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Site 6079 (Boreal Stand 79): Kates Grade, Dickinson County, Michigan, Township 44N, Range 27W, Section 12. 1956-07-15

[s.l.]: [s.n.], 1956-07-15

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STAND RECORD

FORESTS

Stand No. 79

Name: Kates Grade

County: Dickinson, N. Michigan

Date: July 15, 1956

Size of Stand 60 acres

Forest Type: spruce-fir - b spruce larch

Topography: Level

Locality:

T: 44N

R: 27W

Sec: 12

Observers: PFM, JEM

Size of Area Sampled:

Soil Type:

Slope:

Directions

Condition of Stand:

Considerable flat swampy land - wet site - quite wet - standing water in places after heavy rains of summer of 1956
 Lightly logged in places
 Organic substrate - many rotted fallen logs.

Open Crown 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									

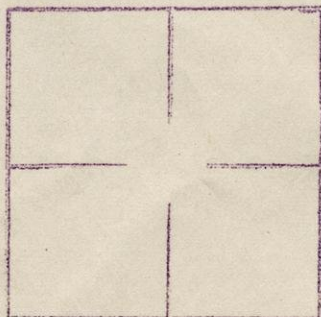
DEPTH

CHARACTERISTICS (Color, Texture, Structure, etc.)

A ₀	1" needles + leaves	2" needles + leaves	1 1/2" needles
A ₁	8" black sandy peat	9" black sandy muck	11" black crumbly 1/2 rot must
A ₂	no leached visible		
B	reddish black sand glei visible	reddish grey black sand glei	blackish sand glei

Parent Material:

Map:



Stand about 80 yrs old White Birch + Ws tried
 probably previously burned.

TREE DATA SUMMARY SHEET

spruce-fir, spruce-fir-mixed hardwoods
~~Northern Pine-Hardwoods~~

Station Number: 79

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	31	55				2411	90	56.9		77.5	27.9	34.4	23.6	85.9	
Acer rubru							1	0.6							
A. sacchar															
A. spicatu															
Betula lut															
B. papyrif	17	21				1528	1	0.6		42.5	15.3	13.1	15.0	43.5	
Carpinus c															
Fagus gran															
Ostrya vir															
Picea glau	14	16				1690	3	1.9		35.0	12.6	10.0	16.6	39.2	
Picea mar. Picea Bank	16	25				1145	10	6.3		40.0	14.5	15.6	11.2	41.3	
P. resinos															
P. Strobis															
Populus ba	2	2				220	2	1.3		5.0	1.8	1.3	2.2	5.3	
P. grandid															
P. tremulo	5	6				783				12.5	4.5	3.8	7.7	16.0	
Prunus mar. virg.							9	5.6							
Quercus el															
Q. rubra															
Tilia amer															
Tsuga cana															
Thuja occi	25	34				2373 ³¹	30	19.4		62.5	22.5	21.2	23.3	67.0	
Ulmus amer							1	0.6							
U. fulva															
Frax. nig.	1	1				50				2.5	0.9	0.6	0.4	1.9	
Prunus serot.							1	0.6							
Alnus rugosa							7	4.4							
Pyrus amer.							3	1.9							
TOTALS	111	160				10,200	160	100.0		277.5	100.0	100.0	100.0	300.0	

AVE. DIST. BTW'N TREES:

9.9

AVE. B. A.:

63.8

TREES/ACRE:

444

DOM./ACRE:

28,327

[illegible]

Stand No. 79(2)

[illegible]

NORTHERN PINE-HARDWOODS

Stand No. 79(3)

[illegible]

POINT RECORD TREES

NORTHERN PINE-HARDWOODS

Stand No. 79 (4)

STATION NO.	1	2	3	4	5	6	7	8	9	10
Abies balsam	11-40 8 3	5 1/2-45 8 1/2 9-20	3 1/2-12 8 1/2 4 1/2-20 17	10 1/2-75 15 6-35 12 1/2 11-45	6-70 16 20-90 15	5-45 27 7-75 21	15-65 10 11	14-36 10 12-18 21	14-30 16 18	10 1/2 4 24
Acer rubrum		11-75	12-45 7	5-75 12				6-38		
A. sacchar.										
A. spicatum										
Betula lut.										
B. papyrif	17-120					11 1/2-75	10-100 10-75		13 1/2-75	
Carpinus car										
Fagus gran										
Ostrya virg										
Picea glau	3-150		14 1/2-150							
Pinus Bank										
P. resinosa										
P. Strobus										
Populus bals							10-30 25			
P. grand										
P. trem					13-170	12 1/2-20				
Prunus pen.										
Quercus ell										
Q. rubra										
Tilia amer										
Tsuga can										
Thuja occ	15-70 5	14 1/2-5			20-110 10			8 1/2-4	3 2-22 14 1/2 16-7	
Ulmus amer										
U. fulva										
Picea mariana								9 7-40 6 2-40	3 1/2-65 3-75 16-15	
Alnus rugosa				15						
Pinus stro	6	4 3/4					9 1/2			
Canopy	55	75	60	50	70	35	15	10	25	80
Litter	1	1/2	3/4	1	1/2	1	1/2	1/2	1	1
Distance										

Av. canopy - 45% 20

Av. litter - 1.5"

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

[illegible]

[illegible]

	P.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20		
Geum aleppicum																							
Geum canadense	✓								✓													1	5
Geum rivale																							
Glyceria striata																							
Goodyera obtusifolia																							
Goodyera pubescens																							
Goodyera repens																							
Goodyera tessellata																							
Habenaria clavellata																							
Habenaria hyperborea																							
Habenaria obtusata	✓																					1	
Habenaria orbiculata																							
Habenaria psycodes																							
Habenaria viridis	✓																					1	
Hackelia virginiana																							
Halenia deflexa																							
Hamamelis virginiana																							
Helianthus strumosus																							
Hepatica acutiloba																							
Hepatica americanum																							
Heracleum maximum	✓																					1	
Heuchera richardsonii																							
Hieracium aurantiacum																							
Hieracium canadense																							
Hieracium pratense																							
Hieracium scabrum																							
Ilex verticillata																							
Impatiens capensis	✓																					1	
Iris lacustris																							
Isopyrum bitermum																							
Juniperus communis																							
Juniperus horizontalis																							
Lactuca canadensis	✓																					1	
Laportea canadensis	✓																					1	
Lathyrus ochroleucus																							
Ledum groenlandicum	✓																					1	
Lichens spp.	✓	✓	✓		✓	✓	✓	✓	✓		✓	✓	✓	✓		✓	✓	✓		✓	✓	16	80
Lilium michiganense																							
Linnaea borealis	✓			✓				✓														2	10
Listera auriculata																							
Listera borealis																							
Listera convallarioides																							
Listera cordata																							
Lobelia inflata																							
Lonicera canadensis	✓		✓																			1	5
Lonicera dioica	✓																			✓		1	5
Lonicera hirsuta																							
Lonicera involucrata	✓																						
Lonicera oblongifolia	✓																		✓			1	5
Lonicera prolifera																							
Lonicera villosa																							
Luzula acuminata																							

	P.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20		
Luzula multiflora																							
Lycopodium annotinum																							
Lycopodium clavatum																							
Lycopodium complanatum																							
Lycopodium inundatum																							
Lycopodium lucidulum																							
Lycopodium obscurum																							
Lycopodium sabinaefolium																							
Lycopodium selago																							
Lycopodium tristachyum																							
Lycopus americanus																							
Lycopus uniflorus	✓													✓		✓				✓		3	15
Lysimachia ciliata	✓																✓					1	5
Lysimachia quadrifolia																							
Lysimachia terrestris																							
Maianthemum canadense	✓	✓	✓	✓		✓	✓	✓	✓	✓				✓	✓							10	50
Malaxis unifolia																							
Medeola virginiana																							
Melampyrum lineare																							
Menispermum canadense																							
Mertensia paniculata																							
Milium effusum																							
Mitchella repens																							
Mitella diphylla																							
Mitella nuda	✓		✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓				✓	✓	✓		14	70
Moneses uniflora																							
Monotropa hypopithys																							
Monotropa uniflora																							
Mosses spp.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	20	100
Nemopanthus mucronata																							
Onoclea sensibilis																							
Orchis spectabilis																							
Oryzopsis asperifolia																							
Oryzopsis racemosa																							
Osmorhiza claytoni	✓												✓	✓								2	10
Osmorhiza longistylis																							
Osmunda claytoniana																							
Osmunda cinnamomea																							
Osmunda regalis																							
Oxalis montana	✓	✓	✓		✓	✓	✓		✓	✓	✓		✓							✓		10	50
Oxalis stricta																							
Panax quinquefolius																							
Panax trifolius																							
Parthenocissus inserta																							
Parthenocissus quinquefolia																							
Petasites palmatus	✓																						1
Phleum pratense																							
Phlox divaricata																							
Phryma leptostachya																							
Plantago major																							
Poa compressa																							
Poa pratensis																							

	P.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20		
Podophyllum peltatum																							
Polygala paucifolia																							
Polygonatum biflorum																							
Polygonatum pubescens																							
Polygonum cilinode	✓																						1
Polymnia canadensis																							
Polypodium virginianum																							
Potentilla canadensis																							
Potentilla norvegica																							
Potentilla simplex																							
Potentilla tridentata																							
Prenanthes alba																							
Primula mistassinaca																							
Prunella vulgaris	✓							✓	✓														2 10
Prunus pumila																							
Pteretis pensylvanica																							
Pteridium aquilinum																							
Pyrola asarifolia																							
Pyrola elliptica																							
Pyrola grandiflora																							
Pyrola minor																							
Pyrola rotundifolia																							
Pyrola secunda																							
Pyrola virens																							
Pyrus floribunda																							
Pyrus melanocarpa																							
Ranunculus abortivus	✓																			✓			1 5
Ranunculus acris																							
Ranunculus pensylvanicus																							
Ranunculus recurvatus	✓				✓							✓	✓										3 15
Ranunculus repens																							
Ranunculus septentrionalis																							
Rhamnus alnifolia	✓																						1
Rhus glabra																							
Rhus radicans																							
Rhus typhina																							
Rhus vernix																							
Ribes americanum																							
Ribes cynosbati	✓						✓		✓		✓												3 15
Ribes glandulosum																							
Ribes hirtellum																							
Ribes lacustre																							
Ribes oxycanthoides																							
Ribes triste	✓		✓										✓										2 10
Rosa sp.																							
Rubus allegheniensis																							
Rubus idaeus	✓								✓														1 5
Rubus hispidus																							
Rubus odoratus																							
Rubus parviflorus																							
Rubus pubescens	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓		✓	✓	✓		✓		16 80
Rubus (blackberry)																							

	P.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20		
Rubus (dewberry)																							
Rubus (raspberry)																							
Rumex acetosella																							
Salix spp.	✓																						1
Sambucus canadensis																							
Sambucus pubens	✓																						1
Sanguinaria canadensis																							
Sanicula gregaria																							
Sanicula marilandica																							
Satureja vulgaris																							
Saxifraga pensylvanica	✓																						1
Schizachne purpurascens																							
Scutellaria epilobiifolia																							
Scutellaria lateriflora	✓															✓						1	5
Senecio aureus																							
Shepherdia canadensis																							
Sium suave	✓																						1
Smilacina racemosa																							
Smilacina stellata																							
Smilacina trifolia																							
Smilax herbacea																							
Smilax tamnoides var hispida																							
Spiranthes gracilis																							
Spiranthes romanzoffiana																							
Solidago canadensis																							
Solidago flexicaulis																							
Solidago gigantea																							
Solidago graminifolia																							
Solidago hispida																							
Solidago juncea																							
Solidago lepida																							
Solidago macrophylla																							
Solidago rugosa																							
Solidago ulmifolia	✓																						1
Spiraea alba																							
Spiraea latifolia																							
Stachys palustris																							
Stellaria calycantha																							
Stellaria longifolia																							
Stellaria palustris																							
Streptopus amplexifolius																							
Streptopus roseus	✓																						1
Symphoricarpos albus																							
Symphoricarpos occidentalis																							
Taraxacum officinale																							
Taxus canadensis																							
Thalictrum dasycarpum	✓																						1
Thalictrum dioicum	✓			✓										✓	✓			✓	✓		✓	6	30
Thalictrum polygamum																							
Tiarella cordifolia																							
Trientalis borealis	✓	✓	✓		✓		✓	✓	✓	✓	✓	✓	✓				✓		✓	✓	✓	14	70
Trifolium hybridum																							

[illegible]

	P.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20		
Amelanchier spp.	✓		✓																			1	5
Betula lutea																							
Betula papyrifera	✓				✓						✓											2	10
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	✓										✓											1	5
Populus grandidentata																							
Populus tremuloides	✓																		✓			1	5
Prunus nigra																							
Prunus pensylvanica																							
Prunus serotina																							
Prunus virginiana	✓				✓					✓									✓		✓	4	20
Pyrus americana																							
Pyrus decora																							
Quercus rubra																							
Thuja occidentalis	✓				✓																	1	5
Tilia americana																							
Tsuga canadensis																							
Ulmus americana																							
Ulmus rubra																							
Ulmus thomasi																							
Erigeron spp	✓		✓	✓	✓		✓			✓		✓		✓	✓	✓		✓	✓	✓	✓	13	65
Cirsium sp	✓																						1
Trisetum perfoliatum	✓																						1
Mentha arvensis	✓														✓							1	5
Tris versicolor	✓																						1

PRESENCE LIST

SPRUCE-FIR - MIXED HARDWOODS

STAND NO. 79

TREES

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

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

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

SHRUBS

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

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

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

HERBS

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

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

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

PRESENCE LIST

SPRUCE-FIR - MIXED HARDWOODS

STAND 79

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

~~*Equisetum arvense*~~
~~*Aster lateriflorus*~~
~~*Brassica spp*~~
~~*Solidago sp - ulmi*~~
~~*Mosses*~~
~~*Lichens*~~
~~*Lycopodium pumilum*~~
~~*Cirsium sp*~~
~~*Brachyelytrum erectum*~~
~~*Habenaria obtusata*~~

~~*Eupatorium maculatum*~~
~~*Samolus nivalis*~~
~~*Carex elumnea*~~
~~*Saxifraga pennsylvanica*~~
~~*Lactuca canadense*~~
~~*Caltha palustris*~~
~~*Aster lindleyanus*~~
~~*Carex pedunculata*~~
~~*Trisetum perfoliatum*~~
~~*Mentha arvensis*~~

~~*Thalictrum dasycarpum*~~
~~*Geum canadense*~~
~~*Cypripedium calceolus*~~
~~*Polygonum cilinode*~~
~~*Nettle - Laportea canadensis*~~
~~*Burn sedge*~~
~~*Carex proserpina*~~
~~*Juncus verrucosus*~~
~~*Hieracium lanatum*~~
~~*Salix asprellum*~~

FREQUENCY DATA
(Common Species)

SPRUCE-FIR - MIXED HARDWOODS

STAND NO. 79 (1)

TREE SEEDLINGS

- 064 Abies balsamea
Acer pensylvanicum
432 Acer rubrum
Acer saccharum
Acer spicatum
Betula lutea
04 Betula papyrifera
2 Amelanchier sp.

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

- 088 balsam
Pinus strobus
Populus tremuloides
Prunus pensylvanica
Prunus serotina
4 Thuja occidentalis
Tilia americana
Tsuga canadensis
74 Prunus ang.

SHRUBS

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

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

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

HERBS

- 09876543 Dryopteris spinulosa
Epigaea repens
Epilobium angustifolium
64 Equisetum sylvaticum
Erythronium americanum
Fragaria vesca
0987 Fragaria virginiana
Galium aparine
0987642 Galium triflorum
3 Gaultheria hispidula
Gaultheria procumbens
Gentiana quinquefolia
Geranium maculatum
Goodyera repens
Habenaria obtusata
Halenia deflexa
Hepatica acutiloba
Hepatica americana
Hieracium aurantiacum
73 Linnaea borealis
Lycopodium annotinum
Lycopodium clavatum
Lycopodium complanatum
Lycopodium lucidulum
Lycopodium obscurum
9876534 Maianthemum canadense
Medeola virginiana
Melampyrum lineare
Mitchella repens
Mitella diphylla

- 0986543 Mitella nuda
Monotropa uniflora
Osmorhiza claytoni
0986542 Oxalis montana
Oxalis stricta
Polygala paucifolia
Polygonatum pubescens
Prenanthes alba
Pteridium aquilinum
Pyrola elliptica
Pyrola rotundifolia
Pyrola secunda
Ranunculus acris
Rhus radicans
09876543 Rubus pubescens
Sanguinaria canadensis
Smilacina racemosa
Smilacina stellata
Streptopus roseus
Tiarella cordifolia
0987642 Trientalis borealis
Trillium erectum
Trillium grandiflorum
Uvularia sessilifolia
Viola canadensis
Viola cucullata
09862 Viola pallens
Viola pubescens
Viola renifolia
Waldsteinia fragarioides
4 Viola incog.

Additional species

- 1234567890
Lidias 12456780
Carex fluminea 234789
Sagittaria 54 23469
Cinna latifolia
Equisetum arvense 2
Ranunculus erect 2
Thalictrum diorum 3
Carex intumescens 349

- Eupatorium macul. 4
Ranunculus recurv. 4
Carex pedunculata 679
Rumex crispus 78
Scum canadense 8

Aster lincolniensis 8

FREQUENCY DATA
(Common Species)

SPRUCE-FIR - MIXED HARDWOODS

STAND NO. 79(2)

TREE SEEDLINGS

942 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

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

08 Prunus virg

SHRUBS

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

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

8 Lonicera involucrata = oblongifolia
9 Lonicera dioica

2 Ribes triste

HERBS

Actaea pachypoda
86 Actaea rubra
Adiantum pedatum
Anaphlis margaritacea
Anemone cylindrica
Anemone quinquefolia
Anemone virginiana
Antennaria spp.
Apocynum androsaemifolium
Aquilegia canadensis
Aralia nudicaulis
Arisaema atrorubens
Aster macrophyllus
6531 Athyrium filix-femina
Botrychium virginianum
8 Carex pensylvanica
Chimaphila umbellata
Chrysanthemum leucanthemum
8574 Circaea alpina
Claytonia caroliniana
Claytonia virginiana
Clintonia borealis
062 Coptis groenlandicum
Corallorhiza maculata
09824 Cornus canadensis
Cystopteris fragilis
Dicentra canadensis
Dicentra cucullaria
65 Dryopteris disjuncta
Dryopteris phegopteris

09762 Dryopteris spinulosa
Epigaea repens
Epilobium angustifolium
0 Equisetum sylvaticum
Erythronium americanum
Fragaria vesca
91 Fragaria virginiana
4 Galium aparine
9875321 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
32 Maianthemum canadense
Medeola virginiana
Melampyrum lineare
Mitchella repens
Mitella diphylla

987321 Mitella nuda
Monotropa uniflora
4 Osmorhiza claytoni
02 Oxalis montana
Oxalis stricta
Polygala paucifolia
Polygonatum pubescens
Prenanthes alba
Pteridium aquilinum
Pyrola elliptica
Pyrola rotundifolia
Pyrola secunda
Ranunculus acris
Rhus radicans
0876432 Rubus pubescens
Sanguinaria canadensis
Smilacina racemosa
Smilacina stellata
Streptopus roseus
Tiarella cordifolia
09864 Trientalis borealis
Trillium erectum
Trillium grandiflorum
Uvularia sessilifolia
Viola canadensis
Viola cucullata
874321 Viola pallens
8 Viola pubescens
2 Viola renifolia
Waldsteinia fragarioides

1 Viola micrantha

Additional species

Mosses 1234567890
Lichens 12356790
Ranunculus recurvatus 12
Sium sp. 134567890
Carex pedunc. 234

Carex eburna 2780
Eupatorium maculatum 3
Aster latiflorus 3
Lycopus multiflorus 359
Caltha palustris 3

Thalictrum dio 34780
Carex proserpita 4
Mentha arvensis 4
Carex intumesc 40
Scutellaria later 5

Tall opposite spec 6 - Lysimachia ciliata
Ranunculus about 9
Carex acetula 0