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Site 3050: Council Ground State Park, Lincoln County.

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3020

3050

Stand No: 3050

Name: Cornish Ground State Forest

County: Lincoln

T: 31N R: 6E Sec: 9

Locality:

Date: Aug 14

Observers: J.T.C., O.A., R.B., R.M.C. M.P.

Size of Stand:

Size of Area Sampled:

Forest Type: Pine

Soil Type: Colby Silt loam

Topography: Level

Rolling phase

Condition of Stand:

Excellent

Open Grown Trees:

Stumps:

- | | |
|---------|-----|
| 1. Pine | 6. |
| 2. | 7. |
| 3. | 8. |
| 4. | 9. |
| 5. | 10. |

Soil

Sample No:	pH	N	P	K	Colloids	Vol/wt	WHC
A ₀ _____	—	—	—	—	—	—	—
A ₁ _____	—	—	—	—	—	—	—
A ₂ _____	—	—	—	—	—	—	—
Depth	Characteristics (Color, texture, etc.)						

A₀ 1, 1, 1A₁ 2, 3, 2A₂ 4, 3, Negligible

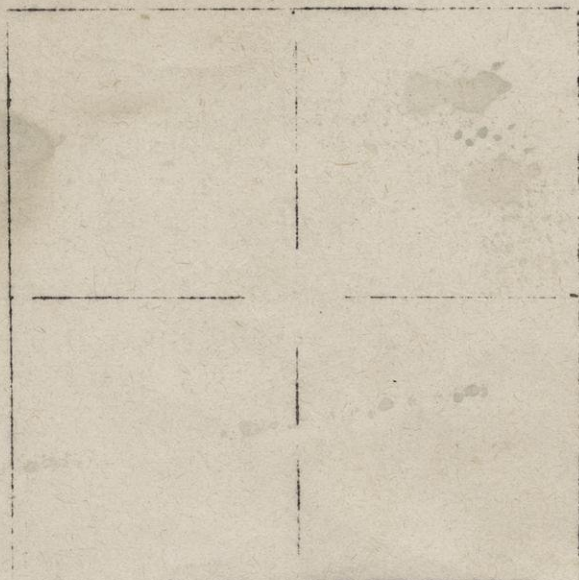
B ?

Parent Material:

Remarks:

Some wind throwing evidence quite old.

Map



Tree	# Pts.	# Tr.	Size Cl. sq. in. -80:-320:321	Dom.	# Sap.	# Seed.	F.% Seed.	F.% Tr.	D.% Tr.	Dom % Tr.	D F D Index	Station No. 3050	
Acer rubrum					1	3.7						Total Length of 960 Transect.	
A. sacchar.												Total Area of 6240 Transect.	
Carya cord.												Ave. Dist. Btw'n 24 Trees	
C. ovata												Saplings/unit area 188	
Fagus gran.												Ave. BA (Total BA=80) 237	
Fraxinus am												No. Trees/acre 87	
F. penn.												Dom./acre 20619	
Juglans cin													
J. nigra													
Ostrya vir.													
2.5 Populus gr.	1	1	1		16	3	11.1	1.9	1.25	0.1	3.3	7	
P. tremuloi													
Prunus sero													
Quercus al.													
Q. macrocar													
Q. rubra													
2.5 Q. velutina	1	1	1		14			1.9	1.25	0.1	3.3	7	
Tilia amer.													
Ulmus amer.													
U. fulva													
95 Pinus Strobus	38	65	6	36	23	17182	21	77.8	71.7	81.5	90.5	243.5	1218
25 P. resinosa	10	10	1	9		1727		18.9	1.25	9.1	40.5	122	
7.5 Betula pap	3	3	3		38	2	7.4	5.7	3.75	0.2	9.7	49	
19.25 Totals	80	12	45	23	18977	27		100.1	100	99.9	300.3	1403	

1450
1150

PS

~~||||~~ ~~||||~~ ~~||||~~ 1

AR 1

BP 11

46656

PG 11

TABULATION FORM

NORTHERN PINE-HARDWOODS

Stand No. 3050

[illegible]

TABULATION FORM

NORTHERN PINE-HARDWOODS

Stand No. 3050

[illegible]

TABULATION FORM

NORTHERN PINE-HARDWOODS

Stand No. 3050

STATION NO.	P.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	T
Fragaria vesca sp	✓		✓	✓	✓	✓	✓	✓					✓	✓			✓	✓	✓	✓	✓	1260
Galium aparine																						
Galium boreale																						
Galium circaezans																						
Galium concinnum																						
Galium lanceolatum																						
Galium triflorum	✓							✓														15
Gaultheria hispidula																						
Gaultheria procumbens	✓	✓	✓	✓		✓		✓		✓	✓			✓			✓	✓		✓	✓	1260
Geranium maculatum	✓				✓																	15
Gerardia pedicularia																						
Geum canadense																						
Geum rivale																						
Gnaphalium obtusifolium	✓																	✓				15
Goodyera oblongifolia																						
Goodyera pubescens																						
Goodyera repens																						
Habenaria bracteata																						
Habenaria orbiculata																						
Hackelia virginiana																						
Halenia deflexa																						
Hamamelis virginiana																						
Helianthus occidentalis	✓																					1
Hepatica acutiloba																						
Hepatica americana																						
Heuchera richardsonii																						1
Hieracium canadense	✓																					1
Hieracium scabrum																						
Hydrophyllum virginianum																						
Hystrix patula																						
Ilex verticillata																						
Impatiens biflora																						
Impatiens pallida																						
Isopyrum bitermum																						
Krigia biflora																						
Lactuca canadensis																						
Laportea canadensis																						
Lathyrus ochroleucus	✓																					1
Lathyrus venosus																						
Ledum groenlandicum																						
Lilium michiganense																						
Linnaea borealis	✓																					1
Lithospermum canescens																						
Lobelia inflata																						
Lonicera canadensis																						
Lonicera hirsuta																						
Lonicera oblongifolia	✓																					1
Lonicera prolifera																						
Lupinus perennis																						
Luzula acuminata																						
Luzula multiflora																						

351

161

365

[illegible]

TABULATION FORM

NORTHERN PINE-HARDWOODS

Stand No. 3050

[illegible]

TABULATION FORM

NORTHERN PINE-HARDWOODS

Stand No. 3050

STATION NO.	P.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20		
<i>Trientalis borealis</i>	✓							✓														1	5
<i>Trillium cernuum</i>																							
<i>Trillium grandiflorum</i>																							
<i>Uvularia grandiflora</i>																							
<i>Uvularia sessilifolia</i>																							
<i>Vaccinium angustifolium</i>																							
<i>Vaccinium myrtilloides</i>	✓																						1
<i>Veronicastrum virginicum</i>																							
<i>Viburnum acerifolium</i>																							
<i>Viburnum rafinesquianum</i>	✓																						1
<i>Viburnum lentago</i>																							
<i>Viola adunca</i>																							
<i>Viola blanda</i>																							
<i>Viola canadensis</i>	✓																						1
<i>Viola conspersa</i>																							
<i>Viola cucullata</i>																							
<i>Viola pensylvanica</i>																							
<i>Viola incognita</i>																							
<i>Viola pallens</i>																							
<i>Viola pubescens</i>																							
<i>Viola renifolia</i>																							
<i>Vitis aestivalis</i>																							
<i>Vitis riparia</i>																							
<i>Waldsteinia fragarioides</i>																							
<i>Xanthoxylum americanum</i>																							
<i>Zizia aurea</i>																							
Additional species:																							
<i>Achillea mill</i>	✓																	✓				1	5

II Pine Wood Survey

Point Record

Stand No.:

Actaea rubra
 Adiantum pedatum
 Aletris farinosa
 Anemone canadensis
 Anemone cylindrica
 Anemone quinquefolia
 Apocynum cannabinum
 Arabis canadensis
 Aralia hispida
 Arenaria lateriflora
 Arisaema strobiliferum
 Asarum canadense
 Asclepias amplexicaulis
 Asclepias phytolacca
 Asclepias syriaca
 Asclepias tuberosa
 Aster caeruleus
 Aster puniceus
 Aster sericeus
 Baptisia leucantha
 Baptisia leucophylla
 Boehmeria cylindrica
 Botrychium virginicum
 Bromus Kalmii
 Campanula aparinoides
 Campanula rotundifolia
 Ceanothus americanus
 Chamaedaphne calyculata
 Circaea latifolia
 Claytonia virginica
 Clintonia borealis
 Conopholis americana
 Coptis trifolia
 Cornus rugosa
 Corydalis aurea
 Corydalis sempervirens
 Corylus cornuta
 Cryptotaenia canadensis
 Cystopteris fragilis
 Cyperus filiculmis
 Cyperus Schweinitzii
 Danthonia spicata
 Dentaria laciniata
 Desmodium nudiflorum
 Dicentra canadensis
 Dioscorea villosa
 Dodecatheon Meadia
 Dryopteris cristata
 Dryopteris Linnaea
 Dryopteris marginata
 Dryopteris Phegopteris
 Equisetum arvense
 Equisetum hyemale
 var. affine
 Erechtites hieracifolia

Erysimum cheiranthoides
 Erythronium albidum
 Eupatorium perfoliatum
 Galium aparine
 Galium asperellum
 Galium Claytonia
 Galium concinnum
 Galium lanceolatum
 Gerardia Guttieraria
 Habenaria psycodes
 Hamamelis virginiana
 Helianthemum Bicknellii
 Hepatica acutiloba
 Hydrophyllum virginicum
 Hypericum Kalmianum
 Ilex verticillata
 Impatiens biflora
 Iris virginica
 var. Shrevei
 Isopyrum biternatum
 Juncus tenuis
 Laportea canadensis
 Lechea intermedia
 Ledum groenlandicum
 Lespedeza capitata
 Liatris aspera
 Liatris cylindrica
 Liatris pycnostachya
 Lilium michiganense
 Linaria canadensis
 Liparis lilifolia
 Lobelia cardinalis
 Lobelia inflata
 Lobelia spicata
 Lonicera dioica
 Lonicera oblongifolia
 Lonicera prolifera
 Lychnis alba
 Lycopodium clavatum
 Lycopodium americana
 Lysimachia terrestris
 Menispermum canadensis
 Mitella diphylla
 Monarda punctata
 Monotropa uniflora
 Oenothera biennis
 Oenothera muricata
 Optunia Rafinesquii
 Orobanche uniflora
 Osmunda cinnamomea
 Oxypolis rigidior
 var. longifolia
 Pedicularis canadensis
 Pellaea glabella
 Pentstemon gracilis
 var. wisconsinensis

Physocarpus opulifolius
 Podophyllum peltatum
 Polemonium reptans
 Polygala sanguinea
 Polygonatum pubescens
 Potentilla arguta
 Prunella vulgaris
 Pteris nodulosa
 Pycnanthemum virginicum
 Ranunculus abortivus
 Ranunculus acris
 Ranunculus pensylvanicus
 Rhus copallina
 Rhus glabra
 var. borealis
 Rhus Vernix
 Ribes cynosbati
 Ribes hirtellum
 Ribes missouriense
 Rudbeckia laciniata
 Sambucus pubens
 Sanguinaria canadensis
 Sanicula marilandica
 Scutellaria epilobium
 Scutellaria parvula
 var. Leonardi
 Silphium perfoliatum
 Solidago castrensis
 Solidago graminifolia
 var. remota
 Solidago hispida
 Solidago missouriensis
 var. glaberrima
 Specularia perfoliata
 Spiraea alba
 Spiraea tomentosa
 var. rosea
 Sporobolus cryptanthus
 Steironema lanceolatum
 Stellaria media
 Symphoricarpos albus
 Taenidia integerrima
 Thalictrum dioicum
 Trillium grandiflorum
 Verbena stricta
 Veronica americana
 Veronicastrium virginicum
 Virburnum acerifolium
 Viburnum affine
 Viburnum Lentago
 Viola eriocarpa
 Viola incognita
 Viola pallens
 Viola pubescens
 Woodsia ilvensis

Polygala pauciflora

Cammil Ground
St Forest
Merrill

Pine & quad. 1

Tree	BA	S	Tree	BA	S	Tree	BA	S
Acer negundo			Fraxinus penn.			Quercus alba		
Acer rubrum			Fraxinus lance			Quercus ellips		
Acer saccharum			Juglans cinere			Quercus macroc.		
Acer spicatum			Ostrya virgin.			Quercus rubra		
Amelanchier sp.			Pinus Banksian			Quercus sp.		
Betula lutea			Pinus resinosa			Sorbus decora		
Betula papyrifera			Pinus Strobus	445/430		Tilia amer.		
Carpinus carol.			Populus grand.			Tsuga canad.		
Carya cordif.			Populus trem.			Ulmus amer.		
Carya ovata			Prunus pensyl.			Ulmus fulva		
Crataegus sp.			Prunus scrocin					
Fraxinus amer.			Prunus virgin.					

Shrubs & Herbs

Distance: 22

Achillea millefolium	Euphorbia corol.	Polygonella artic.
Agrimonia gryposepala	Fragaria spp.	Polypodium virg.
Agropyron trachycaulon	Galium boreale	Potentilla simplex
var. glaucum	Galium triflorum	Prenanthes alba
Alnus rugosa	Gaultheria procum.	Pteridium aquilinum
Amorpha canescens	Gaylussacia baccata	var. latiusculum
Amphicarpa bracteata	Geranium maculatum	Pyrola elliptica
Andropogon Gerardi	Geum canadense	Pyrola rotundifolia
Andropogon scoparius	Gnaphalium obtusif.	Pyrola secunda
Anemone virginiana	var. micradenium	Ranunculus fasc.
Antennaria plantag.	Goodyera pubescens	Ranunculus rhomboid.
Apocynum androsaem.	Helianthemum can.	Rhus glabra
Aquilegia canadensis	Helianthus occident.	Rhus radicans
Arabis lyrata	Heliopsis scabra	Rhus typhina
Aralia nudicaulis	Hepatica americana	Ribes americanum
Arctostaphylos Uva	Heuchera Richardsonii	Rosa spp.
Aronia melanocarpa	Hieracium canadense	Rubus-blackberry
Artemisia caudata	Hieracium scabrum	Rubus-deadberry
Aster azureus	Houstonia longifolia	Rubus-raspberry
Aster lateriflorus	Hypoxis hirsuta	Rudbeckia hirta
var. pendulus	Hystrix patula	Salix discolor
Aster laevis	Juncus Greenii	var. latifolia
Aster macrophyllus	Koeleria crisata	Sambucus canadensis
Aster ptarmicoides	Krigia biflora	Sanicula gregaria
Aster sagittifolius	Lactuca canadensis	Sisyrinchium camp.
Athyrium angustatum	Lathyrus ochroleucus	Smilacina racemosa
Aureolaris pedic.	Lathyrus venosus	Smilacina stellata
Bromus ciliatus	Lithospermum canes.	Smilax ecirrhata
var. intonsus	Lithospermum croceum	Smilax herbacea
Calamagrostis	Lupinus perennis	Smilax hispida
Carex Crawfordii	Lycopodium complan.	Solidago canadensis
Carex penxylvanica	Lycopodium obscurum	var. gilvocan.
Carex siccata	Lysimachia quadrif.	Solidago juncea
Ceanothus ovatus	Maianthemum can.	Solidago nemoralis
Celastrus scandens	Mitchella repens	Solidago speciosa
Chimaphila umbellata	Monarda fistulosa	var. angustata
Clematis virginiana	Myrica asplenifolia	Tephrosia virginiana
Comandra umbellata	Onoclea sensibilis	Tradescantia ohien.
Convolvulus spitham.	Osmorhiza Claytoni	Trientalis borealis
Coreopsis palmata	Osmunda Claytoniana	Uvularia grandiflora
Cornus alternifolia	Osmunda regalis	Uvularia sessilif.
Cornus canadensis	Oxalis violacea	Vaccinium angustif.
Cornus femina	Panicum implicatum	Vaccinium canadense
Cornus stolonifera	Parthenocissus vitacea	Vicia americana
Corylus americana	Pedicularis lanc.	Vicia villosa
Cypripedium acaule	Phlox pilosa	Viola canadensis
Desmodium acuminatum	Phryma leptostachya	Viola cucullata
Desmodium canadense	Physalis virginiana	Viola pedata
Diervilla lonicera	Poa compressa	var. lineariloba
Dryopteris spm.	Polygala polygama	Viola sagittata
Eriogonum repens	Polygonatum biflorum	Vitis rotundifolia
Eriogonum repens		Zanthoxylum amer.

only 5 sp

Linnæa borealis

Tree	BA	S	Tree	BA	S	Tree	BA	S
Acer negundo			Fraxinus penn.			Quercus alba		
Acer rubrum			Fraxinus lance			Quercus ellips		
Acer saccharum			Juglans cinere			Quercus macroc.		
Acer spicatum			Ostrya virgin.			Quercus rubra		
Amelanchier sp.			Pinus Banksian			Quercus sp.		
Betula lutea			Pinus resinosa			Sorbus decora		
Betula papyrifer			Pinus Strobus 215,540			Tilia amer.		
Carpinus carol.			Populus grand.			Tsuga canad.		
Carya cordif.			Populus trem.			Ulmus amer.		
Carya ovata			Prunus pensyl.			Ulmus fulva		
Crataegus sp.			Prunus serotin					
Fraxinus amer.			Prunus virgin.					

Distance: 31

Shrubs & Herbs

Achillea millefolium	Euphorbia corol.	Polygonella artic.
Agrimonia gryposepala	Fragaria spp.	Polypodium virg.
Agropyron trachycaulon	Galium boreale	Potentilla simplex
var. glaucum	Galium triflorum	Prenanthes alba
Alnus rugosa	Gaultheria procum.	Pteridium aquilinum
Amorpha canescens	Gaylussacia baccata	var. latiusculum
Amphicarpa bracteata	Geranium maculatum	Pyrola elliptica
Andropogon Gerardi	Geum canadense	Pyrola rotundifolia
Andropogon scoparius	Gnaphalium obtusif.	Pyrola secunda
Anemone virginiana	var. micradenium	Ranunculus fasc.
Antennaria plantag.	Goodyera pubescens	Ranunculus rhomboid.
Apocynum androsaem.	Helianthemum can.	Rhus glabra
Aquilegia canadensis	Helianthus occident.	Rhus radicans
Arabis lyrata	Heliopsis scabra	Rhus typhina
Aralia nudicaulis	Hepatica americana	Ribes americanum
Arctostaphylos Uva	Heuchera Richardsonii	Rosa spp.
Aronia melanocarpa	Hieracium canadense	Rubus-blackberry
Artemisia caudata	Hieracium scabrum	Rubus-dewberry
Aster azureus	Houstonia longifolia	Rubus-raspberry
Aster lateriflorus	Hypoxis hirsuta	Rudbeckia hirta
var. pendulus	Hystrix patula	Salix discolor
Aster laevis	Juncus Greenii	var. latifolia
Aster macrophyllus	Koeleria crisata	Sambucus canadensis
Aster ptarmicoides	Krigia biflora	Sanicula gregaria
Aster sagittifolius	Lactuca canadensis	Sisyrinchium camp.
Athyrium angustatum	Lathyrus ochroleucus	Smilacina racemosa
Aureolaris pedic.	Lathyrus venosus	Smilacina stellata
Bromus ciliatus	Lithospermum canes.	Smilax ecirrhata
var. intonsus	Lithospermum croceum	Smilax herbacea
Calamagrostis	Lupinus perennis	Smilax hispida
Carex Crawfordii	Lycopodium complan.	Solidago canadensis
Carex pennsylvanica	Lycopodium obscurum	var. gilvocan.
Carex siccata	Lysimachia quadrif.	Solidago juncea
Ceanothus ovatus	Maianthemum can.	Solidago nemoralis
Celastrus scandens	Mitchella repens	Solidago speciosa
Chimaphila umbellata	Monarda fistulosa	var. angustata
Clematis virginiana	Myrica asplenifolia	Tephrosia virginiana
Comandra umbellata	Onoclea sensibilis	Tradescantia ohien.
Convolvulus spitham.	Osmorhiza Claytoni	Trientalis borealis
Coreopsis palmata	Osmunda Claytoniana	Uvularia grandiflora
Cornus alternifolia	Osmunda regalis	Uvularia sessilif.
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Dryopteris spin.	Polygala polygama	Viola sagittata
Eriogonum repens	Polygonatum biflorum	Vitis cestivalis
Eriogonum repens		Zanthoxylum amer.

anemone quinquefolia

3

Tree	BA	S	Tree	BA	S	Tree	BA	S
Acer negundo			Fraxinus penn.			Quercus alba		
Acer rubrum			Fraxinus lance			Quercus ellips		
Acer saccharum			Juglans cinere			Quercus macroc.		
Acer spicatum			Ostrya virgin.			Quercus rubra		
Amelanchier sp.			Pinus Banksian			Quercus sp.		
Betula lutea			Pinus resinosa			Sorbus decora		
Betula papyrifera			Pinus Strobus 160, 340			Ilia amer.		
Carpinus carol.			Populus grand.			Tsuga canad.		
Carya cordif.			Populus trem.			Ulmus amer.		
Carya ovata			Prunus pensyl.			Ulmus fulva		
Crataegus sp.			Prunus serotin					
Fraxinus amer.			Prunus virgin.					

Distance: 39

Shrubs & Herbs

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Cornus canadensis	Oxalis violacea	Vaccinium angustif.
Cornus femina	Panicum implicatum	Vaccinium canadense
Cornus stolonifera	Parthenocissus vitacea	Vicia americana
Corylus americana	Pedicularis lanc.	Vicia villosa
Cyrtopodium acaule	Phlox pilosa	Viola canadensis
Desmodium acuminatum	Phryma leptostachya	Viola cucullata
Desmodium canadense	Physalis virginiana	Viola pedata
Diervilla Lonicera	Poa compressa	var. lineariloba
Dryopteris spin.	Polygala polygama	Viola sagittata
Eragrostis repens	Polygonatum biflorum	Vitis aestivalis
Eragrostis tenuis		Zanthoxylum amer.

var. angustata
Carex
Lycop. comp

4

Tree	BA	S	Tree	BA	S	Tree	BA	S
Acer negundo			Fraxinus penn.			Quercus alba		
Acer rubrum			Fraxinus lance			Quercus ellips		
Acer saccharum			Juglans cinere			Quercus macroc.		
Acer spicatum			Ostrya virgin.			Quercus rubra		
Amelanchier sp.			Pinus Banksian			Quercus sp.		
Betula lutea			Pinus resinosa	210		Sorbus decora		
Betula papyrifera	12	1	Pinus Strobus	210		Tilia amer.		
Carpinus carol.			Populus grand.	210		Tsuga canad.		
Carya cordif.			Populus trem.			Ulmus amer.		
Carya ovata			Prunus pensyl.			Ulmus fulva		
Crataegus sp.			Prunus serotin					
Fraxinus amer.			Prunus virgin.					

Distance: 24.5

Shrubs & Herbs

Achillea millefolium	Euphorbia corol.	Polygonella artic.
Agrimonia gryposepala	Fragaria spp.	Polypodium virg.
Agropyron trachycaulon	Galium boreale	Potentilla simplex
var. glaucum	Galium triflorum	Prenanthes alba
Alnus rugosa	Gaultheria procum.	Pteridium aquilinum
Amorpha canescens	Gaylussacia baccata	var. latiusculum
Amphicarpa bracteata	Geranium maculatum	Pyrola elliptica
Andropogon Gerardi	Geum canadense	Pyrola rotundifolia
Andropogon scoparius	Gnaphalium obtusif.	Pyrola secunda
Anemone virginiana	var. micradenium	Ranunculus fasc.
Antennaria plantag.	Goodyera pubescens	Ranunculus rhomboid.
Apocynum androsaem.	Helianthemum can.	Rhus glabra
Aquilegia canadensis	Helianthus occident.	Rhus radicans
Arabis lyrata	Heliopsis scabra	Rhus typhina
Aralia nudicaulis	Hepatica americana	Ribes americanum
Arctostaphylos Uva	Heuchera Richardsonii	Rosa spp.
Aronia melanocarpa	Hieracium canadense	Rubus-blackberry
Artemisia caudata	Hieracium scabrum	Rubus-dewberry
Aster azureus	Houstonia longifolia	Rubus-raspberry
Aster lateriflorus	Hypoxis hirsuta	Rudbeckia hirta
var. pendulus	Hystrix patula	Salix discolor
Aster laevis	Juncus Greenii	var. latifolia
Aster macrophyllus	Koeleria crisata	Sambucus canadensis
Aster ptarmicoides	Krigia biflora	Sanicula gregaria
Aster sagittifolius	Lactuca canadensis	Sisyrinchium camp.
Athyrium angustatum	Lathyrus ochroleucus	Smilacina racemosa
Aureolaris pedic.	Lathyrus venosus	Smilacina stellata
Bromus ciliatus	Lithospermum canes.	Smilax ecirrhata
var. intonsus	Lithospermum croceum	Smilax herbacea
Calamagrostis	Lupinus perennis	Smilax hispida
Carex Crawfordii	Lycopodium complan.	Solidago canadensis
Carex pennsylvanica	Lycopodium obscurum	var. gilvocan.
Carex siccata	Lysimachia quadrif.	Solidago juncea
Ceanothus ovatus	Maianthemum can.	Solidago nemoralis
Celastrus scandens	Mitchella repens	Solidago speciosa
Chimaphila umbellata	Monarda fistulosa	var. angustata
Clematis virginiana	Myrica asplenifolia	Tephrosia virginiana
Comandra umbellata	Onoclea sensibilis	Tradescantia ohien.
Convolvulus spitham.	Osmorhiza Claytoni	Trientalis borealis
Coreopsis palmata	Osmunda Claytoniana	Uvularia grandiflora
Cornus alternifolia	Osmunda regalis	Uvularia sessilif.
Cornus canadensis	Oxalis violacea	Vaccinium angustif.
Cornus femina	Panicum implicatum	Vaccinium canadense
Cornus stolonifera	Parthenocissus vitacea	Vicia americana
Corylus americana	Pedicularis lanc.	Vicia villosa
Cypripedium acaule	Phlox pilosa	Viola canadensis
Desmodium acuminatum	Phryma leptostachya	Viola cucullata
Desmodium canadense	Physalis virginiana	Viola pedata
Diervilla Lonicera	Poa compressa	var. lineariloba
Dryopteris spin.	Polygala polygama	Viola sagittata
Eriogonum repens	Polygonatum biflorum	Vitis cestivalis
Eriogonum remotus		Zanthoxylum amer.

Scrophularia

Tree	BA	S	Tree	BA	S	Tree	BA	S
Acer negundo			Fraxinus penn.			Quercus alba		
Acer rubrum			Fraxinus lance			Quercus ellips		
Acer saccharum			Juglans cinere			Quercus macroc.		
Acer spicatum			Ostrya virgin.			Quercus rubra		
Amelanchier sp.			Pinus Banksian			Quercus sp.		
Betula lutea			Pinus resinosa	162-		Sorbus decora		
Betula papyrifera			Pinus Strobus	325-3		Tilia amer.		
Carpinus carol.			Populus grand.			Tsuga canad.		
Carya cordif.			Populus trem.			Ulmus amer.		
Carya ovata			Prunus pensyl.			Ulmus fulva		
Crataegus sp.			Prunus scrota					
Fraxinus amer.			Prunus virgin.					

Distance: 26

Shrubs & Herbs

Achillea millefolium	Euphorbia corol.	Polygonella artic.
Agrimonia gryposepala	Fragaria spp.	Polypodium virg.
Agropyron trachycaulon	Galium boreale	Potentilla simplex
var. glaucum	Galium triflorum	Prenanthes alba
Alnus rugosa	Gaultheria procum.	Pteridium aquilinum
Amygdala canescens	Gaylussacia baccata	var. latiusculum
Amphicarpa bracteata	Geranium maculatum	Pyrola elliptica
Andropogon Gerardi	Geum canadense	Pyrola rotundifolia
Andropogon scoparius	Gnaphalium obtusif.	Pyrola secunda
Anemone virginiana	var. micradenium	Ranunculus fasc.
Antennaria plantag.	Goodyera pubescens	Ranunculus rhomboid.
Apocynum androsaem.	Helianthemum can.	Rhus glabra
Aquilegia canadensis	Helianthus occident.	Rhus radicans
Arabis lyrata	Heliopsis scabra	Rhus typhina
Aralia nudicaulis	Hepatica americana	Ribes americanum
Arctostaphylos Uva	Heuchera Richardsonii	Rosa spp.
Aronia melanocarpa	Hieracium canadense	Rubus-blackberry
Artemisia caudata	Hieracium scabrum	Rubus-dewberry
Aster azureus	Houstonia longifolia	Rubus-raspberry
Aster lateriflorus	Hypoxis hirsuta	Rudbeckia hirta
var. pendulus	Hystrix patula	Salix discolor
Aster laevis	Juncus Greenii	var. latifolia
Aster microphyllus	Koeleria crisata	Sambucus canadensis
Aster ptarmicoides	Krigia biflora	Sanicula gregaria
Aster sagittifolius	Lactuca canadensis	Sisyrinchium camp.
Athyrium angustatum	Lathyrus ochroleucus	Smilacina racemosa
Aureolaris pedic.	Lathyrus venosus	Smilacina stellata
Bromus ciliatus	Lithospermum canes.	Smilax ecirrhata
var. intonsus	Lithospermum croceum	Smilax herbacea
Calamagrostis	Lupinus perennis	Smilax hispida
Carex Crawfordii	Lycopodium complan.	Solidago canadensis
Carex pennsylvanica	Lycopodium obscurum	var. gilvocan.
Carex siccata	Lysimachia quadrif.	Solidago juncea
Ceanothus ovatus	Maianthemum can.	Solidago nemoralis
Celastrus scandens	Mitchella repens	Solidago speciosa
Chimaphila umbellata	Monarda fistulosa	var. angustata
Clematis virginiana	Myrica asplenifolia	Tephrosia virginiana
Comandra umbellata	Onoclea sensibilis	Tradescantia ohio.
Convolvulus spitham.	Osmorhiza Claytoni	Trientalis borealis
Coreopsis palmata	Osmunda Claytoniana	Uvularia grandiflora
Cornus alternifolia	Osmunda regalis	Uvularia sessilif.
Cornus canadensis	Oxalis violacea	Vaccinium angustif.
Cornus femina	Panicum implicatum	Vaccinium canadense
Cornus stolonifera	Parthenocissus vitacea	Vicia americana
Corylus americana	Pedicularis lanc.	Vicia villosa
Cypripedium acaule	Phlox pilosa	Viola canadensis
Desmodium acuminatum	Phryma leptostachya	Viola cucullata
Desmodium canadense	Physalis virginiana	Viola pedata
Diervilla Lonicera	Poa compressa	var. lineariloba
Dryopteris spin.	Polygala polygama	Viola sagittata
Erigeron repens	Polygonatum biflorum	Vitisestivalis
Erigeron strigosus		Zanthoxylum amer.

Carex sp

Lycop camp

Tree	BA	S	Tree	BA	S	Tree	BA	S
Acer negundo			Fraxinus penn.			Quercus alba		
Acer rubrum			Fraxinus lance			Quercus ellips		
Acer saccharum			Juglans cinere			Quercus macroc.		
Acer spicatum			Ostrya virgin.			Quercus rubra		
Amelanchier sp.			Pinus Banksian			Quercus sp.		
Betula lutea			Pinus resinosa	185		Sorbus decora		
Betula papyrifera - 14			Pinus Strobus	4		Tilia amer.		
Carpinus carol.			Populus grand.	3		Tsuga canad.		
Carya cordif.			Populus trem.			Ulmus amer.		
Carya ovata			Prunus pensyl.			Ulmus fulva		
Crataegus sp.			Prunus serotin					
Fraxinus amer.			Prunus virgin.					

Distance: 39

Shrubs & Herbs

Achillea millefolium	Euphorbia corol.	Polygonella artic.
Agrimonia gryposepala	Fragaria spp.	Polypodium virg.
Agropyron trachycaulon	Galium boreale	Potentilla simplex
var. glaucum	Galium triflorum	Prenanthes alba
Alnus rugosa	Gaultheria procum.	Pteridium aquilinum
Amorpha canescens	Gaylussacia baccata	var. latiusculum
Amphicarpa bracteata	Geranium maculatum	Pyrola elliptica
Andropogon Gerardi	Geum canadense	Pyrola rotundifolia
Andropogon scoparius	Gnaphalium obtusif.	Pyrola secunda
Anemone virginiana	var. micradenium	Ranunculus fasc.
Antennaria plantag.	Goodyera pubescens	Ranunculus rhomboid.
Apocynum androsaem.	Helianthemum can.	Rhus glabra
Aquilegia canadensis	Helianthus occident.	Rhus radicans
Arabis lyrata	Heliopsis scabra	Rhus typhina
Aralia nudicaulis	Hepatica americana	Ribes americanum
Arctostaphylos Uva	Heuchera Richardsonii	Rosa spp.
Aronia melanocarpa	Hieracium canadense	Rubus-blackberry
Artemisia caudata	Hieracium scabrum	Rubus-dewberry
Aster azureus	Houstonia longifolia	Rubus-raspberry
Aster lateriflorus	Hypoxis hirsuta	Rudbeckia hirta
var. pendulus	Hystrix patula	Salix discolor
Aster laevis	Juncus Greenii	var. latifolia
Aster macrophyllus	Koeleria crisata	Sambucus canadensis
Aster ptarmicoides	Krigia biflora	Sanicula gregaria
Aster sagittifolius	Lactuca canadensis	Sisyrinchium camp.
Athyrium angustatum	Lathyrus ochroleucus	Smilacina racemosa
Aureolaris pedic.	Lathyrus venosus	Smilacina stellata
Bromus ciliatus	Lithospermum canes.	Smilax ecirrhata
var. intonsus	Lithospermum croceum	Smilax herbacea
Calamagrostis	Lupinus perennis	Smilax hispida
Carex Crawfordii	Lycopodium complan.	Solidago canadensis
Carex pennsylvanica	Lycopodium obscurum	var. gilvocan.
Carex siccata	Lysimachia quadrif.	Solidago juncea
Ceanothus ovatus	Maianthemum can.	Solidago nemoralis
Celastrus scandens	Mitchella repens	Solidago speciosa
Chimaphila umbellata	Monarda fistulosa	var. angustata
Clematis virginiana	Myrica asplenifolia	Tephrosia virginiana
Comandra umbellata	Onoclea sensibilis	Tradescantia ohien.
Convolvulus spitham.	Osmorhiza Claytoni	Trientalis borealis
Coreopsis palmata	Osmunda Claytoniana	Uvularia grandiflora
Cornus alternifolia	Osmunda regalis	Uvularia sessilif.
Cornus canadensis	Oxalis violacea	Vaccinium angustif.
Cornus femina	Panicum implicatum	Vaccinium canadense
Cornus stolonifera	Parthenocissus vitacea	Vicia americana
Corylus americana	Pedicularis lanc.	Vicia villosa
Cypripedium acaule	Phlox pilosa	Viola canadensis
Desmodium acuminatum	Phryma leptostachya	Viola cucullata
Desmodium canadense	Physalis virginiana	Viola pedata
Diervilla lonicera	Poa compressa	var. lineariloba
Dryopteris spin.	Polygala polygama	Viola sagittata
Eriogonum repens	Polygonatum biflorum	Vitis coarctata
Eriogonum repens		Zanthoxylum amer.

Corylus americana
Corylus americana

Tree	BA	S	Tree	BA	S	Tree	BA	S
Acer negundo			Fraxinus penn.			Quercus alba		
Acer rubrum			Fraxinus lance			Quercus ellips		
Acer saccharum			Juglans cinere			Quercus macroc.		
Acer spicatum			Ostrya virgin.			Quercus rubra		
Amelanchier sp.			Pinus Banksian			Quercus sp.		
Betula lutea			Pinus resinosa 47			Sorbus decora		
Betula papyrifera			Pinus Strobus 520			Tilia amer.		
Carpinus carol.			Populus grand.			Tsuga canad.		
Carya cordif.			Populus trem.			Ulmus amer.		
Carya ovata			Prunus pensyl.			Ulmus fulva		
Crataegus sp.			Prunus serotin					
Fraxinus amer.			Prunus virgin.					

Distance: 20

Shrubs & Herbs

Achillea millefolium	Euphorbia corol.	Polygonella artic.
Agrimonia grynosepala	Fragaria spp.	Polypodium virg.
Agropyron trachycaulon	Galium boreale	Potentilla simplex
var. glaucum	Galium triflorum	Prenanthes alba
Alnus rugosa	Gaultheria procum.	Pteridium aquilinum
Amorpha canescens	Gaylussacia baccata	var. latiusculum
Amphicarpa bracteata	Geranium maculatum	Pyrola elliptica
Andropogon Gerardi	Geum canadense	Pyrola rotundifolia
Andropogon scoparius	Gnaphalium obtusif.	Pyrola secunda
Anemone virginiana	var. micradenium	Ranunculus fasc.
Antennaria plantag.	Goodyera pubescens	Ranunculus rhomboid.
Apocynum androsaem.	Helianthemum can.	Rhus glabra
Aquilegia canadensis	Helianthus occident.	Rhus radicans
Arabis lyrata	Heliopsis scabra	Rhus typhina
Aralia nudicaulis	Hepatica americana	Ribes americanum
Arctostaphylos Uva	Heuchera Richardsonii	Rosa spp.
Aronia melanocarpa	Hieracium canadense	Rubus-blackberry
Artemisia caudata	Hieracium scabrum	Rubus-dewberry
Aster azureus	Houstonia longifolia	Rubus-raspberry
Aster lateriflorus	Hypoxis hirsuta	Rudbeckia hirta
var. pendulus	Hystrix patula	Salix discolor
Aster laevis	Juncus Greenii	var. latifolia
Aster macrophyllus	Koeleria crisata	Sambucus canadensis
Aster ptarmicoides	Krigia biflora	Sanicula gregaria
Aster sagittifolius	Lactuca canadensis	Sisyrinchium camp.
Athyrium angustatum	Lathyrus ochroleucus	Smilacina racemosa
Aureolaris pedic.	Lathyrus venosus	Smilacina stellata
Bromus ciliatus	Lithospermum canes.	Smilax ecirrhata
var. intonsus	Lithospermum croceum	Smilax herbacea
Calamagrostis	Lupinus perennis	Smilax hispida
Carex Crawfordii	Lycopodium complan.	Solidago canadensis
Carex pennsylvanica	Lycopodium obscurum	var. gilvocan.
Carex siccata	Lysimachia quadrif.	Solidago juncea
Ceanothus ovatus	Maianthemum can.	Solidago nemoralis
Celastrus scandens	Mitchella repens	Solidago speciosa
Chimaphila umbellata	Monarda fistulosa	var. angustata
Clematis virginiana	Myrica asplenifolia	Tephrosia virginiana
Comandra umbellata	Onoclea sensibilis	Tradescantia ohien.
Convolvulus spitham.	Osmorhiza Claytoni	Trientalis borealis
Coreopsis palmata	Osmunda Claytoniana	Uvularia grandiflora
Cornus alternifolia	Osmunda regalis	Uvularia sessilif.
Cornus canadensis	Oxalis violacea	Vaccinium angustif.
Cornus femina	Panicum implicatum	Vaccinium canadense
Cornus stolonifera	Parthenocissus vitacea	Vicia americana
Corylus americana	Pedicularis lanc.	Vicia villosa
Cypripedium acaule	Phlox pilosa	Viola canadensis
Desmodium acuminatum	Phryma leptostachya	Viola cucullata
Desmodium canadense	Physalis virginiana	Viola pedata
Diervilla lonicera	Poa compressa	var. lineariloba
Dryopteris spin.	Polygala polygama	Viola sagittata
Eriogonum repens	Polygonatum biflorum	Vitis cestivalis
Eriogonum ramosus		Zanthoxylum amer.

Carex

Tree	BA	S	Tree	BA	S	Tree	BA	S
Acer negundo			Fraxinus penn.			Quercus alba		
Acer rubrum			Fraxinus lance			Quercus ellips		
Acer saccharum			Juglans cinere			Quercus macroc.		
Acer spicatum			Ostrya virgin.			Quercus rubra		
Amelanchier sp.			Pinus Banksian			Quercus sp.		
Betula lutea			Pinus resinosa			Sorbus decora		
Betula papyrifera			Pinus Strobus			Tilia amer.		
Carpinus carol.			Populus grand.			Tsuga canad.		
Carya cordif.			Populus trem.			Ulmus amer.		
Carya ovata			Prunus pensyl.			Ulmus fulva		
Crataegus sp.			Prunus serotin					
Fraxinus amer.			Prunus virgin.					

Distance: 8.5

Shrubs & Herbs		
Achillea millefolium	Euphorbia corol.	Polygonella artic.
Agrimonia gryposepala	Fragaria spp.	Polypodium virg.
Agropyron trachycaulon	Galium boreale	Potentilla simplex
var. glaucum	Galium triflorum	Prenanthes alba
Alnus rugosa	Gaultheria procum.	Pteridium aquilinum
Amorpha canescens	Gaylussacia baccata	var. latiusculum
Amphicarpa bracteata	Geranium maculatum	Pyrola elliptica
Andropogon Gerardi	Geum canadense	Pyrola rotundifolia
Andropogon scoparius	Gnaphalium obtusif.	Pyrola secunda
Anemone virginiana	var. micradenium	Ranunculus fasc.
Antennaria plantag.	Goodyera pubescens	Ranunculus rhomboid.
Apocynum androsaem.	Helianthemum can.	Rhus glabra
Aquilegia canadensis	Helianthus occident.	Rhus radicans
Arabis lyrata	Heliopsis scabra	Rhus typhina
Aralia nudicaulis	Hepatica americana	Ribes americanum
Arctostaphylos Uva	Heuchera Richardsonii	Rosa spp.
Aronia melanocarpa	Hieracium canadense	Rubus-blackberry
Artemisia caudata	Hieracium scabrum	Rubus-dewberry
Aster azureus	Houstonia longifolia	Rubus-raspberry
Aster lateriflorus	Hypoxis hirsuta	Rudbeckia hirta
var. pendulus	Hystrix patula	Salix discolor
Aster laevis	Juncus Greenii	var. latifolia
Aster macrophyllus	Koeleria crisata	Sambucus canadensis
Aster ptarmicoides	Krigia biflora	Sanicula gregaria
Aster sagittifolius	Lactuca canadensis	Sisyrinchium camp.
Athyrium angustatum	Lathyrus ochroleucus	Smilacina racemosa
Aureolaris pedic.	Lathyrus venosus	Smilacina stellata
Bromus ciliatus	Lithospermum canes.	Smilax ecirrhata
var. intonsus	Lithospermum croceum	Smilax herbacea
Calamagrostis	Lupinus perennis	Smilax hispida
Carex Crawfordii	Lycopodium complan.	Solidago canadensis
Carex pennsylvanica	Lycopodium obscurum	var. gilvocan.
Carex siccata	Lysimachia quadrif.	Solidago juncea
Ceanothus ovatus	Maianthemum can.	Solidago nemoralis
Celastrus scandens	Mitchella repens	Solidago speciosa
Chimaphila umbellata	Monarda fistulosa	var. angustata
Clematis virginiana	Myrica asplenifolia	Tephrosia virginiana
Comandra umbellata	Onoclea sensibilis	Tradescantia ohien.
Convolvulus spitham.	Osmorhiza Claytoni	Trientalis borealis
Coreopsis palmata	Osmunda Claytoniana	Uvularia grandiflora
Cornus alternifolia	Osmunda regalis	Uvularia sessilif.
Cornus canadensis	Oxalis violacea	Vaccinium angustif.
Cornus femina	Panicum implicatum	Vaccinium canadense
Cornus stolonifera	Parthenocissus vitacea	Vicia americana
Corylus americana	Pedicularis lanc.	Vicia villosa
Cypripedium acaule	Phlox pilosa	Viola canadensis
Desmodium acuminatum	Phryma leptostachya	Viola cucullata
Desmodium canadense	Physalis virginiana	Viola pedata
Diervilla Lonicera	Poa compressa	var. lineariloba
Dryopteris spin.	Polygala polygama	Viola sagittata
Eriogonum repens	Polygonatum biflorum	Vitis rotundifolia
Eriogonum venosus		Zanthoxylum amer.

Antennaria, Carex

Tree	BA	S	Tree	BA	S	Tree	BA	S
Acer negundo			Fraxinus penn.			Quercus alba		
Acer rubrum			Fraxinus lance			Quercus ellips		
Acer saccharum			Juglans cinere			Quercus macroc.		
Acer spicatum			Ostrya virgin.			Quercus rubra		
Amelanchier sp.			Pinus Banksian			Quercus sp.		
Betula lutea			Pinus resinosa	198		Sorbus decora		
Betula papyrifera			Pinus Strobus	253		Tilia amer.		
Carpinus carol.			Populus grand.			Tsuga canad.		
Carya cordif.			Populus trem.			Ulmus amer.		
Carya ovata			Prunus pensyl.			Ulmus fulva		
Crataegus sp.			Prunus serotin					
Fraxinus amer.			Prunus virgin.					

Distance: 17.5

Shrubs & Herbs

Achillea millefolium	Euphorbia corol.	Polygonella artic.
Agrimonia gryposepala	Fragaria spp.	Polypodium virg.
Agropyron trachycaulon	Galium boreale	Potentilla simplex
var. glaucum	Galium triflorum	Prenanthes alba
Alnus rugosa	Gaultheria procum.	Pteridium aquilinum
Amorpha canescens	Gaylussacia baccata	var. latiusculum
Amphicarpa bracteata	Geranium maculatum	Pyrola elliptica
Andropogon Gerardi	Geum canadense	Pyrola rotundifolia
Andropogon scoparius	Gnaphalium obtusif.	Pyrola secunda
Anemone virginiana	var. micradenium	Ranunculus fasc.
Antennaria plantag.	Goodyera pubescens	Ranunculus rhomboid.
Apocynum androsaem.	Helianthemum can.	Rhus glabra
Aquilegia canadensis	Helianthus occident.	Rhus radicans
Arabis lyrata	Heliopsis scabra	Rhus typhina
Aralia nudicaulis	Hepatica americana	Ribes americanum
Arctostaphylos Uva	Heuchera Richardsonii	Rosa spr.
Aronia melanocarpa	Hieracium canadense	Rubus-blackberry
Artemisia caudata	Hieracium scabrum	Rubus-dewberry
Aster azureus	Houstonia longifolia	Rubus-raspberry
Aster lateriflorus	Hypoxis hirsuta	Rudbeckia hirta
var. pendulus	Hystrix patula	Salix discolor
Aster laevis	Juncus Greenii	var. latifolia
Aster macrophyllus	Koeleria crisata	Sambucus canadensis
Aster ptarmicoides	Krigia biflora	Sanicula gregaria
Aster sagittifolius	Lactuca canadensis	Sisyrinchium camp.
Athyrium angustatum	Lathyrus ochroleucus	Smilacina racemosa
Aureolaris pedic.	Lathyrus venosus	Smilacina stellata
Bromus ciliatus	Lithospermum canes.	Smilax ecirrhata
var. intonsus	Lithospermum croceum	Smilax herbacea
Calamagrostis	Lupinus perennis	Smilax hispida
Carex Crawfordii	Lycopodium complan.	Solidago canadensis
Carex penxylvanica	Lycopodium obscurum	var. gilvocan.
Carex siccata	Lysimachia quadrif.	Solidago juncea
Ceanothus ovatus	Maianthemum can.	Solidago nemoralis
Celastrus scandens	Mitchella repens	Solidago speciosa
Chimaphila umbellata	Monarda fistulosa	var. angustata
Clematis virginiana	Myrica asplenifolia	Tephrosia virginiana
Comandra umbellata	Onoclea sensibilis	Tradescantia ohien.
Convolvulus spitham.	Osmorhiza Claytoni	Trientalis borealis
Coreopsis palmata	Osmunda Claytoniana	Uvularia grandiflora
Cornus alternifolia	Osmunda regalis	Uvularia sessilif.
Cornus canadensis	Oxalis violacea	Vaccinium angustif.
Cornus femina	Panicum implicatum	Vaccinium canadense
Cornus stolonifera	Parthenocissus vitacea	Vicia americana
Corylus americana	Pedicularis lanc.	Vicia villosa
Cypripedium acaule	Phlox pilosa	Viola canadensis
Desmodium acuminatum	Phryma leptostachya	Viola cucullata
Desmodium canadense	Physalis virginiana	Viola pedata
Diervilla lonicera	Poa compressa	var. lineariloba
Dryopteris spin.	Polygala polygama	Viola sagittata
Eriogonum repens	Polygonatum biflorum	Vitis coarctata
Eriogonum repens		Zanthoxylum amer.

anemone repens

Polygala pennsylvanica

(10)

Tree	: BA	: S	Tree	: BA	: S	Tree	: BA	: S
Acer negundo			Fraxinus penn.			Quercus alba		
Acer rubrum			Fraxinus lance			Quercus ellips	14	
Acer saccharum			Juglans cinere			Quercus macroc.		
Acer spicatum			Ostrya virgin.			Quercus rubra		
Amelanchier sp.			Pinus Banksian			Quercus sp.		
Betula lutea			Pinus resinosa			Sorbus decora		
Betula papyrifera			Pinus Strobus	420		Tilia amer.		
Carpinus carol.			Populus grand.			Tsuga canad.		
Carya cordif.			Populus trem.			Ulmus amer.		
Carya ovata			Prunus pensyl.			Ulmus fulva		
Crataegus sp.			Prunus serotin					
Fraxinus amer.			Prunus virgin.					

Distance: 21

Shrubs & Herbs

Achillea millefolium	Euphorbia corol.	Polygonella artic.
Agrimonia gryposepala	Fragaria spp.	Polypodium virg.
Agropyron trachycaulon	Galium boreale	Potentilla simplex
var. glaucum	Galium triflorum	Prenanthes alba
Alnus rugosa	Gaultheria procum.	Pteridium aquilinum
Amorpha canescens	Gaylussacia baccata	var. latiusculum
Amphicarpa bracteata	Geranium maculatum	Pyrola elliptica
Andropogon Gerardi	Geum canadense	Pyrola rotundifolia
Andropogon scoparius	Gnaphalium obtusif.	Pyrola secunda
Anemone virginiana	var. micradenium	Ranunculus fasc.
Antennaria plantag.	Goodyera pubescens	Ranunculus rhomboid.
Apocynum androsaem.	Helianthemum can.	Rhus glabra
Aquilegia canadensis	Helianthus occident.	Rhus radicans
Arabis lyrata	Heliopsis scabra	Rhus typhina
Aralia nudicaulis	Hepatica americana	Ribes americanum
Arctostaphylos Uva	Heuchera Richardsonii	Rosa spp.
Aronia melanocarpa	Hieracium canadense	Rubus-blackberry
Artemisia caudata	Hieracium scabrum	Rubus-dewberry
Aster azureus	Houstonia longifolia	Rubus-raspberry
Aster lateriflorus	Hypoxis hirsuta	Rudbeckia hirta
var. pendulus	Hystrix patula	Salix discolor
Aster laevis	Juncus Greenii	var. latifolia
Aster microphyllus	Koeleria crisata	Sambucus canadensis
Aster ptarmicoides	Krigia biflora	Sanicula gregaria
Aster sagittifolius	Lactuca canadensis	Sisyrinchium camp.
Athyrium angustatum	Lathyrus ochroleucus	Smilacina racemosa
Aureolaris pedic.	Lathyrus venosus	Smilacina stellata
Bromus ciliatus	Lithospermum canes.	Smilax ecirrhata
var. intonsus	Lithospermum croceum	Smilax herbacea
Calamagrostis	Lupinus perennis	Smilax hispida
Carex Crawfordii	Lycopodium complan.	Solidago canadensis
Carex pennsylvanica	Lycopodium obscurum	var. gilvocan.
Carex siccata	Lysimachia quadrif.	Solidago juncea
Ceanothus ovatus	Maianthemum can.	Solidago nemoralis
Celastrus scandens	Mitchella repens	Solidago speciosa
Chimaphila umbellata	Monarda fistulosa	var. angustata
Clematis virginiana	Myrica asplenifolia	Tephrosia virginiana
Comandra umbellata	Onoclea sensibilis	Tradescantia ohio.
Convolvulus spitham.	Osmorhiza Claytoni	Trientalis borealis
Coreopsis palmata	Osmunda Claytoniana	Uvularia grandiflora
Cornus alternifolia	Osmunda regalis	Uvularia sessilif.
Cornus canadensis	Oxalis violacea	Vaccinium angustif.
Cornus femina	Panicum implicatum	Vaccinium canadense
Cornus stolonifera	Parthenocissus vitacea	Vicia americana
Corylus americana	Pedicularis lanc.	Vicia villosa
Cypropedium acaule	Phlox pilosa	Viola canadensis
Desmodium acuminatum	Phryma leptostachya	Viola cucullata
Desmodium canadense	Physalis virginiana	Viola pedata
Diervilla lonicera	Poa compressa	var. lineariloba
Dryopteris sp.	Polygala polygama	Viola sagittata
Eriogonum repens	Polygonatum biflorum	Vitis coarctata
Eriogonum repens		Zanthoxylum amer.

Tree	BA	S	Tree	BA	S	Tree	BA	S
Acer negundo			Fraxinus penn.			Quercus alba		
Acer rubrum			Fraxinus lance			Quercus ellips		
Acer saccharum			Juglans cinere			Quercus macroc.		
Acer spicatum			Ostrya virgin.			Quercus rubra		
Amelanchier sp.			Pinus Banksian			Quercus sp.		
Betula lutea			Pinus resinosa			Sorbus decora		
Betula papyrifera			Pinus Strobus 390-625			Tilia amer.		
Carpinus carol.			Populus grand.			Tsuga canad.		
Carya cordif.			Populus trem.			Ulmus amer.		
Carya ovata			Prunus pensyl.			Ulmus fulva		
Crataegus sp.			Prunus serotin					
Fraxinus amer.			Prunus virgin.					

Distance: 21

Shrubs & Herbs

Achillea millefolium	Euphorbia corol.	Polygonella artic.
Agrimonia gryposepala	Fragaria spp.	Polypodium virg.
Agropyron trachycaulon	Galium boreale	Potentilla simplex
var. glaucum	Galium triflorum	Prenanthes alba
Alnus rugosa	Gaultheria procum.	Pteridium aquilinum
Amorpha canescens	Gaylussacia baccata	var. latiusculum
Amphicarpa bracteata	Geranium maculatum	Pyrola elliptica
Andropogon Gerardi	Geum canadense	Pyrola rotundifolia
Andropogon scoparius	Gnaphalium obtusif.	Pyrola secunda
Anemone virginiana	var. micradenium	Ranunculus fasc.
Antennaria plantag.	Goodyera pubescens	Ranunculus rhomboid.
Apocynum androsaem.	Helianthemum can.	Rhus glabra
Aquilegia canadensis	Helianthus occident.	Rhus radicans
Arabis lyrata	Heliopsis scabra	Rhus typhina
Aralia nudicaulis	Hepatica americana	Ribes americanum
Arctostaphylos Uva	Heuchera Richardsonii	Rosa spp.
Aronia melanocarpa	Hieracium canadense	Rubus-blackberry
Artemisia caudata	Hieracium scabrum	Rubus-dewberry
Aster azureus	Houstonia longifolia	Rubus-raspberry
Aster lateriflorus	Hypoxis hirsuta	Rudbeckia hirta
var. pendulus	Hystrix patula	Salix discolor
Aster laevis	Juncus Greenii	var. latifolia
Aster microphyllus	Koeleria crisata	Sambucus canadensis
Aster ptarmicoides	Krigia biflora	Sanicula gregaria
Aster sagittifolius	Lactuca canadensis	Sisyrinchium camp.
Athyrium angustatum	Lathyrus ochroleucus	Smilacina racemosa
Aureolaris pedic.	Lathyrus venosus	Smilacina stellata
Bromus ciliatus	Lithospermum canes.	Smilax ecirrhata
var. intonsus	Lithospermum croceum	Smilax herbacea
Calamagrostis	Lupinus perennis	Smilax hispida
Carex Crawfordii	Lycopodium complan.	Solidago canadensis
Carex pennsylvanica	Lycopodium obscurum	var. gilvocan.
Carex siccata	Lysimachia quadrif.	Solidago juncea
Ceanothus ovatus	Maianthemum can.	Solidago nemoralis
Celastrus scandens	Mitchella repens	Solidago speciosa
Chimaphila umbellata	Monarda fistulosa	var. angustata
Clematis virginiana	Myrica asplenifolia	Tephrosia virginiana
Comandra umbellata	Onoclea sensibilis	Tradescantia ohien.
Convolvulus spitham.	Osmorhiza Claytoni	Trientalis borealis
Coreopsis palmata	Osmunda Claytoniana	Uvularia grandiflora
Cornus alternifolia	Osmunda regalis	Uvularia sessilif.
Cornus canadensis	Oxalis violacea	Vaccinium angustif.
Cornus femina	Panicum implicatum	Vaccinium canadense
Cornus stolonifera	Parthenocissus vitacea	Vicia americana
Corylus americana	Pedicularis lanc.	Vicia villosa
Cypripedium acaule	Phlox pilosa	Viola canadensis
Desmodium acuminatum	Phryma leptostachya	Viola cucullata
Desmodium canadense	Physalis virginiana	Viola pedata
Diervilla Lonicera	Poa compressa	var. lineariloba
Dryopteris spin.	Polygala polygama	Viola sagittata
Eriogonum repens	Polygonatum biflorum	Vitis coarctata
Eriogonum repens		Zanthoxylum amer.

Polygala Ranc.

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Tree	BA	S	Tree	BA	S	Tree	BA	S
Acer negundo			Fraxinus penn.			Quercus alba		
Acer rubrum			Fraxinus lance			Quercus ellips		
Acer saccharum			Juglans cinere			Quercus macroc.		
Acer spicatum			Ostrya virgin.			Quercus rubra		
Amelanchier sp.			Pinus Banksian			Quercus sp.		
Betula lutea			Pinus resinosa			Sorbus decora		
Betula papyrifera			Pinus Strobus 160-240			Tilia amer.		
Campinus carol.			Populus grand.			Tsuga canad.		
Carya cordif.			Populus trem.			Ulmus amer.		
Carya ovata			Prunus pensyl.			Ulmus fulva		
Crataegus sp.			Prunus scrota					
Fraxinus amer.			Prunus virgin.					

Distance:

16 1/2 ft

Shrubs & Herbs			
Achillea millefolium	Euphorbia corol.	Polygonella artic.	
Agrimonia gryposepala	Fragaria spp	Polypodium virg.	
Agropyron trachycaulon	Galium boreale	Potentilla simplex	
var. glaucum	Galium triflorum	Prenanthes alba	
Alnus rugosa	Gaultheria procum.	Pteridium aquilinum	
Amorpha canescens	Gaylussacia baccata	var. latiusculum	
Amphicarpa bracteata	Geranium maculatum	Pyrola elliptica	
Andropogon Gerardi	Geum canadense	Pyrola rotundifolia	
Andropogon scoparius	Gnaphalium obtusif.	Pyrola secunda	
Anemone virginiana	var. micradenium	Ranunculus fasc.	
Antennaria plantag.	Goodyera pubescens	Ranunculus rhomboid.	
Apocynum androsaem.	Helianthemum can.	Rhus glabra	
Aquilegia canadensis	Helianthus occident.	Rhus radicans	
Arabis lyrata	Heliopsis scabra	Rhus typhina	
Aralia nudicaulis	Hepatica americana	Ribes americanum	
Arctostaphylos Uva	Heuchera Richardsonii	Rosa spp.	
Aronia melanocarpa	Hieracium canadense	Rubus-blackberry	
Artemisia caudata	Hieracium scabrum	Rubus-dewberry	
Aster azureus	Houstonia longifolia	Rubus-raspberry	
Aster lateriflorus	Hypoxis hirsuta	Rudbeckia hirta	
var. pendulus	Hystrix patula	Salix discolor	
Aster laevis	Juncus Greenii	var. latifolia	
Aster macrophyllus	Koeleria crisata	Sambucus canadensis	
Aster ptarmicoides	Krigia biflora	Sanicula gregaria	
Aster sagittifolius	Lactuca canadensis	Sisyrinchium camp.	
Athyrium angustatum	Lathyrus ochroleucus	Smilacina racemosa	
Aureolaris pedic.	Lathyrus venosus	Smilacina stellata	
Bromus ciliatus	Lithospermum canes.	Smilax ecirrhata	
var. intonsus	Lithospermum croceum	Smilax herbacea	
Calamagrostis	Lupinus perennis	Smilax hispida	
Carex Crawfordii	Lycopodium complan.	Solidago canadensis	
Carex pennsylvanica	Lycopodium obscurum	var. gilvocan.	
Carex siccata	Lysimachia quadrif.	Solidago juncea	
Ceanothus ovatus	Maianthemum can.	Solidago nemoralis	
Celastrus scandens	Mitchella repens	Solidago speciosa	
Chimaphila umbellata	Monarda fistulosa	var. angustata	
Clematis virginiana	Myrica asplenifolia	Tephrosia virginiana	
Comandra umbellata	Onoclea sensibilis	Tradescantia ohien.	
Convolvulus spitham.	Osmorhiza Claytoni	Trientalis borealis	
Coreopsis palmata	Osmunda Claytoniana	Uvularia grandiflora	
Cornus alternifolia	Osmunda regalis	Uvularia sessilif.	
Cornus canadensis	Oxalis violacea	Vaccinium angustif.	
Cornus femina	Panicum implicatum	Vaccinium canadense	
Cornus stolonifera	Parthenocissus vitacea	Vicia americana	
Corylus americana	Pedicularis lanc.	Vicia villosa	
Cypropedium acaule	Phlox pilosa	Viola canadensis	
Desmodium acuminatum	Phryma leptostachya	Viola cucullata	
Desmodium canadense	Physalis virginiana	Viola pedata	
Diervilla Lonicera	Poa compressa	var. lineariloba	
Dryopteris spin.	Polygala polygama	Viola sagittata	
Erigeron repens	Polygonatum biflorum	Vitis coarctata	
Erigeron ramosus		Zanthoxylum amer.	

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Tree	: BA	: S	Tree	: BA	: S	Tree	: BA	: S
Acer negundo			Fraxinus penn.			Quercus alba		
Acer rubrum			Fraxinus lance			Quercus ellips		
Acer saccharum			Juglans cinere			Quercus macroc.		
Acer spicatum			Ostrya virgin.			Quercus rubra		
Amelanchier sp.			Pinus Banksian			Quercus sp.		
Betula lutea			Pinus resinosa			Sorbus decora		
Betula papyrifera			Pinus Strobus 250-220			Tilia amer.		
Carpinus carol.			Populus grand.			Tsuga canad.		
Carya cordif.			Populus trem.			Ulmus amer.		
Carya ovata			Prunus pensyl.			Ulmus fulva		
Crataegus sp.			Prunus serotin					
Fraxinus amer.			Prunus virgin.					

Distance: 28 1/2

Shrubs & Herbs		
Achillea millefolium	Euphorbia corol.	Polygonella artic.
Agrimonia gryposepala	✓ Fragaria spp.	Polypodium virg.
Agropyron trachycaulon	Galium boreale	Potentilla simplex
var. glaucum	Galium triflorum	Prenanthes alba
Alnus rugosa	✓ Gaultheria procum.	✓ Pteridium aquilinum
Amygdala canescens	Gaylussacia baccata	var. latiusculum
Amphicarpa bracteata	Geranium maculatum	✓ Pyrola elliptica
Andropogon Gerardi	Geum canadense	Pyrola rotundifolia
Andropogon scoparius	Gnaphalium obtusif.	Pyrola secunda
Anemone virginiana	var. micradenium	Ranunculus fasc.
Antennaria plantag.	Goodyera pubescens	Ranunculus rhomboid.
Apocynum androsaem.	Helianthemum can.	Rhus glabra
✓ Aquilegia canadensis	Helianthus occident.	Rhus radicans
Arabis lyrata	Heliopsis scabra	Rhus typhina
Aralia nudicaulis	Hepatica americana	Ribes americanum
Arctostaphylos Uva	Heuchera Richardsonii	Rosa spp.
Aronia melanocarpa	Hieracium canadense	✓ Rubus-blackberry
Artemisia caudata	Hieracium scabrum	Rubus-dewberry
Aster azureus	Houstonia longifolia	Rubus-raspberry
Aster lateriflorus	Hypoxis hirsuta	Rudbeckia hirta
var. pendulus	Hystrix patula	Salix discolor
Aster laevis	Juncus Greenii	var. latifolia
✓ Aster macrophyllus	Koeleria crisata	Sambucus canadensis
Aster ptarmicoides	Krigia biflora	Sanicula gregaria
Aster sagittifolius	Lactuca canadensis	Sisyrinchium camp.
Athyrium angustatum	Lathyrus ochroleucus	Smilacina racemosa
Aureolaris pedic.	Lathyrus venosus	Smilacina stellata
Bromus ciliatus	Lithospermum canes.	Smilax ecirrhata
var. intonsus	Lithospermum croceum	Smilax herbacea
Calamagrostis	Lupinus perennis	Smilax hispida
Carex Crawfordii	Lycopodium complan.	Solidago canadensis
Carex pennsylvanica	Lycopodium obscurum	var. gilvocan.
Carex siccata	✓ Lysimachia quadrif.	Solidago juncea
Ceanothus ovatus	Maianthemum can.	Solidago nemoralis
Celastrus scandens	Mitchella repens	Solidago speciosa
Chimaphila umbellata	Monarda fistulosa	var. angustata
Clematis virginiana	Myrica asplenifolia	Tephrosia virginiana
Comandra umbellata	Onoclea sensibilis	Tradescantia ohio.
Convolvulus spitham.	Osmorhiza Claytoni	Trientalis borealis
Coreopsis palmata	Osmunda Claytoniana	Uvularia grandiflora
Cornus alternifolia	Osmunda regalis	Uvularia sessilif.
Cornus canadensis	Oxalis violacea	Vaccinium angustif.
Cornus femina	Panicum implicatum	Vaccinium canadense
Cornus stolonifera	Parthenocissus vitacea	Vicia americana
Corylus americana	Pedicularis lanc.	Vicia villosa
Cypripedium acaule	Phlox pilosa	Viola canadensis
Desmodium acuminatum	Phryma leptostachya	Viola cucullata
Desmodium canadense	Physalis virginiana	Viola pedata
Diervilla Lonicera	Poa compressa	var. lineariloba
Dryopteris spin.	Polygala polygama	Viola sagittata
Ericaceae repens	Polygonatum biflorum	Vitis rotundifolia
Erigeron annuus		Zanthoxylum amer.

Tree	BA	S	Tree	BA	S	Tree	BA	S
Acer negundo			Fraxinus penn.			Quercus alba		
Acer rubrum			Fraxinus lance			Quercus ellips		
Acer saccharum			Juglans cinere			Quercus macroc.		
Acer spicatum			Ostrya virgin.			Quercus rubra		
Amelanchier sp.			Pinus Banksian			Quercus sp.		
Betula lutea			Pinus resinosa	180		Sorbus decora		
Betula papyrifera			Pinus Strobus	180	2	Tilia amer.		
Carpinus carol.			Populus grand.			Tsuga canad.		
Carya cordif.			Populus trem.			Ulmus amer.		
Carya ovata			Prunus pensyl.			Ulmus fulva		
Crataegus sp.			Prunus serotin					
Fraxinus amer.			Prunus virgin.					

Distance: 21

Shrubs & Herbs			
Achillea millefolium	Euphorbia corol.	Polygonella artic.	
Agrimonia gryposepala	Fragaria spp.	Polypodium virg.	
Agropyron trachycaulon	Galium boreale	Potentilla simplex	
var. glaucum	Galium triflorum	Prenanthes alba	
Alnus rugosa	Gaultheria procum.	Pteridium aquilinum	
Amorpha canescens	Gaylussacia baccata	var. latiusculum	
Amphicarpa bracteata	Geranium maculatum	Pyrola elliptica	
Andropogon Gerardi	Geum canadense	Pyrola rotundifolia	
Andropogon scoparius	Gnaphalium obtusif.	Pyrola secunda	
Anemone virginiana	var. micradenium	Ranunculus fasc.	
Antennaria plantag.	Goodyera pubescens	Ranunculus rhomboid.	
Apocynum androsaem.	Helianthemum can.	Rhus glabra	
Aquilegia canadensis	Helianthus occident.	Rhus radicans	
Arabis lyrata	Heliopsis scabra	Rhus typhina	
Aralia nudicaulis	Hepatica americana	Ribes americanum	
Arctostaphylos Uva	Heuchera Richardsonii	Rosa spp.	
Aronia melanocarpa	Hieracium canadense	Rubus-blackberry	
Artemisia caudata	Hieracium scabrum	Rubus-dewberry	
Aster azureus	Houstonia longifolia	Rubus-raspberry	
Aster lateriflorus	Hypoxis hirsuta	Rudbeckia hirta	
var. pendulus	Hystrix patula	Salix discolor	
Aster laevis	Juncus Greenii	var. latifolia	
Aster macrophyllus	Koeleria crisata	Sambucus canadensis	
Aster ptarmicoides	Krigia biflora	Sanicula gregaria	
Aster sagittifolius	Lactuca canadensis	Sisyrinchium camp.	
Athyrium angustatum	Lathyrus ochroleucus	Smilacina racemosa	
Aureolaris pedic.	Lathyrus venosus	Smilacina stellata	
Bromus ciliatus	Lithospermum canes.	Smilax ecirrhata	
var. intonsus	Lithospermum croceum	Smilax herbacea	
Calamagrostis	Lupinus perennis	Smilax hispida	
Carex Crawfordii	Lycopodium complan.	Solidago canadensis	
Carex pennsylvanica	Lycopodium obscurum	var. gilvocan.	
Carex siccata	Lysimachia quadrif.	Solidago juncea	
Ceanothus ovatus	Malanthemum can.	Solidago nemoralis	
Celastrus scandens	Mitchella repens	Solidago speciosa	
Chimaphila umbellata	Monarda fistulosa	var. angustata	
Clematis virginiana	Myrica asplenifolia	Tephrosia virginiana	
Comandra umbellata	Onoclea sensibilis	Tradescantia ohien.	
Convolvulus spitham.	Osmorhiza Claytoni	Trientalis borealis	
Coreopsis palmata	Osmunda Claytoniana	Uvularia grandiflora	
Cornus alternifolia	Osmunda regalis	Uvularia sessilif.	
Cornus canadensis	Oxalis violacea	Vaccinium angustif.	
Cornus femina	Panicum implicatum	Vaccinium canadense	
Cornus stolonifera	Parthenocissus vitacea	Vicia americana	
Corylus americana	Pedicularis lanc.	Vicia villosa	
Cypropedium acaule	Phlox pilosa	Viola canadensis	
Desmodium acuminatum	Phryma leptostachya	Viola cucullata	
Desmodium canadense	Physalis virginiana	Viola pedata	
Diervilla lonicera	Poa compressa	var. lineariloba	
Dryopteris sp.	Polygala polygama	Viola sagittata	
Erigeron repens	Polygonatum biflorum	Vitis aestivalis	
Erigeron annuus		Zanthoxylum amer.	

Carex muricata

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Tree	BA	S	Tree	BA	S	Tree	BA	S
Acer negundo			Fraxinus penn.			Quercus alba		
Acer rubrum			Fraxinus lance			Quercus ellips		
Acer saccharum			Juglans cinere			Quercus macroc.		
Acer spicatum			Ostrya virgin.			Quercus rubra		
Amelanchier sp.			Pinus Banksian			Quercus sp.		
Betula lutea			Pinus resinosa			Sorbus decora		
Betula papyrifera			Pinus Strobus	250-80		Tilia amer.		
Carpinus carol.			Populus grand.			Tsuga canad.		
Carya cordif.			Populus trem.			Ulmus amer.		
Carya ovata			Prunus pensyl.			Ulmus fulva		
Crataegus sp.			Prunus serotin					
Fraxinus amer.			Prunus virgin.					

Distance: 7

Shrubs & Herbs

Achillea millefolium	Euphorbia corol.	Polygonella artic.
Agrimonia gryposepala	Fragaria spp.	Polypodium virg.
Agropyron trachycaulon	Galium boreale	Potentilla simplex
var. glaucum	Galium triflorum	Prenanthes alba
Alnus rugosa	Gaultheria procum.	Pteridium aquilinum
Amorpha canescens	Gaylussacia baccata	var. latiusculum
Amphicarpa bracteata	Geranium maculatum	Pyrola elliptica
Andropogon Gerardi	Geum canadense	Pyrola rotundifolia
Andropogon scoparius	Gnaphalium obtusif.	Pyrola secunda
Anemone virginiana	var. micradenium	Ranunculus fasc.
Antennaria plantag.	Goodyera pubescens	Ranunculus rhomboid.
Apocynum androsaem.	Helianthemum can.	Rhus glabra
Aquilegia canadensis	Helianthus occident.	Rhus radicans
Arabis lyrata	Heliopsis scabra	Rhus typhina
Aralia nudicaulis	Hepatica americana	Ribes americanum
Arctostaphylos Uva	Heuchera Richardsonii	Rosa spp.
Aronia melanocarpa	Hieracium canadense	Rubus-blackberry
Artemisia caudata	Hieracium scabrum	Rubus-dewberry
Aster azureus	Houstonia longifolia	Rubus-raspberry
Aster lateriflorus	Hypoxis hirsuta	Rudbeckia hirta
var. pendulus	Hystrix patula	Salix discolor
Aster laevis	Juncus Greenii	var. latifolia
Aster macrophyllus	Koeleria crisata	Sambucus canadensis
Aster ptarmicoides	Krigia biflora	Sanicula gregaria
Aster sagittifolius	Lactuca canadensis	Sisyrinchium camp.
Athyrium angustatum	Lathyrus ochroleucus	Smilacina racemosa
Aureolaris pedic.	Lathyrus venosus	Smilacina stellata
Bromus ciliatus	Lithospermum canes.	Smilax ecirrhata
var. intonsus	Lithospermum croceum	Smilax herbacea
Calamagrostis	Lupinus perennis	Smilax hispida
Carex Crawfordii	Lycopodium complan.	Solidago canadensis
Carex pennsylvanica	Lycopodium obscurum	var. gilvocan.
Carex siccata	Lysimachia quadrif.	Solidago juncea
Ceanothus ovatus	Maianthemum can.	Solidago nemoralis
Celastrus scandens	Mitchella repens	Solidago speciosa
Chimaphila umbellata	Monarda fistulosa	var. angustata
Clematis virginiana	Myrica asplenifolia	Tephrosia virginiana
Comandra umbellata	Onoclea sensibilis	Tradescantia ohioen.
Convolvulus spitham.	Osmorhiza Claytoni	Trientalis borealis
Coreopsis palmata	Osmunda Claytoniana	Uvularia grandiflora
Cornus alternifolia	Osmunda regalis	Uvularia sessilif.
Cornus canadensis	Oxalis violacea	Vaccinium angustif.
Cornus femina	Panicum implicatum	Vaccinium canadense
Cornus stolonifera	Parthenocissus vitacea	Vicia americana
Corylus americana	Pedicularis lanc.	Vicia villosa
Cypropedium acaule	Phlox pilosa	Viola canadensis
Desmodium acuminatum	Phryma leptostachya	Viola cucullata
Desmodium canadense	Physalis virginiana	Viola pedata
Diervilla Lonicera	Poa compressa	var. lineariloba
Dryopteris spm.	Polygala polygama	Viola sagittata
Eriogon repens	Polygonatum biflorum	Vitis coarctata
Eriogon venosus		Zanthoxylum amer.

16

Tree	BA	S	Tree	BA	S	Tree	BA	S
Acer negundo			Fraxinus penn.			Quercus alba		
Acer rubrum			Fraxinus lance			Quercus ellips		
Acer saccharum			Juglans cinere			Quercus macroc.		
Acer spicatum			Ostrya virgin.			Quercus rubra		
Amelanchier sp.			Pinus Banksian			Quercus sp.		
Petula lutea			Pinus resinosa	180		Sorbus decora		
Betula papyrifer			Pinus Strobus	90		Tilia amer.		
Carpinus carol.			Populus grand.			Tsuga canad.		
Carya cordif.			Populus trem.			Ulmus amer.		
Carya ovata			Prunus pensyl.			Ulmus fulva		
Crataegus sp.			Prunus serotin					
Fraxinus amer.			Prunus virgin.					

Distance: 27 1/2

Shrubs & Herbs

Achillea millefolium	Euphorbia corol.	Polygonella artic.
Agrimonia gryposepala	Fragaria spp.	Polypodium virg.
Agropyron trachycaulon	Galium boreale	Potentilla simplex
var. glaucum	Galium triflorum	Prenanthes alba
Alnus rugosa	Gaultheria procum.	Pteridium aquilinum
Amorpha canescens	Gaylussacia baccata	var. latiusculum
Amphicarpa bracteata	Geranium maculatum	Pyrola elliptica
Andropogon Gerardi	Geum canadense	Pyrola rotundifolia
Andropogon scoparius	Gnaphalium obtusif.	Pyrola secunda
Anemone virginiana	var. micradenium	Ranunculus fasc.
Antennaria plantag.	Goodyera pubescens	Ranunculus rhomboid.
Apocynum androsaem.	Helianthemum can.	Rhus glabra
Aquilegia canadensis	Helianthus occident.	Rhus radicans
Arabis lyrata	Heliopsis scabra	Rhus typhina
Aralia nudicaulis	Hepatica americana	Ribes americanum
Arctostaphylos Uva	Heuchera Richardsonii	Rosa spp.
Aronia melanocarpa	Hieracium canadense	Rubus-blackberry
Artemisia caudata	Hieracium scabrum	Rubus-dewberry
Aster azureus	Houstonia longifolia	Rubus-raspberry
Aster lateriflorus	Hypoxis hirsuta	Rudbeckia hirta
var. pendulus	Hystrix patula	Salix discolor
Aster laevis	Juncus Greenii	var. latifolia
Aster macrophyllus	Koeleria crisata	Sambucus canadensis
Aster ptarmicoides	Krigia biflora	Sanicula gregaria
Aster sagittifolius	Lactuca canadensis	Sisyrinchium camp.
Athyrium angustatum	Lathyrus ochroleucus	Smilacina racemosa
Aureolaris pedic.	Lathyrus venosus	Smilacina stellata
Bromus ciliatus	Lithospermum canes.	Smilax ecirrhata
var. intonsus	Lithospermum croceum	Smilax herbacea
Calamagrostis	Lupinus perennis	Smilax hispida
Carex Crawfordii	Lycopodium complan.	Solidago canadensis
Carex pennsylvanica	Lycopodium obscurum	var. gilvocan.
Carex siccata	Lysimachia quadrif.	Solidago juncea
Ceanothus ovatus	Maianthemum can.	Solidago nemoralis
Celastrus scandens	Mitchella repens	Solidago speciosa
Chimaphila umbellata	Monarda fistulosa	var. angustata
Clematis virginiana	Myrica asplenifolia	Tephrosia virginiana
Comandra umbellata	Onoclea sensibilis	Tradescantia ohio.
Convolvulus spitham.	Osmorhiza Claytoni	Trientalis borealis
Coreopsis palmata	Osmunda Claytoniana	Uvularia grandiflora
Cornus alternifolia	Osmunda regalis	Uvularia sessilif.
Cornus canadensis	Oxalis violacea	Vaccinium angustif.
Cornus femina	Panicum implicatum	Vaccinium canadense
Cornus stolonifera	Parthenocissus vitacea	Vicia americana
Corylus americana	Pedicularis lanc.	Vicia villosa
Cypropedium acaule	Phlox pilosa	Viola canadensis
Desmodium acuminatum	Phryma leptostachya	Viola cucullata
Desmodium canadense	Physalis virginiana	Viola pedata
Diervilla Lonicera	Poa compressa	var. lineariloba
Dryopteris spin.	Polygala polygama	Viola sagittata
Eriogonum repens	Polygonatum biflorum	Vitis festiva
Eriogonum tomentos		Zinnia americana

Tree	BA	S	Tree	BA	S	Tree	BA	S
Acer negundo			Fraxinus penn.			Quercus alba		
Acer rubrum			Fraxinus lance			Quercus ellips		
Acer saccharum			Juglans cinere			Quercus macroc.		
Acer spicatum			Ostrya virgin.			Quercus rubra		
Amelanchier sp.			Pinus Banksian			Quercus sp.		
Betula lutea			Pinus resinosa			Sorbus decora		
Betula papyrifera			Pinus Strobus 370-280			Tilia amer.		
Carpinus carol.			Populus grand.			Tsuga canad.		
Carya cordif.			Populus trem.			Ulmus amer.		
Carya ovata			Prunus pensyl.			Ulmus fulva		
Crataegus sp.			Prunus serotin					
Fraxinus amer.			Prunus virgin.					

Distance: 405

Shrubs & Herbs

Achillea millefolium	Euphorbia corol.	Polygonella artic.
Agrimonia gryposepala	Fragaria spp.	Polypodium virg.
Agropyron trachycaulon	Galium boreale	Potentilla simplex
var. glaucum	Galium triflorum	Prenanthes alba
Alnus rugosa	Gaultheria procum.	Pteridium aquilinum
Amorpha canescens	Gaylussacia baccata	var. latiusculum
Amphicarpa bracteata	Geranium maculatum	Pyrola elliptica
Andropogon Gerardi	Geum canadense	Pyrola rotundifolia
Andropogon scoparius	Gnaphalium obtusif.	Pyrola secunda
Anemone virginiana	var. micradenium	Ranunculus fasc.
Antennaria plantag.	Goodyera pubescens	Ranunculus rhomboid.
Apocynum androsaem.	Helianthemum can.	Rhus glabra
Aquilegia canadensis	Helianthus occident.	Rhus radicans
Arabis lyrata	Heliopsis scabra	Rhus typhina
Aralia nudicaulis	Hepatica americana	Ribes americanum
Arctostaphyles Uva	Heuchera Richardsonii	Rosa spp.
Aronia melanocarpa	Hieracium canadense	Rubus-blackberry
Artemisia caudata	Hieracium scabrum	Rubus-dewberry
Aster azureus	Houstonia longifolia	Rubus-raspberry
Aster lateriflorus	Hypoxis hirsuta	Rudbeckia hirta
var. pendulus	Hystrix patula	Salix discolor
Aster laevis	Juncus Greenii	var. latifolia
Aster macrophyllus	Koeleria crisata	Sambucus canadensis
Aster ptarmicoides	Krigia biflora	Sanicula gregaria
Aster sagittifolius	Lactuca canadensis	Sisyrinchium camp.
Athyrium angustatum	Lathyrus ochroleucus	Smilacina racemosa
Aureolaris pedic.	Lathyrus venosus	Smilacina stellata
Bromus ciliatus	Lithospermum canes.	Smilax ecirrhata
var. intonsus	Lithospermum croceum	Smilax herbacea
Calamagrostis	Lupinus perennis	Smilax hispida
Carex Crawfordii	Lycopodium complan.	Solidago canadensis
Carex pennsylvanica	Lycopodium obscurum	var. gilvocan.
Carex siccata	Lysimachia quadrif.	Solidago juncea
Ceanothus ovatus	Maianthemum can.	Solidago nemoralis
Celastrus scandens	Mitchella repens	Solidago speciosa
Chimaphila umbellata	Monarda fistulosa	var. angustata
Clematis virginiana	Myrica asplenifolia	Tephrosia virginiana
Comandra umbellata	Onoclea sensibilis	Tradescantia ohien.
Convolvulus spitham.	Osmorhiza Claytoni	Trientalis borealis
Coreopsis palmata	Osmunda Claytoniana	Uvularia grandiflora
Cornus alternifolia	Osmunda regalis	Uvularia sessilif.
Cornus canadensis	Oxalis violacea	Vaccinium angustif.
Cornus femina	Panicum implicatum	Vaccinium canadense
Cornus stolonifera	Parthenocissus vitacea	Vicia americana
Corylus americana	Pedicularis lanc.	Vicia villosa
Cypripedium acaule	Phlox pilosa	Viola canadensis
Desmodium acuminatum	Phryma leptostachya	Viola cucullata
Desmodium canadense	Physalis virginiana	Viola pedata
Diervilla Lonicera	Poa compressa	var. lineariloba
Dryopteris spm.	Polygala polygama	Viola sagittata
Erigeron repens	Polygonatum biflorum	Vitis coarctata
Erigeron annuus		Zinnia americana

Snaphalium obt

Tree	: BA	: S	Tree	: BA	: S	Tree	: BA	: S
Acer negundo			Fraxinus penn.			Quercus alba		
Acer rubrum			Fraxinus lance			Quercus ellips		
Acer saccharum			Juglans cinere			Quercus macroc.		
Acer spicatum			Ostrya virgin.			Quercus rubra		
Amelanchier sp.			Pinus Banksian			Quercus sp.		
Betula lutea			Pinus resinosa			Sorbus decora		
Betula papyrifera			Pinus Strobus 18-80			Tilia amer.		
Carpinus carol.			Populus grand.			Tsuga canad.		
Carya cordif.			Populus trem.			Ulmus amer.		
Carya ovata			Prunus pensyl.			Ulmus fulva		
Crataegus sp.			Prunus serotin					
Fraxinus amer.			Prunus virgin.					

Distance: 364

			Shrubs & Herbs					
Achillea millefolium			Euphorbia corol.			Polygonella artic.		
Agrimonia gryposepala			Fragaria spp.			Polypodium virg.		
Agropyron trachycaulon			Galium boreale			Potentilla simplex		
var. glaucum			Galium triflorum			Prenanthes alba		
Alnus rugosa			Gaultheria procum.			Pteridium aquilinum		
Amygdala canescens			Gaylussacia baccata			var. latiusculum		
Amphicarpa bracteata			Geranium maculatum			Pyrola elliptica		
Andropogon Gerardi			Geum canadense			Pyrola rotundifolia		
Andropogon scoparius			Gnaphalium obtusif.			Pyrola secunda		
Anemone virginiana			var. micradenium			Ranunculus fasc.		
Antennaria plantag.			Goodyera pubescens			Ranunculus rhomboid.		
Apocynum androsaem.			Helianthemum can.			Rhus glabra		
Aquilegia canadensis			Helianthus occident.			Rhus radicans		
Arabis lyrata			Heliopsis scabra			Rhus typhina		
Aralia nudicaulis			Hepatica americana			Ribes americanum		
Arctostaphylos Uva			Heuchera Richardsonii			Rosa spp.		
Aronia melanocarpa			Hieracium canadense			Rubus-blackberry		
Artemisia caudata			Hieracium scabrum			Rubus-dewberry		
Aster azureus			Houstonia longifolia			Rubus-raspberry		
Aster lateriflorus			Hypoxis hirsuta			Rudbeckia hirta		
var. pendulus			Hystrix patula			Salix discolor		
Aster laevis			Juncus Greenii			var. latifolia		
Aster macrophyllus			Koeleria crisata			Sambucus canadensis		
Aster ptarmicoides			Krigia biflora			Sanicula gregaria		
Aster sagittifolius			Lactuca canadensis			Sisyrinchium camp.		
Athyrium angustatum			Lathyrus ochroleucus			Smilacina racemosa		
Aureolaris pedic.			Lathyrus venosus			Smilacina stellata		
Bromus ciliatus			Lithospermum canes.			Smilax ecirrhata		
var. intonsus			Lithospermum croceum			Smilax herbacea		
Calamagrostis			Lupinus perennis			Smilax hispida		
Carex Crawfordii			Lycopodium complan.			Solidago canadensis		
Carex penxylvanica			Lycopodium obscurum			var. gilvocan.		
Carex siccata			Lysimachia quadrif.			Solidago juncea		
Ceanothus ovatus			Maianthemum can.			Solidago nemoralis		
Celastrus scandens			Mitchella repens			Solidago speciosa		
Chimaphila umbellata			Monarda fistulosa			var. angustata		
Clematis virginiana			Myrica asplenifolia			Tephrosia virginiana		
Comandra umbellata			Onoclea sensibilis			Tradescantia ohio.		
Convolvulus spitham.			Osmorhiza Claytoni			Trientalis borealis		
Coreopsis palmata			Osmunda Claytoniana			Uvularia grandiflora		
Cornus alternifolia			Osmunda regalis			Uvularia sessilif.		
Cornus canadensis			Oxalis violacea			Vaccinium angustif.		
Cornus femina			Panicum implicatum			Vaccinium canadense		
Cornus stolonifera			Parthenocissus vitacea			Vicia americana		
Corylus americana			Pedicularis lanc.			Vicia villosa		
Cypropedium acaule			Phlox pilosa			Viola canadensis		
Desmodium acuminatum			Phryma leptostachya			Viola cucullata		
Desmodium canadense			Physalis virginiana			Viola pedata		
Diervilla Lonicera			Poa compressa			var. lineariloba		
Dryopteris spin.			Polygala polygama			Viola sagittata		
Eriogonum repens			Polygonatum biflorum			Vitis edulis		
Eriogonum ramosus						Zanthoxylum amer.		

19

Tree	BA	S	Tree	BA	S	Tree	BA	S
Acer negundo			Fraxinus penn.			Quercus alba		
Acer rubrum			Fraxinus lance			Quercus ellips		
Acer saccharum			Juglans cinere			Quercus macroc.		
Acer spicatum			Ostrya virgin.			Quercus rubra		
Amelanchier sp.			Pinus Banksian			Quercus sp.		
Betula lutea			Pinus resinosa			Sorbus decora		
Betula papyrifera			Pinus Strobus	50-35		Lilia amer.		
Carpinus carol.			Populus grand.			Tsuga canad.		
Carya cordif.			Populus trem.			Ulmus amer.		
Carya ovata			Prunus pensyl.			Ulmus fulva		
Crataegus sp.			Prunus serotin					
Fraxinus amer.			Prunus virgin.					

Distance: 31

Shrubs & Herbs		
Achillea millefolium	Euphorbia corol.	Polygonella artic.
Agrimonia gryposepala	Fragaria spp.	Polypodium virg.
Agropyron trachycaulon	Galium boreale	Potentilla simplex
var. glaucum	Galium triflorum	Prenanthes alba
Alnus rugosa	Gaultheria procum.	Pteridium aquilinum
Amorpha canescens	Gaylussacia baccata	var. latiusculum
Amphicarpa bracteata	Geranium maculatum	Pyrola elliptica
Andropogon Gerardi	Geum canadense	Pyrola rotundifolia
Andropogon scoparius	Gnaphalium obtusif.	Pyrola secunda
Anemone virginiana	var. micradenium	Ranunculus fasc.
Antennaria plantag.	Goodyera pubescens	Ranunculus rhomboid.
Apocynum androsaem.	Helianthemum can.	Rhus glabra
Aquilegia canadensis	Helianthus occident.	Rhus radicans
Arabis lyrata	Heliopsis scabra	Rhus typhina
Aralia nudicaulis	Hepatica americana	Ribes americanum
Arctostaphylos Uva	Heuchera Richardsonii	Rosa spp.
Aronia melanocarpa	Hieracium canadense	Rubus-blackberry
Artemisia caudata	Hieracium scabrum	Rubus-dewberry
Aster azureus	Houstonia longifolia	Rubus-raspberry
Aster lateriflorus	Hypoxis hirsuta	Rudbeckia hirta
var. pendulus	Hystrix patula	Salix discolor
Aster laevis	Juncus Greenii	var. latifolia
Aster macrophyllus	Koeleria crisata	Sambucus canadensis
Aster ptarmicoides	Krigia biflora	Sanicula gregaria
Aster sagittifolius	Lactuca canadensis	Sisyrinchium camp.
Athyrium angustatum	Lathyrus ochroleucus	Smilacina racemosa
Aureolaris pedic.	Lathyrus venosus	Smilacina stellata
Bromus ciliatus	Lithospermum canes.	Smilax ecirrhata
var. intonsus	Lithospermum croceum	Smilax herbacea
Calamagrostis	Lupinus perennis	Smilax hispida
Carex Crawfordii	Lycopodium complan.	Solidago canadensis
Carex pennsylvanica	Lycopodium obscurum	var. gilvocan.
Carex siccata	Lysimachia quadrif.	Solidago juncea
Ceanothus ovatus	Maianthemum can.	Solidago nemoralis
Celastrus scandens	Mitchella repens	Solidago speciosa
Chimaphila umbellata	Monarda fistulosa	var. angustata
Clematis virginiana	Myrica asplenifolia	Tephrosia virginiana
Comandra umbellata	Onoclea sensibilis	Tradescantia ohien.
Convolvulus spitham.	Osmorhiza Claytoni	Trientalis borealis
Coreopsis palmata	Osmunda Claytoniana	Uvularia grandiflora
Cornus alternifolia	Osmunda regalis	Uvularia sessilif.
Cornus canadensis	Oxalis violacea	Vaccinium angustif.
Cornus femina	Panicum implicatum	Vaccinium canadense
Cornus stolonifera	Parthenocissus vitacea	Vicia americana
Corylus americana	Pedicularis lanc.	Vicia villosa
Cypripedium acaule	Phlox pilosa	Viola canadensis
Desmodium acuminatum	Phryma leptostachya	Viola cucullata
Desmodium canadense	Physalis virginiana	Viola pedata
Diervilla Lonicera	Poa compressa	var. lineariloba
Dryopteris spin.	Polygala polygama	Viola sagittata
Erigeron repens	Polygonatum biflorum	Vitis aestivalis
Erigeron ramosus		Zanthoxylum amer.

Polygala pauciflora

Tree	BA	S	Tree	BA	S	Tree	BA	S
Acer negundo			Fraxinus penn.			Quercus alba		
Acer rubrum	1		Fraxinus lance			Quercus ellips		
Acer saccharum			Juglans cinere			Quercus macroc.		
Acer spicatum			Ostrya virgin.			Quercus rubra		
Amelanchier sp.			Pinus Banksian			Quercus sp.		
Betula lutea			Pinus resinosa			Sorbus decora		
Betula papyrifera			Pinus Strobus	37-500		Tilia amer.		
Carpinus carol.			Populus grand.			Tsuga canad.		
Carya cordif.			Populus trem.			Ulmus amer.		
Carya ovata			Prunus pensyl.			Ulmus fulva		
Crataegus sp.			Prunus serotin					
Fraxinus amer.			Prunus virgin.					

Distance: 2 1/2

Shrubs & Herbs		
Achillea millefolium	Euphorbia corol.	Polygonella artic.
Agrimonia gryposepala	Fragaria spp.	Polypodium virg.
Agropyron trachycaulon	Galium boreale	Potentilla simplex
var. glaucum	Galium triflorum	Prenanthes alba
Alnus rugosa	Gaultheria procum.	Pteridium aquilinum
Amorpha canescens	Gaylussacia baccata	var. latiusculum
Amphicarpa bracteata	Geranium maculatum	Pyrola elliptica
Andropogon Gerardi	Geum canadense	Pyrola rotundifolia
Andropogon scoparius	Gnaphalium obtusif.	Pyrola secunda
Anemone virginiana	var. micradenium	Ranunculus fasc.
Antennaria plantag.	Goodyera pubescens	Ranunculus rhomboid.
Apocynum androsaem.	Helianthemum can.	Rhus glabra
Aquilegia canadensis	Helianthus occident.	Rhus radicans
Arabis lyrata	Heliopsis scabra	Rhus typhina
Aralia nudicaulis	Hepatica americana	Ribes americanum
Arctostaphylos Uva	Heuchera Richardsonii	Rosa spp.
Aronia melanocarpa	Hieracium canadense	Rubus-blackberry
Artemisia caudata	Hieracium scabrum	Rubus-dewberry
Aster azureus	Houstonia longifolia	Rubus-raspberry
Aster lateriflorus	Hypoxis hirsuta	Rudbeckia hirta
var. pendulus	Hystrix patula	Salix discolor
Aster laevis	Juncus Greenii	var. latifolia
Aster macrophyllus	Koeleria crisata	Sambucus canadensis
Aster ptarmicoides	Krigia biflora	Sanicula gregaria
Aster sagittifolius	Lactuca canadensis	Sisyrinchium camp.
Athyrium angustatum	Lathyrus ochroleucus	Smilacina racemosa
Aureolaris pedic.	Lathyrus venosus	Smilacina stellata
Bromus ciliatus	Lithospermum canes.	Smilax ecirrhata
var. intonsus	Lithospermum croceum	Smilax herbacea
Calamagrostis	Lupinus perennis	Smilax hispida
Carex Crawfordii	Lycopodium complan.	Solidago canadensis
Carex pennsylvanica	Lycopodium obscurum	var. gilvocan.
Carex siccata	Lysimachia quadrif.	Solidago juncea
Ceanothus ovatus	Maianthemum can.	Solidago nemoralis
Celastrus scandens	Mitchella repens	Solidago speciosa
Chimaphila umbellata	Monarda fistulosa	var. angustata
Clematis virginiana	Myrica asplenifolia	Tephrosia virginiana
Comandra umbellata	Onoclea sensibilis	Tradescantia ohien.
Convolvulus spitham.	Osmorhiza Claytoni	Trientalis borealis
Coreopsis palmata	Osmunda Claytoniana	Uvularia grandiflora
Cornus alternifolia	Osmunda regalis	Uvularia sessilif.
Cornus canadensis	Oxalis violacea	Vaccinium angustif.
Cornus femina	Panicum implicatum	Vaccinium canadense
Cornus stolonifera	Parthenocissus vitacea	Vicia americana
Corylus americana	Pedicularis lanc.	Vicia villosa
Cypropedium acaule	Phlox pilosa	Viola canadensis
Desmodium acuminatum	Phryma leptostachya	Viola cucullata
Desmodium canadense	Physalis virginiana	Viola pedata
Diervilla lonicera	Poa compressa	var. lineariloba
Dryopteris spin.	Polygala polygama	Viola sagittata
Erigeron repens	Polygonatum biflorum	Vitis cestivalis
Erigeron ramosus		Zanthoxylum amer.

Anemone quinque

Polygala pauciflora

Tree	BA	S	Tree	BA	S	Tree	BA	S
Acer negundo			Fraxinus penn.			Quercus alba		
Acer rubrum			Fraxinus lanceo .			Quercus ellipsoi		
Acer saccharum			Juglans cinerea			Quercus macroc.		
Acer spicatum			Ostrya virgin.			Quercus rubra		
Amelanchier sp.			Pinus Banksiana			Quercus sp.		
Betula lutea			Pinus resinosa			Sorbus decora		
Betula papyrifera			Pinus Strobus	122		Tilia amer.		
Carpinus carol.			Populus grand.	115		Tsuga canad.		
Carya cordif.			Populus trem.			Ulmus amer.		
Carya ovata			Prunus pensyl.			Ulmus fulva		
Castalegus sp.			Prunus serotina					
Fraxinus amer.			Prunus virgin.					

Distance: 6.6

Acer negundo	Fraxinus penn.	Quercus alba
Acer rubrum	Fraxinus lanceo.	Quercus ellipsoi
Acer saccharum	Juglans cinerea	Quercus macroc.
Acer spicatum	Ostrya virgin.	Quercus rubra
Amelanchier sp.	Pinus Banksiana	Quercus sp.
Betula lutea	Pinus resinosa	Sorbus decora
Betula papyrifera	Pinus Strobus	Tilia amer.
Carpinus carol.	Populus grand.	Tsuga canad.
Carya cordif.	Populus trem.	Ulmus amer.
Carya ovata	Prunus pensyl.	Ulmus fulva
Crataegus sp.	Prunus serotina	
Fraxinus amer.	Prunus virgin.	

Distance: 14.5

Acer negundo	Fraxinus penn.	Quercus alba
Acer rubrum	Fraxinus lanceo	Quercus ellipsoi
Acer saccharum	Juglans cinerea	Quercus macroc.
Acer spicatum	Ostrya virgin.	Quercus rubra
Amelanchier sp.	Pinus Banksiana	Quercus sp.
Betula lutea	Pinus resinosa	Sorbus decora
Betula papyrifera	Pinus Strobus {385	Tilia amer.
Carpinus carol.	Populus grand. {570	Tsuga canad.
Carya cordif.	Populus trem.	Ulmus amer.
Carya ovata	Prunus pensyl.	Ulmus fulva
Crataegus sp.	Prunus serotina	
Fraxinus amer.	Prunus virgin.	

Distance: 46.5

Acer negundo	Fraxinus penn.	Quercus alba
Acer rubrum	Fraxinus lanceol.	Quercus ellipsoi
Acer saccharum	Juglans cinerea	Quercus macroc.
Acer spicatum	Ostrya virgin.	Quercus rubra
Amelanchier sp.	Pinus Banksiana	Quercus sp.
Betula lutea	Pinus resinosa 265	Sorbus decora
Betula papyrifera	Pinus Strobus 84	Tilia amer.
Carpinus carol.	Populus grand.	Tsuga canad.
Carya cordif.	Populus trem.	Ulmus amer.
Carya ovata	Prunus pensyl.	Ulmus fulva
Crataegus sp.	Prunus serotina	
Fraxinus amer.	Prunus virgin.	

Distance: 34.5

grad 10) R. Strehm $\frac{340}{625}$

Plat 21'

Plunder

P. lyngbya faye

Aster m/m

Maintien des mœurs

Pinus Strobus

Pyrola Secunda

Carey.

Tree	BA	S	Tree	BA	S	Tree	BA	S
Acer negundo			Fraxinus penn.			Quercus alba		
Acer rubrum			Fraxinus lanceol.			Quercus ellipsoi		
Acer saccharum			Juglans cinerea			Quercus macroc.		
Acer spicatum			Ostrya virgin.			Quercus rubra		
Amelanchier sp.			Pinus Banksiana			Quercus sp.		
Betula lutea			Pinus resinosa			Sorbus decora		
Betula papyrifera			Pinus Strobus {280			Tilia amer.		
Carpinus carol.			Populus grand. {170			Tsuga canad.		
Carya cordif.			Populus trem.			Ulmus amer.		
Carya ovata			Prunus pensyl.			Ulmus fulva		
Crataegus sp.			Prunus serotina					
Fraxinus amer.			Prunus virgin.					

Distance: 15.5

Acer negundo			Fraxinus penn.			Quercus alba		
Acer rubrum			Fraxinus lanceol.			Quercus ellipsoi		
Acer saccharum			Juglans cinerea			Quercus macroc.		
Acer spicatum			Ostrya virgin.			Quercus rubra		
Amelanchier sp.			Pinus Banksiana			Quercus sp.		
Betula lutea			Pinus resinosa			Sorbus decora		
Betula papyrifera			Pinus Strobus {50			Tilia amer.		
Carpinus carol.			Populus grand. {55			Tsuga canad.		
Carya cordif.			Populus trem.			Ulmus amer.		
Carya ovata			Prunus pensyl.			Ulmus fulva		
Crataegus sp.			Prunus serotina					
Fraxinus amer.			Prunus virgin.					

Distance: 21.5

Acer negundo			Fraxinus penn.			Quercus alba		
Acer rubrum			Fraxinus lanceol.			Quercus ellipsoi		
Acer saccharum			Juglans cinerea			Quercus macroc.		
Acer spicatum			Ostrya virgin.			Quercus rubra		
Amelanchier sp.			Pinus Banksiana			Quercus sp.		
Betula lutea			Pinus resinosa			Sorbus decora		
Betula papyrifera			Pinus Strobus {240			Tilia amer.		
Carpinus carol.			Populus grand. {230			Tsuga canad.		
Carya cordif.			Populus trem.			Ulmus amer.		
Carya ovata			Prunus pensyl.			Ulmus fulva		
Crataegus sp.			Prunus serotina					
Fraxinus amer.			Prunus virgin.					

Distance: 20

Acer negundo			Fraxinus penn.			Quercus alba		
Acer rubrum			Fraxinus lanceol.			Quercus ellipsoi		
Acer saccharum			Juglans cinerea			Quercus macroc.		
Acer spicatum			Ostrya virgin.			Quercus rubra		
Amelanchier sp.			Pinus Banksiana			Quercus sp.		
Betula lutea			Pinus resinosa			Sorbus decora		
Betula papyrifera			Pinus Strobus {340			Tilia amer.		
Carpinus carol.			Populus grand. {64			Tsuga canad.		
Carya cordif.			Populus trem.			Ulmus amer.		
Carya ovata			Prunus pensyl.			Ulmus fulva		
Crataegus sp.			Prunus serotina					
Fraxinus amer.			Prunus virgin.					

Distance: 36.5

Roa.
Amelanchier
White Oak
Red Oak

Tree	BA	S	Tree	BA	S	Tree	BA	S
Acer negundo			Fraxinus penn.			Quercus alba		
Acer rubrum			Fraxinus lanceo.			Quercus ellipsoi		
Acer saccharum			Juglans cinerea			Quercus macroc.		
Acer spicatum			Ostrya virgin.			Quercus rubra		
Amelanchier sp.			Pinus Banksiana			Quercus sp.		
Betula lutea			Pinus resinosa			Sorbus decora		
Betula papyrifera			Pinus Strobus 230-450			Tilia amer.		
Carpinus carol.			Populus grand.			Tsuga canad.		
Carya cordif.			Populus trem.			Ulmus amer.		
Carya ovata			Prunus pensyl.			Ulmus fulva		
Crataegus sp.			Prunus serotina					
Fraxinus amer.			Prunus virgin.					
						Distance: 35 1/2		
Acer negundo			Fraxinus penn.			Quercus alba		
Acer rubrum			Fraxinus lanceo.			Quercus ellipsoi		
Acer saccharum			Juglans cinerea			Quercus macroc.		
Acer spicatum			Ostrya virgin.			Quercus rubra		
Amelanchier sp.			Pinus Banksiana			Quercus sp.		
Betula lutea			Pinus resinosa			Sorbus decora		
Betula papyrifera			Pinus Strobus 140-220			Tilia amer.		
Carpinus carol.			Populus grand.			Tsuga canad.		
Carya cordif.			Populus trem.			Ulmus amer.		
Carya ovata			Prunus pensyl.			Ulmus fulva		
Crataegus sp.			Prunus serotina					
Fraxinus amer.			Prunus virgin.					
						Distance: 27		
Acer negundo			Fraxinus penn.			Quercus alba		
Acer rubrum			Fraxinus lanceo			Quercus ellipsoi		
Acer saccharum			Juglans cinerea			Quercus macroc.		
Acer spicatum			Ostrya virgin.			Quercus rubra		
Amelanchier sp.			Pinus Banksiana			Quercus sp.		
Betula lutea			Pinus resinosa 140			Sorbus decora		
Betula papyrifera			Pinus Strobus 230			Tilia amer.		
Carpinus carol.			Populus grand.			Tsuga canad.		
Carya cordif.			Populus trem.			Ulmus amer.		
Carya ovata			Prunus pensyl.			Ulmus fulva		
Crataegus sp.			Prunus serotina					
Fraxinus amer.			Prunus virgin.					
						Distance: 19		
Acer negundo			Fraxinus penn.			Quercus alba		
Acer rubrum			Fraxinus lanceol.			Quercus ellipsoi		
Acer saccharum			Juglans cinerea			Quercus macroc.		
Acer spicatum			Ostrya virgin.			Quercus rubra		
Amelanchier sp.			Pinus Banksiana			Quercus sp.		
Betula lutea			Pinus resinosa 160			Sorbus decora		
Betula papyrifera			Pinus Strobus 150			Tilia amer.		
Carpinus carol.			Populus grand.			Tsuga canad.		
Carya cordif.			Populus trem.			Ulmus amer.		
Carya ovata			Prunus pensyl.			Ulmus fulva		
Crataegus sp.			Prunus serotina					
Fraxinus amer.			Prunus virgin.					
						Distance: 21		

Tree	BA	S	Tree	BA	S	Tree	BA	S
33 Acer negundo			Fraxinus penn.			Quercus alba		
Acer rubrum			Fraxinus lanceo.			Quercus ellipsoi		
Acer saccharum			Juglans cinerea			Quercus macroc.		
Acer spicatum			Ostrya virgin.			Quercus rubra		
Amelanchier sp.			Pinus Banksiana			Quercus sp.		
Betula lutea			Pinus resinosa			Sorbus decora		
Betula papyrifera			Pinus Strobus 95-120			Tilia amer.		
Carpinus carol.			Populus grand.			Tsuga canad.		
Carya cordif.			Populus trem.			Ulmus amer.		
Carya ovata			Prunus pensyl.			Ulmus fulva		
Crataegus sp.			Prunus serotina					
Fraxinus amer.			Prunus virgin.					
						Distance: 11 1/2		
34 Acer negundo			Fraxinus penn.			Quercus alba 1		
Acer rubrum			Fraxinus lanceo.			Quercus ellipsoi		
Acer saccharum			Juglans cinerea			Quercus macroc.		
Acer spicatum			Ostrya virgin.			Quercus rubra		
Amelanchier sp.			Pinus Banksiana			Quercus sp.		
Betula lutea			Pinus resinosa			Sorbus decora		
Betula papyrifera			Pinus Strobus 290-195			Tilia amer.		
Carpinus carol.			Populus grand.			Tsuga canad.		
Carya cordif.			Populus trem.			Ulmus amer.		
Carya ovata			Prunus pensyl.			Ulmus fulva		
Crataegus sp.			Prunus serotina					
Fraxinus amer.			Prunus virgin.					
						Distance: 28 1/2		
35 Acer negundo			Fraxinus penn.			Quercus alba		
Acer rubrum			Fraxinus lanceo			Quercus ellipsoi		
Acer saccharum			Juglans cinerea			Quercus macroc.		
Acer spicatum			Ostrya virgin.			Quercus rubra		
Amelanchier sp.			Pinus Banksiana			Quercus sp.		
Betula lutea			Pinus resinosa			Sorbus decora		
Betula papyrifera			Pinus Strobus 145-210			Tilia amer.		
Carpinus carol.			Populus grand.			Tsuga canad.		
Carya cordif.			Populus trem.			Ulmus amer.		
Carya ovata			Prunus pensyl.			Ulmus fulva		
Crataegus sp.			Prunus serotina					
Fraxinus amer.			Prunus virgin.					
						Distance: 19		
36 Acer negundo			Fraxinus penn.			Quercus alba		
Acer rubrum			Fraxinus lanceol.			Quercus ellipsoi		
Acer saccharum			Juglans cinerea			Quercus macroc.		
Acer spicatum			Ostrya virgin.			Quercus rubra		
Amelanchier sp.			Pinus Banksiana			Quercus sp.		
Betula lutea			Pinus resinosa			Sorbus decora		
Betula papyrifera			Pinus Strobus 360			Tilia amer.		
Carpinus carol.			Populus grand. 16			Tsuga canad.		
Carya cordif.			Populus trem.			Ulmus amer.		
Carya ovata			Prunus pensyl.			Ulmus fulva		
Crataegus sp.			Prunus serotina					
Fraxinus amer.			Prunus virgin.					
						Distance: 16		

Tree	BA	S	Tree	BA	S	Tree	BA	S
Acer negundo			Fraxinus penn.			Quercus alba		
Acer rubrum			Fraxinus lanceo.			Quercus ellipsoi		
Acer saccharum			Juglans cinerea			Quercus macroc.		
Acer spicatum			Ostrya virgin.			Quercus rubra		
Amelanchier sp.			Pinus Banksiana			Quercus sp.		
Betula lutea			Pinus resinosa			Sorbus decora		
Betula papyrifera 12		1	Pinus Strobus 330		1	Tilia amer.		
Carpinus carol.			Populus grand.			Tsuga canad.		
Carya cordif.			Populus trem.			Ulmus amer.		
Carya ovata			Prunus pensyl.			Ulmus fulva		
Crataegus sp.			Prunus serotina					
Fraxinus amer.			Prunus virgin.					

Distance: 30 1/2

Acer negundo			Fraxinus penn.			Quercus alba		
Acer rubrum			Fraxinus lanceo.			Quercus ellipsoi		
Acer saccharum			Juglans cinerea			Quercus macroc.		
Acer spicatum			Ostrya virgin.			Quercus rubra		
Amelanchier sp.			Pinus Banksiana			Quercus sp.		
Betula lutea			Pinus resinosa			Sorbus decora		
Betula papyrifera			Pinus Strobus 230-340			Tilia amer.		
Carpinus carol.			Populus grand.			Tsuga canad.		
Carya cordif.			Populus trem.			Ulmus amer.		
Carya ovata			Prunus pensyl.			Ulmus fulva		
Crataegus sp.			Prunus serotina					
Fraxinus amer.			Prunus virgin.					

Distance: 18

Acer negundo			Fraxinus penn.			Quercus alba		
Acer rubrum			Fraxinus lanceo			Quercus ellipsoi		
Acer saccharum			Juglans cinerea			Quercus macroc.		
Acer spicatum			Ostrya virgin.			Quercus rubra		
Amelanchier sp.			Pinus Banksiana			Quercus sp.		
Betula lutea			Pinus resinosa			Sorbus decora		
Betula papyrifera			Pinus Strobus 500-440			Tilia amer.		
Carpinus carol.			Populus grand.			Tsuga canad.		
Carya cordif.			Populus trem.			Ulmus amer.		
Carya ovata			Prunus pensyl.			Ulmus fulva		
Crataegus sp.			Prunus serotina					
Fraxinus amer.			Prunus virgin.					

Distance: 19 1/2

Acer negundo			Fraxinus penn.			Quercus alba		
Acer rubrum			Fraxinus lanceol.			Quercus ellipsoi		
Acer saccharum			Juglans cinerea			Quercus macroc.		
Acer spicatum			Ostrya virgin.			Quercus rubra		
Amelanchier sp.			Pinus Banksiana			Quercus sp.		
Betula lutea			Pinus resinosa			Sorbus decora		
Betula papyrifera			Pinus Strobus 220-280			Tilia amer.		
Carpinus carol.			Populus grand.			Tsuga canad.		
Carya cordif.			Populus trem.			Ulmus amer.		
Carya ovata			Prunus pensyl.			Ulmus fulva		
Crataegus sp.			Prunus serotina					
Fraxinus amer.			Prunus virgin.					

Distance: 30

THE CORTICOLOUS VEGETATION OF THE NORTHERN WISCONSIN UPLAND
Data collected by William L. Culberson, Summers 1952-1953.

From a 40-tree sample, the continuum index of this stand is..... 1471
Abbreviations in the data sheets refer to the following species:

Alectoria nidulifera
Allarthonia caesia
Anaptychia palmatula
Anaptychia speciosa
Arthonia radiata
Bacidia chlorococca
Bacidia fusciorubella
Bacidia sp.
Buellia punctata
Buellia stillingiana
Caloplaca aurantiaca
Caloplaca cerina
Caloplaca sp.
Candelaria concolor
Candelaria fibrosa
Cetraria atlantica
Cetraria ciliaris
Cetraria fendleri
Cetraria oakesiana
Cetraria pinastri
Cladonia botrytes
Cladonia cenotea
Cladonia chlorophaea
Cladonia coniocraea
Cladonia cristatella
Cladonia verticillata
Collema subfurvum
Conotrema urceolatum
Evernia mesomorpha
Graphis scripta
Lecanora pallida
Lecanora subfusca
Lecanora varia
Lecidea berengeriana
Lecidea nylanderii
Lecidea vernalis
Lepraria aeruginosa
Leptorhaphis epidermidis
Le sym = unknown crustose
Lobaria pulmonaria
Lobaria quercizans
Normandina pulchella
Ochrolechia pallescens
Opegrapha varia
Parmelia andreana
Parmelia aurulenta
Parmelia borrieri
Parmelia caperata
Parmelia cetrarioides
Parmelia crinita
Parmelia physodes
Parmelia rudecta

Parmelia saxatilis
Parmelia subaurifera
Parmelia subquercifolia
Parmelia sulcata
Parmelia trichotera
Parmeliopsis ambigua
Parmeliopsis hyperopta
Parmeliopsis placorodia
Peltigera canina
Pertusaria sp.
Physcia aipolia
Physcia ascendens
Physcia ciliata
Physcia grisea
Physcia millegrana
Physcia orbicularis
Physcia syncolla
Physcia tribacoides
Pyrenula leucoplaca
Pyrenula nitida
Pyxine soorediata
Ramalina fastigiata
Ramalina pollinaria
Rinodina halei
Rinodina papillata
Rinodina sp.
Trypethelium virens
Usnea sp.
Xanthoria fallax
Xanthoria polycarpa

(Bryophytes)

Amblystegium varium
Anomodon attenuatus
Anomodon minor
Anomodon rostratus
Anomodon tristis
Bazzania trilobata
Brachythecium sp.
Brotherella recurvans
Campylium hispidulum
Chamberlainia acuminata
Dicranum flagellare
Dicranum montanum
Dicranum sp.
Entodon sp.
Eurhynchium serrulatum
Eurhynchium strigosum
Frullania asagrayana
Frullania bolanderi
Frullania eboraensis
Heterophyllum
 haldanianum
Hypnum reptile
Hypnum sp.
Jamesoniella autumnalis
Leskea sp.
Leucodon sciuroides
Lindbergia brachyptera
 var. *austini*
Lophocolea heterophylla
Mnium cuspidatum
Mnium spinulosum
Neckera pennata
Orthotrichum sp.
Plagiochila asplenioides
Plagiothecium sp.
Platygyrium repens
Porella platy-
 phylloidea
Ptilidium pulcherrimum
Pylasia sp.
Radula complanata
Tetraphis pellucida
Thuidium delicatulum
Ulota crispa

Ecology Laboratory
University of Wisconsin
Madison

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