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Site 6019 (Boreal Stand 19): Kabetogama, St. Louis County, Minnesota, Township 68N, Range 21W, Section 5. 1955-07-22

[s.l.]: [s.n.], 1955-07-22

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[= Site 6019]

Data Form No. 20

Plant Ecology Research

Univ. of Wisconsin

STAND RECORD

FORESTS

Stand No. 19

Name: *Kabetogama*
County: *St Louis Co., Minn*
Date: *July 22, 1956*
Size of Stand: *40 acres*
Forest Type: *Cedar-Birch-Spruce*
Topography: *Gently rolling*

Locality: *1/4 mile past road passing to Kabetogama L.*
T: *68N* R: *21W* Sec: *5*
off Hy 53, Minn.

Observers: *PFM*

Size of Area Sampled:

Soil Type:

Slope:

Directions

slight slope to south - 1' in 40'

Condition of Stand:

Fair - large Ws, Ws + Aspen overtopping young cedar + h. birch
Very sparse understorey
Few cedars removed by axts
On about 8-10" peat - well decomposed. Now well drained no sphagnum
Comes off peat in some parts but composition does not seem to change
Reproduction by all species is very poor except layer by suckering

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									

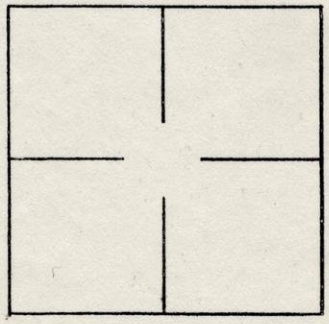
DEPTH

CHARACTERISTICS (Color, Texture, Structure, etc.)

A ₀	<i>5" - 3" letter 2" ferment</i>	<i>* 2 3" - letter 6" 3" - ferment</i>	<i># 3 as # 2</i>
A ₁	<i>1" - black</i>	<i>3" - black</i>	
A ₂	<i>1" dark-grey leached</i>	<i>2" grey leached</i>	
B	<i>6" + grey compacted clay</i>	<i>6" grey clay</i>	

Parent Material:

Map:



LICHENS OF GREAT LAKES SPRUCE-FIR COMMUNITIES

MINNESOTA

St. Louis County



Lake Kabetogama, Hy. 53. T68N R21W SEC 5
Cedar, w.spruce, w.birch & aspen. Young stand.
Gently rolling, slight S. slope. Heavy canopy,
sparse understory, poor tree reproduction.

July 22, 1955. Coll. Paul F. Maycock

Plant Ecology Research
TREE DATA SUMMARY SHEET

Wet - Mesic

190.0

~~Northern Pine Hardwoods~~
Spruce-fir

Station Number: 19 - 1597

1601

Mid-range Index

N. range Index

TREE	# PTS	# TRS	DOM. CLASSES			TOT. DOM.	# SAP	D. % SAP	F. % SDL.	F. % TRS.	% SUM F. TR.	D. % TRS.	DOM% TRS.	DFD INDEX	NEW LOWLAND INDEX C. I.
			-80	-320	321										
18.9 Abies bals	1	1				42	18	11.3		2.5	1.0	0.6	0.5	2.1	14.7
Acer rubru															
A. sacchar															
9.0 A. spicatu															1.0
Betula lut															
480.0 B. papyrif	21	23				1014	26	16.3		52.5	21.0	14.4	12.6	48.0	240.0
Carpinus c															
Fagus gran															
Ostrya vir															
341.0 Picea glau	12	14				1070				30.0	12.0	8.8	13.3	34.1	204.6
125.0 Picea mar. Pinus Bank	6	6				225	3	1.9		15.0	6.0	3.7	2.8	12.5	25.0
P. resinosa															
P. Strobus															
272.7 Populus ba	11	12				949				27.5	11.0	7.5	11.8	30.3	60.6
P. grandid															
253.6 P. tremulo	9	12				1213	1	0.6		22.5	9.0	7.5	15.2	31.7	63.4
6.0 Prunus vir. pen															1.0
Quercus el															
Q. rubra															
Tilia amer															
Tsuga cana															
1130.4 Thuja occi	40	92				3521	112	70.0		100.0	40.0	57.5	43.8	141.3	989.1
Ulmus amer															
U. fulva															
6.0 Frax. nig.															1.0
9.0 Pyrus amer.															1.0
2652 TOTALS		160				8034	160	100.0		250.0	100.0	100.0	100.0	300.0	1597

AVE. DIST. BTW'N TREES:

6.4

AVE. B. A.:

50.2

TREES/ACRE:

1062

DOM./ACRE:

53,312

STATION NO.	TREE #										DATE	STAND NO
	1	2	3	4	5	6	7	8	9	10	19(3)	
SUBJECT												
ABIES BAL.												
ACER RUB												
A. SACO												
A. SPIC												
BETULA LUT												
B. PAP		12 1/2 25		1' 35"							6' 7 1/2 82 37	
CARPINUS												
FAGUS												
FRAX NIG												
OSTRYA												
PICEA O L		8 1/2 30 62	5	7	75	6 1/4 109 44			1 1/2 74			
P. MAR			3' 27	9' 38								
PINUS BANK												
P. RES												
P. STROB.												
POP BALS	4' 32					7' 72			8' 115			
P. GRAND												
P. TREM			3 1/2 189				3' 12 52 145	8' 52				
PRUN US PEN												
P. SEROT												
P. VING												
QUERCUS ILL.												
Q. MACRO												
Q. RUB												
TILIA												
TRUJA												
TRUJA	1' 1 1/2 31 50	44 7	52	11' 1 1/2 85 36	1 1/2 44	12' 44	5 1/2 40 10 1/2 32 10 1/2 31 15 30	8' 38 31	8 1/2 39 4 1/2 40 9 36	2' 10 1/2 28 35	8' 4 29	44
ULMUS AME R												
U. RUBRA												
LITTER CANOPY	40 55	30 56	50 55	70 60	60 65	50 70	50 70	20 80	40 25	50 75		
DISTANCE	12 1/2	36	31	18 1/2	29	27 1/2	26	33	22	25 1/2		

STATION NO. SUBJECT	THRES										DATE	STAND NO.	19(4)							
	1	2	3	4	5	6	7	8	9	10										
ABIES BAL.	5'	42																		
AGER R UB																				
A. BACC																				
A. SPIG																				
BETULA LUT																				
B. PAP	5 1/2	42				7 1/2	34	9 1/2	48	16	39	7 1/2	28	10 1/2	25					
CARPINUS																				
FAGUS																				
FR AX NIG																				
OSTR YA																				
PIGEA GL.			6 1/2	42						4	14									
P. MAR						3 1/2	21					6	29							
PINUS BANK																				
P. RES																				
P. STROB																				
POP BALS						4 1/2	82	8	41											
P. GRAND																				
P. TREM								8	150											
PRUNUS PEN																				
P. SEROT																				
P. VING																				
QUERCUS E LL																				
Q. MACRO																				
Q. RUBRA																				
T ILIA																				
TSUGA			110	34		12	20			18 1/2	28	3 1/2	25		4	23				
THUJA	10 1/2	56	11	128	4	42	3	75	20	35	4 1/2	22	16 1/2	35	2	57	4	32	4	22
ULMUS AMER.	13	34	1 1/2	25	4	51	16	24		9 1/2	24	2 1/2	29	10	41	8 1/2	34			
U. RUBRA			114	130	8 1/2	25	14	35												
LITTER	4 1/2	6	4	4 1/2	6	5	5	5 1/2	6	5	5 1/2	6	5							
CANOPY	70	25	55	60	50	70	45	20	15	85										
DIS TANCE	34	26 1/2	23	15	17 1/2	30	28	24	27 1/2	20										

Av. canopy. 55%.

Av. litter 4.7"

SUBJECT	DATE									
	SECTION NO.	STAND NO.								
	1	2	3	4	5	6	7	8	9	10
ABIES BAL										3 1/2 - 9 - 10
ACER RUB										
A. SACO										
A. SPIC										
BETULA LUT										
B. PAP					1 1/2 - 2 1/2	12	7	7		
CAMPINUS										
FAGUS										
FRAX NIG										
OSTRYA										
PICEA GL										
PICEA MAR		5 1/2								
PINUS BANK										
P. RES										
P. STROB										
POP BALS										
P. GRAND										
P. THOR										
PRUNUS PEN										
P. SEROT										
P. VIRE										
QUERCUS ALL										
Q. MAURO										
Q. RUB										
TILIA										
TSUGA										
THUJA	3 1/2 - 4	1 1/2 - 2	4 1/2 - 7 1/2	3 1/2 - 4 1/2	7 1/2 - 8 1/2	2 1/2 - 4	4 - 5 1/2	1 1/2 - 3 1/2	8 1/2 - 10	5
ULMUS AMER										
U. RUB										
LITTER										
CANOPE										
DIS TANCE	11	19 1/2	25 1/2	48 1/2	15	20 1/2	17 1/2	18	27 1/2	27 1/2

SUBJECT	DATE									
	STAND NO. 1961									
SECTION NO.	1	2	3	4	5	6	7	8	9	10
ABIES BAL	7'	3 1/2 7'	9'	5'	7 10 1/2	6 3-4'				
AGER RUS										
A. BAGO										
A. SPIC										
BETULA LUT										
B. PAP	2'			8 1/2			9'		7'	6 1/2
CAMPINUS										
FAGUS										
FRAX NIG										
OSTRYA										
PICEA GL										
PICEA MAR										
PINUS BANK										
P. RES										
P. STROB										
POP BALB										
P. GRAND										
P. TRIM								4'		
PRUNUS PEN										
P. SEROT										
P. VING										
QUERCUS ALL										
Q. MACRO										
Q. RUB										
TILIA										
TSUGA										
THUJA										
ULMUS AMER	4' 4'	3' 4'	4' 4 1/2 7 1/2		4'	4 1/2 8'	9' 2 1/2	4' 1'	11 1/2 6'	4 1/2 2'
U. RUB									15'	8 1/2
LITTER										
CANOPY										
DISTANCE	17	17 1/2	25	31	17	18 1/2	23 1/2	10	37 1/2	21 1/2

DATE 1961

SUBJECT	SAPLINGS									
	1	2	3	4	5	6	7	8	9	10
ABIES BAL	6 3/4		4							
ACER RUB										
A. SACQ										
A. SPIC										
BETULA LUT										
B. PAP	6 1/2	7 1/2	6 9/10		8	11	3	4		7 7/10
CARPINUS										
FAGUS										
FRAX HIG										
OSTRYA										
PICEA OL										
PICEA MAR										
PINUS BANK										
P. RES										
P. STROB										
POP BALS										
P. GRAND										
P. TUM										
PRUNUS PEN										
P. SEROT										
P. VIB										
QUERCUS ILL										
Q. MACRO										
Q. RUB										
TILIA										
TAXUS										
TRISA	4 1/2	7 1/2	5	5	3 1/2	6 1/2	1 1/2	6	8 1/2	6
ULMUS AMER					4 9/10	2 6	9	6	2 1/2	4 1/2
U. RUB									1 3/4	1 9/10
LITTER										
CANOPY										
DIS TANCE	25 1/2	31 1/2	24	23 1/2	17 1/2	34	11 1/2	15	11 1/2	24

	SAPLINGS										DATE	STAND NO. 194		
STATION NO.	1	2	3	4	5	6	7	8	9	10				
SUBJECT														
ABIES BAL	5 1/2	12												
ACER R UB														
A. SACO														
A. SPIC														
BETULA LUT														
B. PAP					7'	2'	8 7'		3' 9 1/2	3'				
CARPINUS														
FAGUS														
FRAX NIG														
OSTRYA														
FICIA GL														
P. MAR								3'	1'					
PINUS BANK														
P. RES														
P. STROB														
POP BAL														
P. GRAND														
P. TRE M														
PRUNUS PEN														
P. SEROT														
P. VING														
QUERCUS ELL														
Q. MACRO														
Q. RUBRA														
TILIA														
TSUGA														
THUJA	7 6 1/2	9 1/2	1' 3-4'	4' 2-8'	8 7 1/4	5	6 4 1/2	3'	1' 8 1/2	10 1/2	6 1/2	4-2' 4 1/2	1 1/2	1' 2 7
ULMUS AMER														
U. RUB														
LITTER														
CANOPY														
DISTANCE	28 1/2	20	20	24	20 1/2	22	25 1/2	12 1/2	15	13				

PRESENCE LIST

SPRUCE-FIR - MIXED HARDWOODS

STAND NO. 19

TREES

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

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

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

SHRUBS

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

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

Rubus idaeus
 Rubus parviflorus
 Salix sp.
 Sambucus canadensis
 Sambucus pubens
 Shepherdia canadensis
 Smilax tamnoides var. *hispidus*
 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 19

- | | | |
|---------------------------------------|--------------------------------------|----------------------------|
| Epigaea repens | Lycopodium lucidulum | Ranunculus acris |
| ✓ Epilobium angustifolium | Lycopodium obscurum | Ranunculus pensylvanicus |
| Epilobium glandulosum | Lycopodium obscurum var. dendroideum | Ranunculus recurvatus |
| Epilobium strictum | Lycopodium selago | Ranunculus repens |
| Equisetum pratense | Lycopodium tristachyum | Ranunculus septentrionalis |
| ✓ Equisetum sylvaticum | Lysimachia ciliata | Rhus radicans |
| Erigeron annuus | Lysimachia quadrifolia | Rubus pubescens |
| Erigeron philadelphicus | Lysimachia terrestris | Sanguinaria canadensis |
| Erigeron strigosus | ✓ Maianthemum canadense | ✓ Sanicula marilandica |
| Erythronium albidum | Malaxis unifolia | Satureja vulgaris |
| Erythronium americanum | Medeola virginiana | Schizachne purpurascens |
| ✓ Fragaria vesca | Melampyrum lineare | Scutellaria epilobiifolia |
| Fragaria virginiana | Mitchella repens | Scutellaria lateriflora |
| Galium aparine | Mitella diphylla | Smilacina racemosa |
| Galium boreale | ✓ Mitella nuda | Smilacina stellata |
| Galium concinnum | ✓ Moneses uniflora | Smilacina trifolia |
| Galium lanceolatum | Monotropa hypopithys | Smilax herbacea |
| ✓ Galium triflorum | Monotropa uniflora | ✓ Solidago canadensis ? |
| Gaultheria hispidula | Onoclea sensibilis | Solidago flexicaulis |
| Gaultheria procumbens | Orchis spectabilis | Solidago graminifolia |
| Gentiana andrewsii | Osmorhiza claytoni | Solidago ulmifolia |
| Gentiana crinata | Osmorhiza longistylis | Stellaria calycantha |
| Gentiana quinquefolia | Osmunda cinnamomea | Streptopus amplexifolius |
| Geocalum lividum | Osmunda claytoniana | ✓ Streptopus roseus |
| Geranium bicknellii | Oxalis montana | ✓ Taraxacum officinale |
| Geranium maculatum | Oxalis stricta | Thalictrum dioicum |
| Geum rivale | Panax quinquefolius | Thalictrum polygamum |
| ✓ Goodyera repens | Panax trifolius | Tiarella cordifolia |
| Goodyera tessellata | ✓ Petasites palmatus | ✓ Trientalis borealis |
| Habenaria hyperborea | Phlox divaricata | ✓ Trillium cernuum |
| ✓ Habenaria orbiculata | Poa compressa | Trillium erectum |
| Habenaria psycodes | Poa pratensis | Trillium grandiflorum |
| Habenaria viridis | Polygala paucifolia | Trillium undulatum |
| Halenia deflexa | Polygonatum biflorum | Uvularia grandiflora |
| Helianthus strumosus | Polygonatum pubescens | Uvularia sessilifolia |
| Hepatica acutiloba | Polymnia canadensis | ✓ Viola americana |
| Hepatica americanum | Polypodium virginianum | Viola adunca |
| Hieracium aurantiacum | Potentilla norvegica | Viola blanda |
| Hieracium canadense | Potentilla simplex | Viola canadensis |
| Hieracium scabrum | Potentilla tridentata | ✓ Viola conspersa |
| ✓ Impatiens capensis | ✓ Prenanthes alba | Viola cucullata |
| Iris lacustris | Primula mistassinaca | Viola incognita |
| Isopyrum biternatum | Prunella vulgaris | Viola nephrophylla |
| ✓ Lathyrus ochroleucus | Pteridium aquilinum | Viola pallens |
| ✓ Linnaea borealis | ✓ Pyrola asarifolia | Viola papilionacea |
| Lobelia inflata | Pyrola elliptica | Viola pubescens |
| Lycopodium annotinum | Pyrola minor | ✓ Viola renifolia |
| ✓ Lycopodium clavatum | Pyrola rotundifolia | Viola selkirkii |
| Lycopodium clavatum var. megastachyon | ✓ Pyrola secunda | Viola sororia |
| Lycopodium complanatum | Pyrola virens | Waldsteinia fragarioides |
| Lycopodium inundatum | Ranunculus abortivus | |

Additional species

- Mosses
 Lichens
 Equisetum - black nodes - arvense v. borealis
 Viola sp. - incognita
 Brachyplectum erectum
 Anemone arvensis - edge.
 Anemone hepatica
 Small plant like notch - Viola sp. americana
 Carex pedunculata
 Equisetum scirpoides

Sphagnum sp.

FREQUENCY DATA
(Common Species)

SPRUCE-FIR - MIXED HARDWOODS

STAND NO. 1911

TREE SEEDLINGS

8 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

9643 Populus balsamifera
Pinus strobus
54 Populus tremuloides
Prunus pensylvanica
Prunus serotina
Thuja occidentalis
Tilia americana
Tsuga canadensis

SHRUBS

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

Prunus pumila
Pyrus melanocarpa
Ribes cynosbati
Ribes glandulosum
Ribes lacustre
7 Rosa sp.
Rubus (blackberry)
Rubus (dewberry)
Rubus (raspberry)
6 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
2 Actaea rubra
Adiantum pedatum
Anaphlis margaritacea
Anemone cylindrica
Anemone quinquefolia
Anemone virginiana
Antennaria spp.
Apocynum androsaemifolium
Aquilegia canadensis
6 Aralia nudicaulis
Arisaema atrorubens
874 Aster macrophyllus
Athyrium filix-femina
2 Botrychium virginianum
72 Carex pensylvanica
Chimaphila umbellata
Chrysanthemum leucanthemum
Circaea alpina
Claytonia caroliniana
Claytonia virginiana
Clintonia borealis
Coptis groenlandicum
Corallorhiza maculata
87 Cornus canadensis
Cystopteris fragilis
Dicentra canadensis
Dicentra cucullaria
Dryopteris disjuncta
Dryopteris phegopteris

Dryopteris spinulosa
Epigaea repens
Epilobium angustifolium
8 Equisetum sylvaticum
Erythronium americanum
86 Fragaria vesca
Fragaria virginiana
Galium aparine
9876 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
93 Maianthemum canadense
Medeola virginiana
Melampyrum lineare
Mitchella repens
Mitella diphylla

097654321 Mitella nuda
Monotropa uniflora
Osmorhiza claytoni
Oxalis montana
Oxalis stricta
Polygala paucifolia
Polygonatum pubescens
Prenanthes alba
Pteridium aquilinum
Pyrola elliptica
Pyrola rotundifolia
52 Pyrola secunda
Ranunculus acris
Rhus radicans
07 Rubus pubescens
Sanguinaria canadensis
Smilacina racemosa
Smilacina stellata
Streptopus roseus
Tiarella cordifolia
6 Trientalis borealis
Trillium erectum
Trillium grandiflorum
Uvularia sessilifolia
Viola canadensis
Viola cucullata
Viola pallens
Viola pubescens
6 Viola renifolia
Waldsteinia fragarioides

Additional species

Mosses 1234567890
Lichens 4567890
Equisetum sp. 2
Viola sp. 256890

Aster ciliolatus 6
Asarum Can 6
Saturyus och 7
Viola conspersa 0
Impatiens 0

brachyotum 0

FREQUENCY DATA
(Common Species)

SPRUCE-FIR - MIXED HARDWOODS

STAND NO. 19 p1

TREE SEEDLINGS

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

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

8531 Pop. bals.

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

7 Max mg

SHRUBS

Alnus rugosa
Arctostaphylos uva-ursi
Comptonia peregrina
Corylus americana
Corylus cornuta
Diervilla lonicera
Dirca palustris
Ilex verticillata
Ledum groenlandicum
96 Lonicera canadensis
2 Lyrum ballmoza
7 Somera lysate

Prunus pumila
Pyrus melanocarpa
Ribes cynosbati
Ribes glandulosum
Ribes lacustre
4 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
3 Actaea rubra
Adiantum pedatum
Anaphlis margaritacea
Anemone cylindrica
4 Anemone quinquefolia
Anemone virginiana
Antennaria spp.
Apocynum androsaemifolium
Aquilegia canadensis
4 Aralia nudicaulis
Arisaema atrorubens
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Athyrium filix-femina
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Chrysanthemum leucanthemum
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Mitella diphylla

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Osmorhiza claytoni
Oxalis montana
Oxalis stricta
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Polygonatum pubescens
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Pteridium aquilinum
Pyrola elliptica
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Trillium erectum
Trillium grandiflorum
Uvularia sessilifolia
Viola canadensis
Viola cucullata
Viola pallens
Viola pubescens
7 Viola renifolia
Waldsteinia fragarioides

Additional species

Maple 1234567890 Viola sp 4567
Rubus 13456790 ... Viola amer. 7
Asarum cand 1 Pyrola asarifolia 0
Corydalis 1