsuga cana															
Thuja occi	3	4				375	1	0.6		7.5	2.8	2.5	2.9	8.2	57.4
Ulmus amer															
U. fulva															
Frax. nigrom	1	2				219	4	2.5		2.5	0.9	1.2	1.7	3.9	23.4
Pyrus amer.	1	1				32	1	0.6		2.5	0.9	0.6	0.3	1.8	7.2
Amus rugosa							8	5.0							1.0
Amelanchier							1	0.6							1.0
TOTALS		160				12,709	160	100.0		275.0	100.0	100.0	100.0	300.0	1677

AVE. DIST. BTW'N TREES:

10.0

AVE B. A.:

79.4

TREES/ACRE:

436

DOM./ACRE:

34,618

N. Range
gradient

838.4

13.6

399.6

776.0

9.6

83.4

369.9

57.4

27.3

10.8

1.0

2587.0

Mid-range
gradient

15.3

444.0

776.0

11.2

97.3

328.8

65.6

23.4

16.2

2721

POINT RECORD TREES

NORTHERN PINE-HARDWOODS

Stand No. 11 (1)

STATION NO.	1	2	3	4	5	6	7	8	9	10
<i>Abies balsam</i>	30' 118 9' 110	4' 115 3' 47		6' 45 4' 49	7' 28 4' 63	11' 18 4' 82		17' 121 17' 84	14' 52 9' 48	
<i>Acer rubrum</i>				4' 18					4' 83	
<i>A. sacchar.</i>										
<i>A. spicatum</i>			11' 114 2							
<i>Betula lut.</i>										
<i>B. papyrif</i>		5' 52 6' 25	16' 112		6' 15	3' 42	8' 42 4' 37		17' 57 10' 72	
<i>Carpinus car</i>										
<i>Fagus gran</i>										
<i>Ostrya virg</i>										
<i>Picea glau</i>			12' 108 18' 62					6' 190		5' 82
<i>Pinus Bank</i>										
<i>P. resinosa</i>										
<i>P. Strobus</i>										
<i>Populus bals</i>										
<i>P. grand</i>										
<i>P. trem</i>				9' 109 7' 98	2' 142	10' 115	10' 96		6' 95 13' 86	
<i>Prunus pen.</i>										
<i>Quercus ell</i>										
<i>Q. rubra</i>										
<i>Tilia amer</i>										
<i>Tsuga can</i>										
<i>Thuja occ</i>							9' 108			
<i>Ulmus amer</i>										
<i>U. fulva</i>										
<i>Fraxinus nigra</i>	10' 95 18' 124									
LITTER	1/4"	3/4"	1"	1 1/2"	1 1/4"	2"	2"	1"	1 1/2"	2"
CANOPY	45	65	70	75	80	55	50	65	40	65
Distance	67 1/2'	18'	57 1/2'	23 1/2'	24'	20'	31'	50'	44'	34 1/2'

POINT RECORD TREES

NORTHERN PINE-HARDWOODS

Stand No. 11 (6)

STATION NO.	1	2	3	4	5	6	7	8	9	10
Abies balsam	3' 48 7' 28	5' 29 3' 74	11' 48 4' 65	9' 52 10' 38	3' 37	8' 52 8 1/2 33	10' 25 14' 53	9 1/2 18	10' 21 7' 65 6' 49	15 1/2 29 7' 31
Acer rubrum										
A. sacchar.										
A. spicatum										
Betula lut.										
B. papyrif	9 1/2 91	7' 42	7' 37	7 1/2 17	2' 19			8' 22		
Carpinus car										
Fagus gran										
Ostrya virg										
Picea glau	6' 88	16' 76		10 1/2 135	8 1/2 60	4' 142	5' 42	11' 43 3' 26	4' 120	8' 210 10 1/2 183
Pinus Bank										
P. resinosa										
P. Strobus					11 1/2 97					
Populus bals										
P. grand										
P. trem			5' 35			10 1/2 68	4' 31			
Prunus pen.										
Quercus ell										
Q. rubra										
Tilia amer										
Tsuga can										
Thuja occ										
Ulmus amer										
U. fulva										
LITTER	2 1/2	3 1/4	2"	2 1/2	1 1/2	1 1/2	2"	2"	2 1/2	3"
CANOPY	55	48	60	55	70	75	65	50	45	60
Distance	25 1/2	31 1/2	27'	37'	25'	31'	33'	31 1/2	27'	41'

POINT RECORD TREES

NORTHERN PINE-HARDWOODS

Stand No. 11 (3)

STATION NO.	1	2	3	4	5	6	7	8	9	10
Abies balsam	4' 28	11' 52 16' 45			16' 62		10' 42 16' 108 14 1/6	13' 56 10' 140	13' 36	18' 108
Acer rubrum										
A. sacchar.										
A. spicatum										
Betula lut.										
B. papyrif	13' 32	7' 37		23 122				17' 97	9' 72	7' 180
Carpinus car										
Fagus gran										
Ostrya virg			17' 240							
Picea glau	7' 61	10' 154	17' 225 18' 113	11' 144	17' 132 15' 268	13' 222 12 245				7' 113
Pinus Bank										
P. resinosa										
P. Strobus									12' 260	
Populus bals										
P. grand										
P. trem			8' 17		12' 26	18' 27 13' 25	4' 112	5' 19 12 58		15' 86
Prunus pen.										
Quercus ell										
Q. rubra										
Tilia amer										
Tsuga can										
Thuja occ				13' 108 21' 95						
Ulmus amer										
U. fulva										
Pyrus amer.	11' 32									
LITTER	1/2"	1 1/2"	1/2"	1/2"	1/4	1/2"	3/4	1/4	1/2	1/2
CANOPY	75	52	190	1020	520	620	1020	18	40	20
Distance	35'	44 1/2'	60	68 1/2'	60 1/2'	57'	44 1/2'	47 1/2'	46'	47'

POINT RECORD TREES

NORTHERN PINE-HARDWOODS

Stand No. 11(4)

STATION NO.	1	2	3	4	5	6	7	8	9	10
Abies balsam	11' 1/2 72	15' 1/2 73	17' 1/2 155 25 162	14' 1/2 132	2' 100 13 41	4' 39 14 26	3' 79 7 31	4' 38 6 31	8' 1/2 92 11 34	4' 72 12 68
Acer rubrum					17 58	5 28	10 36		11 38	
A. sacchar.										
A. spicatum										
Betula lut.										
B. papyrif	18' 105							7' 244		
Carpinus car										
Fagus gran										
Ostrya virg										
Picea glau			18' 160 21 12	7' 43		9 1/2 115	4' 89	2' 28	13' 94	14 150
Pinus Bank										
P. resinosa	6' 140									
P. Strobus				9' 25	17' 78					14 130
Populus bals										
P. grand										
P. trem	6' 76	10 121 11 51 4 32								
Prunus pen.										
Quercus ell										
Q. rubra										
Tilia amer										
Tsuga can										
Thuja occ				8' 64						
Ulmus amer										
U. fulva										
LITTER	1"	1/2"	1/2"	2 1/2"	1"	1 1/2"	2"	1 1/2"	1"	1"
CANOPY	55	15	0%	20	75	70	75	70	7	65
Distance	41 1/2'	40 1/2'	81'	38 1/2'	49 1/2'	22 1/2'	24'	19'	41 1/2'	45'

Av. canopy. 47%

Av. litter - 1.3"

POINT RECORD TREES ~~SAPLINGS~~

NORTHERN PINE-HARDWOODS

Stand No. 11(1)

STATION NO.	1	2	3	4	5	6	7	8	9	10
Abies balsam			20	13' 12½'	5' 9'	3' 12½'	2' 8½'	11' 11'	12' 4' 14'	1' 1½'
Acer rubrum										
A. sacchar.										
A. spicatum	9' 4'	14' 8'	11' 9½'			7'	9½'	10'		
Betula lut.										
B. papyrif		7'		4'	13'	4'	4'		14'	5' 1'
Carpinus car										
Fagus gran										
Ostrya virg										
Picea glau										
Pinus Bank										
P. resinosa										
P. Strobus										
Populus bals										
P. grand										
P. trem								12½'		
Prunus pen.										
Quercus ell										
Q. rubra										
Tilia amer										
Tsuga can										
Thuja occ							6½'			
Ulmus amer										
U. fulva										
Frax nigra	4'	8'								
Alnus incana			7'							
Distance	36'	25'	47½'	38½'	35'	26½'	26½'	44½'	44	8½'

POINT RECORD TREES ~~SAPLINGS~~ NORTHERN PINE-HARDWOODS

Stand No. 11 (2)

STATION NO.	1	2	3	4	5	6	7	8	9	10
Abies balsam	6 16	10 1/2	10 3	5' 11'	23 13 1/2		6' 9'	9 1/2 12 1/2	11' 12'	5' 9 1/2
Acer rubrum										
A. sacchar.										
A. spicatum		13'						13'		7' 3'
Betula lut.										
B. papyrif	11 23	14 1/2	11	4' 4	10 1/2 22	11'	10'	12 1/2	10 1/2 9 1/2	
Carpinus car										
Fagus gran										
Ostrya virg										
Picea glau		16'				8' 14'				
Pinus Bank										
P. resinosa										
P. Strobus										
Populus bals										
P. grand										
P. trem						12'		4'		
Prunus pen.										
Quercus ell										
Q. rubra										
Tilia amer										
Tsuga can										
Thuja occ										
Ulmus amer										
U. fulva										
Distance	56'	54'	33'	24'	69'	45'	37 1/2'	39'	43'	24 1/2'

POINT RECORD TREES *SAPLINGS* NORTHERN PINE-HARDWOODS

Stand No. 11 (3)

STATION NO.	1	2	3	4	5	6	7	8	9	10
<i>Abies balsam</i>	4'	7' 11½'	17'						18'	
<i>Acer rubrum</i>										
<i>A. sacchar.</i>										
<i>A. spicatum</i>	2'		7'	25' 16'	4' 3'		14'	2'	4' 17'	12'
<i>Betula lut.</i>										
<i>B. papyrif</i>	2'	3' 8'	12'	6'		4'	11½' 6½'	3'		3' 14'
<i>Carpinus car</i>										
<i>Fagus gran</i>										
<i>Ostrya virg</i>										
<i>Picea glau</i>										
<i>Pinus Bank</i>										
<i>P. resinosa</i>										
<i>P. Strobus</i>										
<i>Populus bals</i>										
<i>P. grand</i>										
<i>P. trem</i>				7'	13½'	9' 9'	11'			
<i>Prunus pen.</i>						12				
<i>Quercus ell</i>										
<i>Q. rubra</i>										
<i>Tilia amer</i>										
<i>Tsuga can</i>										
<i>Thuja occ</i>										
<i>Ulmus amer</i>										
<i>U. fulva</i>										
<i>Pyrus amer.</i>	14'									
<i>Amelanchier</i>			16'							
<i>Alnus incana</i>					16'			1½' 2'		4' 15'
Distance	22'	29½'	52'	54'	36½'	34'	42½'	8½'	57'	36'

POINT RECORD TREES *SAPLINGS* NORTHERN PINE-HARDWOODS

Stand No. 114

STATION NO.	1	2	3	4	5	6	7	8	9	10
<i>Abies balsam</i>			7'	19' 17'	11½'	12½' 17'	4' 21'	2'	13'	14'
<i>Acer rubrum</i>						13 5				
<i>A. sacchar.</i>										
<i>A. spicatum</i>	19'	18'		4'	4' 4'	6'				
<i>Betula lut.</i>										
<i>B. papyrif</i>			12½'					3'		12'
<i>Carpinus car</i>										
<i>Fagus gran</i>										
<i>Ostrya virg</i>										
<i>Picea glau</i>		7' 1'					10½' 15'		7'	
<i>Pinus Bank</i>										
<i>P. resinosa</i>										
<i>P. Strobus</i>				14'						
<i>Populus bals</i>										
<i>P. grand</i>										
<i>P. trem</i>	18'	10½'						1'9'	3' 5'	7' 8'
<i>Prunus pen.</i>										
<i>Quercus ell</i>										
<i>Q. rubra</i>										
<i>Tilia amer</i>										
<i>Tsuga can</i>										
<i>Thuja occ</i>										
<i>Ulmus amer</i>										
<i>U. fulva</i>										
<i>Alnus incana</i>	12' 16'									
<i>Frax. nigra</i>			3' 5'							
Distance	65'	36½'	27½'	54'	25½'	47½'	50½'	15'	28'	41'

	P.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20			
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	✓																						1	
Anemone canadensis	✓																						1	
Anemone cylindrica																								
Anemone quinquefolia	✓	✓		✓		✓								✓		✓		✓	✓	✓		8	40	
Anemone virginiana																								
Antennaria spp.																								
Apocynum androsaemifolium	✓																				✓	1	5	
Aquilegia canadensis																								
Aralia hispida																								
Aralia nudicaulis	✓				✓		✓				✓			✓					✓			5	25	
Aralia racemosa																								
Arctostaphylos uva-ursi																								
Arenaria lateriflora																								
Arisaema atrorubens																								
Asarum canadense	✓	✓																				1	5	
Asclepias exaltata																								
Aster acuminatus																								
Aster ciliolatus																								
Aster furcatus																								
Aster lateriflorus																								
Aster macrophyllus	✓		✓	✓	✓	✓	✓	✓	✓	✓		✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	16	80
Aster nova-angliae																								
Aster paniculatus																								
Aster puniceus																								
Aster sagittifolius																								
Aster umbellatus																								
Athyrium filix-femina																								
Athyrium thelypteroides																								
Botrychium lanceolatum																								
Botrychium lunaria																								
Botrychium matricariaefolium																								
Botrychium multifidum																								
Botrychium virginianum	✓																						1	
Brachelytrum erectum	✓																				✓	1	5	
Caltha palustris	✓																						1	
Calypso bulbosa																								
Campanula rotundifolia																								
Carex arctata																								
Carex aurea																								
Carex brunnescens																								
Carex canescens																								

OMIT
STREAM SIDE

[illegible]

										10										20	
Desmodium glutinosum																					
Dicentra canadensis																					
Dicentra cucullaria																					
Diervilla lonicera	✓										✓									1	5
Dirca palustris																					
Dryopteris boottii																					
Dryopteris cristata																					
Dryopteris disjuncta	✓									✓									✓	2	10
Dryopteris goldiana																					
Dryopteris marginalis																					
Dryopteris noveboracensis																					
Dryopteris phegopteris																					
Dryopteris spinulosa	✓					✓													✓	2	10
Empetrum nigrum																					
Epifagus virginiana																					
Epigaea repens																					
Epilobium angustifolium	✓																				1
Epilobium glandulosum																					
Epilobium strictum																					
Equisetum arvense v. borealis	✓												✓						✓	2	10
Equisetum pratense																					
Equisetum scirpoides																					
Equisetum sylvaticum																					
Erigeron annuus																					
Erigeron philadelphicus																					
Erigeron strigosus																					
Erythronium albidum																					
Erythronium americanum																					
Eupatorium maculatum	✓																				1
Eupatorium perfoliatum																					
Eupatorium purpureum																					
Fagopyrum sagittatum																					
Festuca obtusa																					
Fragaria vesca	✓												✓			✓	✓			3	15
Fragaria virginiana	✓																				
Galium aparine																					
Galium asprellum	✓																				1
Galium boreale																					
Galium concinnum																					
Galium lanceolatum																					
Galium triflorum	✓					✓	✓						✓						✓	✓	5 25
Gaultheria hispidula																					
Gaultheria procumbens																					
Gaylussacia baccata																					
Gentiana andrewsii																					
Gentiana crinata																					
Gentiana linearis																					
Gentiana quinquefolia																					
Geocaulon lividum																					
Geranium bicknelli																					
Geranium maculatum																					
Geranium robertianum																					

OMIT
STREAMSIDE

									10								20	
<i>Geum aleppicum</i>	✓																✓	1 5
<i>Geum canadense</i>	↓																	
<i>Geum rivale</i>																		
<i>Glyceria striata</i>																		
<i>Goodyera obtusifolia</i>																		
<i>Goodyera pubescens</i>																		
<i>Goodyera repens</i>																		
<i>Goodyera tessellata</i>																		
<i>Habenaria clavellata</i>																		
<i>Habenaria hyperborea</i>																		
<i>Habenaria obtusata</i>																		
<i>Habenaria orbiculata</i>																		
<i>Habenaria psycodes</i>																		
<i>Habenaria viridis</i>																		
<i>Hackelia virginiana</i>																		
<i>Halenia deflexa</i>																		
<i>Hamamelis virginiana</i>																		
<i>Helianthus strumosus</i>																		
<i>Hepatica acutiloba</i>																		
<i>Hepatica americanum</i>																		
<i>Hieracleum maximum</i>	✓																	1
<i>Heuchera richardsonii</i>																		
<i>Hieracium aurantiacum</i>																		
<i>Hieracium canadense</i>																		
<i>Hieracium pratense</i>																		
<i>Hieracium scabrum</i>																		
<i>Ilex verticillata</i>																		
<i>Impatiens capensis</i>	✓																	1
<i>Iris lacustris</i>																		
<i>Isopyrum biternatum</i>																		
<i>Juniperus communis</i>																		
<i>Juniperus horizontalis</i>																		
<i>Lactuca canadensis</i>																		
<i>Laportea canadensis</i>																		
<i>Lathyrus ochroleucus</i>	✓					✓		✓										2 10
<i>Ledum groenlandicum</i>																		
<i>Lichens spp.</i>	✓					✓							✓					2 10
<i>Lilium michiganense</i>																		
<i>Linnaea borealis</i>	✓							✓		✓	✓							3 15
<i>Listera auriculata</i>																		
<i>Listera borealis</i>																		
<i>Listera convallarioides</i>																		
<i>Listera cordata</i>																		
<i>Lobelia inflata</i>																		
<i>Lonicera canadensis</i>	✓							✓										1 5
<i>Lonicera dioica</i>																		
<i>Lonicera hirsuta</i>	✓					✓												1 5
<i>Lonicera involucrata</i>																		
<i>Lonicera oblongifolia</i>																		
<i>Lonicera prolifera</i>																		
<i>Lonicera villosa</i>																		
<i>Luzula acuminata</i>																		

OMIT
STREAMSIDE

										10									20	
<i>Luzula multiflora</i>																				
<i>Lycopodium annotinum</i>																				
<i>Lycopodium clavatum</i>																				
<i>Lycopodium complanatum</i>																				
<i>Lycopodium inundatum</i>																				
<i>Lycopodium lucidulum</i>																				
<i>Lycopodium obscurum</i>	✓																			1
<i>Lycopodium sabinaefolium</i>																				
<i>Lycopodium selago</i>																				
<i>Lycopodium tristachyum</i>																				
<i>Lycopus americanus</i>																				
<i>Lycopus uniflorus</i>																				
<i>Lysimachia ciliata</i>																				
<i>Lysimachia quadrifolia</i>																				
<i>Lysimachia terrestris</i>																				
<i>Maianthemum canadense</i>	✓			✓			✓		✓	✓	✓	✓		✓			✓	✓	✓	10 50
<i>Malaxis unifolia</i>																				
<i>Medeola virginiana</i>																				
<i>Melampyrum lineare</i>																				
<i>Menispermum canadense</i>																				
<i>Mertensia paniculata</i>	✓				✓															1 5
<i>Milium effusum</i>																				
<i>Mitchella repens</i>																				
<i>Mitella diphylla</i>																				
<i>Mitella nuda</i>	✓	✓			✓	✓				✓							✓			5 25
<i>Moneses uniflora</i>																				
<i>Monotropa hypopithys</i>																				
<i>Monotropa uniflora</i>																				
<i>Mosses spp.</i>	✓	✓		✓	✓	✓	✓		✓	✓				✓	✓		✓	✓	✓	12 60
<i>Nemophanthus mucronata</i>																				
<i>Onoclea sensibilis</i>																				
<i>Orchis spectabilis</i>																				
<i>Oryzopsis asperifolia</i>																				
<i>Oryzopsis racemosa</i>																				
<i>Osmorhiza claytoni</i>	✓																			1
<i>Osmorhiza longistylis</i>																				
<i>Osmunda claytoniana</i>																				
<i>Osmunda cinnamomea</i>																				
<i>Osmunda regalis</i>																				
<i>Oxalis montana</i>																				
<i>Oxalis stricta</i>																				
<i>Panax quinquefolius</i>																				
<i>Panax trifolius</i>																				
<i>Parthenocissus inserta</i>																				
<i>Parthenocissus quinquefolia</i>																				
<i>Petasites palmatus</i>																				
<i>Phleum pratense</i>	✓																			1
<i>Phlox divaricata</i>																				
<i>Phryma leptostachya</i>																				
<i>Plantago major</i>																				
<i>Poa compressa</i>																				
<i>Poa pratensis</i>	✓																✓			1 5

[illegible]

[illegible]

[illegible]

PRESENCE LIST

SPRUCE-FIR - MIXED HARDWOODS

STAND NO. 11

May 27, 1956

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

☐ *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*

☐ *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*

TREES

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

SHRUBS

☐ *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)

HERBS

☐ *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*

☐ *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*

☒ *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*

☒ *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*

May 27, 1956

Data Form No .77

Plant Ecology Research

Univ. of Wisconsin

PRESENCE LIST

SPRUCE-FIR - MIXED HARDWOODS

5-11

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 bicknelli
Geranium maculatum
Geum rivale
Goodyera repens
Goodyera tessellata
Habenaria hyperborea
Habenaria orbiculata
Habenaria psycodes
Habenaria viridis
Halenia deflexa
Helianthus strumosus
Hepatica acutiloba
Hepatica americana
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 f
Trillium erectum
Trillium grandiflorum
Trillium undulatum
Uvularia grandiflora
Uvularia sessilifolia
Vicia americana
Viola adunca
Viola blanda
Viola canadensis
Viola conspersa
Viola cucullata
✓ Viola incognita f
Viola nephrophylla
Viola pallens
Viola papilionacea
✓ Viola pubescens
✓ Viola renifolia f
✓ Viola selkirkii f
Viola sororia
Waldsteinia fragarioides

Additional species

Tall sp with black spots - vegetative
Carex pedunculata - Andromeda
Equisetum arvense - quinquefolia
Mertensia paniculata
Geum sp.
Juncus effusus f
Gram sp.

Pteris fem.
Heracleum lanatum } stem
Caltha palustris
Saxifraga sp.
Thalictrum dioic
Pyrola virens

Equisetum scirpoides
Actaea sp.

SPRING DATA

Data Form No. 75

Plant Ecology Research

Univ. of Wisconsin

FREQUENCY DATA

(Common Species)

May 27, 1956

SPRUCE-FIR - MIXED HARDWOODS

Stand 55-60 yrs - Ws + Wp broad

STAND NO. 11

Herbert - Sprague

TREE SEEDLINGS

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

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

SHRUBS

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

21 Prunus virginiana
04 Pyrus arbutifolia
09852 Rubus parviflorus
Sambucus pubens
Shepherdia canadensis
Spiraea alba
Symphoricarpos occidentalis
Taxus canadensis
Vaccinium angustifolium
Vaccinium myrtilloides
Viburnum acerifolium
Viburnum trilobum

HERBS

Dryopteris spinulosa
Epigaea repens
Epilobium angustifolium
Equisetum sylvaticum
Erythronium americanum
Fragaria vesca
2 Fragaria virginiana
Galium aparine
Galium triflorum
Gaultheria hispidula
Gaultheria procumbens
Gentiana quinquefolia
Geranium maculatum
Goodyera repens
Habenaria obtusata
Halenia deflexa
Hepatica acutiloba
Hepatica americana
Hieracium aurantiacum
6 Linnaea borealis
Lycopodium annotinum
Lycopodium clavatum
Lycopodium complanatum
Lycopodium lucidulum
Lycopodium obscurum
987654321 Maianthemum canadense
Medeola virginiana
Melampyrum lineare
Mitchella repens
Mitella diphylla

9 Mitella nuda
Monotropa uniflora
Osmorhiza claytoni
Oxalis montana
Oxalis stricta
Polygala paucifolia
Polygonatum pubescens
Prenanthes alba
Pteridium aquilinum
Pyrola elliptica
Pyrola rotundifolia
5 Pyrola secunda
Ranunculus acris
Rhus radicans
0 Rubus pubescens
Sanguinaria canadensis
Smilacina racemosa
Smilacina stellata
9 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

Lathyrus villosus 25
Sisymbrium 2
Moss 2345789
Rushes 2589

Carex arctata 2
Impatiens cap 0
Solidago fl 0
Mentha syl bann 0

Sambucus mar 0

FREQUENCY DATA
(Common Species)

SPRUCE-FIR - MIXED HARDWOODS

STAND NO. 11

Herb

May 27, 1956

TREE SEEDLINGS

- 65432 Abies balsamea 890
Acer pensylvanicum
Acer rubrum
Acer saccharum
98762 Acer spicatum
Betula lutea
Betula papyrifera
53 Amelanchier

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

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

SHRUBS

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

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

- 4 Pyrus ang
9765 Pyrus acer
09842 Rubus parviflorus
Sambucus pubens
Shepherdia canadensis
Spiraea alba
Symphoricarpos occidentalis
Taxus canadensis
Vaccinium angustifolium
Vaccinium myrtilloides
Viburnum acerifolium
Viburnum trilobum

HERBS

- Actaea pachypoda
7 Actaea rubra
Adiantum pedatum
Anaphalis margaritacea
Anemone cylindrica
765431 Anemone quinquefolia 890
Anemone virginiana
Antennaria spp.
Apocynum androsaemifolium
Aquilegia canadensis
Aralia nudicaulis
Arisaema atrorubens
765421 Aster macrophyllus 890
41 Athyrium filix-femina
Botrychium virginianum
Carex pensylvanica
Chimaphila umbellata
Chrysanthemum leucanthemum
Circaea alpina
Claytonia caroliniana
Claytonia virginiana
2 Clintonia borealis
Coptis groenlandicum
Corallorhiza maculata
6 Cornus canadensis
Cystopteris fragilis
Dicentra canadensis
Dicentra cucullaria
Dryopteris disjuncta
Dryopteris phegopteris

- Dryopteris spinulosa
Epigaea repens
Epilobium angustifolium
8541 Equisetum sylvaticum
Erythronium americanum
Fragaria vesca
05432 Fragaria virginiana
Galium aparine
0854 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
0986521 Maianthemum canadense
Medeola virginiana
Melampyrum lineare
Mitchella repens
Mitella diphylla

- 6532 Mitella nuda
Monotropa uniflora
Osmorhiza claytoni
Oxalis montana
Oxalis stricta
Polygala paucifolia
Polygonatum pubescens
Prenanthes alba
Pteridium aquilinum
Pyrola elliptica
Pyrola rotundifolia
Pyrola secunda
Ranunculus acris
Rhus radicans
7 Rubus pubescens
Sanguinaria canadensis
Smilacina racemosa
Smilacina stellata
75321 Streptopus roseus
Tiarella cordifolia
Trientalis borealis
Trillium erectum
Trillium grandiflorum
Uvularia sessilifolia
Viola canadensis
Viola cucullata
Viola pallens
Viola pubescens
8654 Viola renifolia
Waldsteinia fragarioides

Additional species

- Equisetum variegatum 1
Mertensia pauciflora 138
Epipactis atrorubens 7890
Solidago flex 139

- Mon 1 2346780
Jul 12 346780
Gen 5 p 0

- Asarum can 7
Juncus commun 28
Carex pedunc 23567890
Taraxacum 2478
Veronica micro 2568

- Pyrola asarifolia 6
Impatiens 2
Geranium bock 4
Rumex crisp 4
Lithospermum 57

PRESENCE LIST

SPRUCE-FIR - MIXED HARDWOODS

STAND NO. //

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 pensylvanicum*
- 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 11

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

Pteris pensylvanicum
 Equisetum sp. - black. - cyrence
 Solidago juncea
 Moss
 Lichens
 Uvularia sessilifolia
 Pyrola sp. - secunda
 Wade Grass - Brachyelytrum erect.
 Mertensia paniculata
 Rubus sp.

Solidago lepida
 Trifolium pratense
 Trifolium repens
 Saxifraga pensylvanicum
 Equisetum sp. - black
 Ranunculus sp. - recurvatus
 Sanicula marilandica
 Phlox pratensis
 Isium sp. - allepicum
 Eupatorium maculatum
 Calluna palustris

Pyrola asarifolia
 Isium allepicum
 Thalictrum dasycarpum
 Hieracium maximum
 Carex pedunculata
 Carex projecta
 Mertensia paniculata
 Galium asprellum

FREQUENCY DATA
(Common Species)

SPRUCE-FIR - MIXED HARDWOODS

STAND NO. 11 (1)

TREE SEEDLINGS

7632 Abies balsamea 90
 Acer pensylvanicum
 Acer rubrum
 Acer saccharum
 05432 Acer spicatum
 Betula lutea
 875 Betula papyrifera
 3 Thaximus nigrum

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

Pinus strobus
 8 Populus tremuloides
 Prunus pensylvanica
 Prunus serotina
 Thuja occidentalis
 Tilia americana
 Tsuga canadensis
 087 Pyrus amer.

SHRUBS

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

Prunus pumila
 Pyrus melanocarpa
 Ribes cynosbati
 Ribes glandulosum
 Ribes lacustre
 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

HERBS

Actaea pachypoda
 Actaea rubra
 Adiantum pedatum
 Anaphlis margaritacea
 Anemone cylindrica
 531 Anemone quinquefolia
 Anemone virginiana
 Antennaria spp.
 Apocynum androsaemifolium
 Aquilegia canadensis
 064 Aralia nudicaulis
 Arisaema atrorubens
 65432 Aster macrophyllus 789
 Athyrium filix-femina
 Botrychium virginianum
 Carex pensylvanica
 Chimaphila umbellata
 Chrysanthemum leucanthemum
 1 Circaea alpina
 Claytonia caroliniana
 Claytonia virginiana
 09 Clintonia borealis
 Coptis groenlandicum
 Corallorhiza maculata
 Cornus canadensis
 Cystopteris fragilis
 Dicentra canadensis
 Dicentra cucullaria
 Dryopteris disjuncta
 Dryopteris phegopteris

4 Dryopteris spinulosa
 Epigaea repens
 Epilobium angustifolium
 Equisetum sylvaticum
 Erythronium americanum
 Fragaria vesca
 Fragaria virginiana
 Galium aparine
 43 Galium triflorum
 Gaultheria hispidula
 Gaultheria procumbens
 Gentiana quinquefolia
 Geranium maculatum
 Goodyera repens
 Habenaria obtusata
 Halenia deflexa
 Hepatica acutiloba
 Hepatica americana
 Hieracium aurantiacum
 08 Linnaea borealis
 Lycopodium annotinum
 Lycopodium clavatum
 Lycopodium complanatum
 Lycopodium lucidulum
 Lycopodium obscurum
 09863 Maianthemum canadense
 Medeola virginiana
 Melampyrum lineare
 Mitchellia repens
 Mitella diphylla

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

Additional species

Phytolacca americana 1
 Asarum canadense 1
 Moss 1345689
 Carex prosecta 1

Carex - thin 1

Taraxacum 1

Rubus parviflorus 1, 2, 3, 5, 6, 7, 8, 9, 10

Mertensia paniculata 4

Lichens 6

Lathyrus och. 68

Cornus racemosa 8

Viola incognita 34

FREQUENCY DATA
(Common Species)

SPRUCE-FIR - MIXED HARDWOODS

STAND NO. 11 (2)

TREE SEEDLINGS

0934 *Abies balsamea*
Acer pensylvanicum
Acer rubrum
Acer saccharum
 8632 *Acer spicatum* 9
Betula lutea
 5421 *Betula papyrifera*
 657 *Frax nigra*

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

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

981 *Pyrus amer.*

SHRUBS

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

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

HERBS

Actaea pachypoda
Actaea rubra
Adiantum pedatum
Anaphalis margaritacea
Anemone cylindrica
 8753 *Anemone quinquefolia* 9
Anemone virginiana
Antennaria spp.
 • *Apocynum androsaemifolium*
Aquilegia canadensis
 83 *Aralia nudicaulis*
Arisaema atrorubens
 65431 *Aster macrophyllus* 790
Athyrium filix-femina
Botrychium virginianum
Carex pensylvanica
Chimaphila umbellata
Chrysanthemum leucanthemum
 86 *Circaea alpina*
Claytonia caroliniana
Claytonia virginiana
 1 *Clintonia borealis*
Coptis groenlandicum
Corallorhiza maculata
Cornus canadensis
 8 *Cystopteris fragilis*
Dicentra canadensis
Dicentra cucullaria
 81 *Dryopteris disjuncta*
Dryopteris phegopteris

7 *Dryopteris spinulosa*
Epigaea repens
Epilobium angustifolium
Equisetum sylvaticum
Erythronium americanum
 875 *Fragaria vesca*
Fragaria virginiana
Galium aparine
 985 *Galium triflorum*
Gaultheria hispidula
Gaultheria procumbens
Gentiana quinquefolia
Geranium maculatum
Goodyera repens
Habenaria obtusata
Halenia deflexa
Hepatica acutiloba
Hepatica americana
Hieracium aurantiacum
 1 *Linnaea borealis*
Lycopodium annotinum
Lycopodium clavatum
Lycopodium complanatum
Lycopodium lucidulum
Lycopodium obscurum
 09841 *Maianthemum canadense*
Medeola virginiana
Melampyrum lineare
Mitchella repens
Mitella diphylla

81 *Mitella nuda*
Monotropa uniflora
Osmorhiza claytoni
Oxalis montana
Oxalis stricta
Polygala paucifolia
Polygonatum pubescens
Prenanthes alba
Pteridium aquilinum
Pyrola elliptica
Pyrola rotundifolia
Pyrola secunda
 7 *Ranunculus acris*
Rhus radicans
Rubus pubescens
Sanguinaria canadensis
Smilacina racemosa
Smilacina stellata
 01 *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

Frax 23
Rubus parviflorus 2345690
Comus racemosa 280
Solidago flexicaulis 4
Carex - brown base 490
Moss 45789
Juncus 5
Equisetum 59
Poa pratensis 7
Sambucus sp.
Sp. spallp. 7
W. brachyelytrum erectum 8
Trifolium repens 0
Viola incognita 58