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POINT RECORD TREES

SOUTHERN HARDWOODS

Stand No. 1541

STATION NO.	1	2	3	4	5	6	7	8	9	10
<i>Acer rubrum</i>										
<i>A. saccharum</i>			44 20411							
<i>Betula papy.</i>										
<i>Carpinus car</i>										
<i>Carya cord</i>										
<i>C. ovata</i>		1	1		1					
<i>Celtis occ</i>							1 44 42			
<i>Crataegus sp.</i>									1	1
<i>Fagus grand</i>										
<i>Fraxinus am</i>										
<i>F. nigra</i>										
<i>Juglans cin.</i>										
<i>J. nigra</i>										
<i>Ostrya virg</i>										
<i>Populus gran</i>										
<i>P. tremul</i>		2421					44 58		48	
<i>Prunus serot</i>	19 27	3728 313440	2923 22	18	27 19	45 2328	23 85 100	30 402221	1 38 57	2 23 1
<i>Quercus alba</i>		1 21+1 1	2223 2534	2422 3728 23					1941 1921	1330 1932
<i>Q. ellipsoid</i>										
<i>Q. macrocarpa</i>								2	1	
<i>Q. rubra</i>								1828 22671		
<i>Q. velutina</i>	5224 19	18 32		1		59 3414	29 15	38 32		47 34 42
<i>Tilia amer</i>					7035 4562					
<i>Ulmus amer</i>				+3	2216 192223					
<i>Ulmus fulva</i>										
<i>acer neg.</i>		2	1	3	3	1	4	2	1	
<i>Sap diet</i>	20 21 20 38	6 15 1626	13 7 1837	10 9 10 21	3 20 11 22	17 10 13 9	12 19 12 22	18 15 17 28	25 17 41 23	16 17 29 30
Distance	11 17 16 14	6 11 10 11	5 6 10 13	5 8 3 16	9 16 13 17	13 12 6 12	4 7 15 10	17 6 10 22	18 11 6 12	3 6 5 24

65 90

65 75

55 60

70

POINT RECORD TREES

SOUTHERN HARDWOODS

Stand No. 1541

STATION NO.	1	2	3	4	5	6	7	8	9	10
<i>Acer rubrum</i>										
<i>A. saccharum</i>										
<i>Betula papy.</i>										
<i>Carpinus car</i>										
<i>Carya cord</i>										
<i>C. ovata</i>										
<i>Celtis occ</i>										
<i>Crataegus sp.</i>										
<i>Fagus grand</i>										
<i>Fraxinus am</i>										
<i>F. nigra</i>										
<i>Juglans cin.</i>										
<i>J. nigra</i>										
<i>Ostrya virg</i>										
<i>Populus gran</i>								42 37	37 19	
<i>P. tremul</i>								24 50	60 56	
<i>Prunus serot</i>		17	2	38 19	224	3619	72	3	43	2
<i>Quercus alba</i>	1319 +1	1715 14+1	5429 15	12		16			42 37+1	26 48
<i>Q. ellipsoid</i>										
<i>Q. macrocarpa</i>										
<i>Q. rubra</i>										
<i>Q. velutina</i>	57 20 18 50 34 20	45 48		45 2229 65 47	13 42 62 82 112	55 50 40 37	72 60 35 32	32	64 35	15 32 36 18 26 34 42 50
<i>Tilia amer</i>				38 39 48						
<i>Ulmus amer</i>										
<i>Ulmus fulva</i>										
<i>Acer neg</i>		12 35 16								
	17 22 24 30	12 19 12 23	10 11 10 21	17 13 19 22	16 15 13 15	20 23 22 28	10 16 28 31	16 34 19 30	16 10 32 29	21 17 8 38
Distance	8 14 10 7	9 13 12 15	20 14 20 27	10 18 11 21	9 11 14 11	13 11 6 8	18 14 12 14	8 15 12 11	23 18 6 25	11 12 6 23

40

70

45

30

65

75

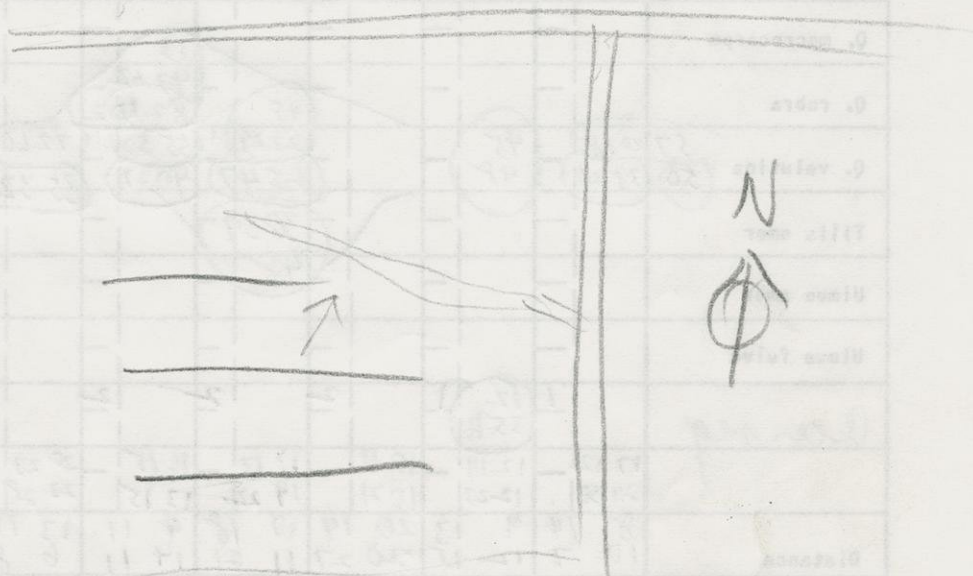
55

Nearly clear cut

Very weedy & dirty woods.

P.T. spider webs, box elder etc.

Very little reprod. - too weedy & brushy.



POINT RECORD TREES

SOUTHERN HARDWOODS

Stand No. 1541

STATION NO.	1	2	3	4	5	6	7	8	9	30
<i>Acer rubrum</i>										
<i>A. saccharum</i>										
<i>Betula papy.</i>										
<i>Carpinus car</i>										
<i>Carya cord</i>										
<i>C. ovata</i>					(27 19)				33	1
<i>Celtis occ</i>										
<i>Crataegus sp.</i>										
<i>Fagus grand</i>										
<i>Fraxinus am</i>										
<i>F. nigra</i>										
<i>Juglans cin.</i>										(72 69)
<i>J. nigra</i>										
<i>Ostrya virg</i>										
<i>Populus gran</i>						42				
<i>P. tremul</i>										1
<i>Prunus serot</i>	(19+1)	(18 14 23 22 45 49)	(23 17)	2	27	2	(45 13)	2	(35+1)	1
<i>Quercus alba</i>	20		(21+1)	1	(28 14 35)		(38 13)	1	(16+2)	(14 45 41+2)
<i>Q. ellipsoid</i>									(27 23 31)	(39 30)
<i>Q. macrocarpa</i>								3		
<i>Q. rubra</i>										
<i>Q. velutina</i>	(62 45 50)	(51 42 31 39 34 51)	(75 38 60 67 34 42 2)				(28 37)	(47 36 21 16 38)	(18 34 84)	(26 16 78 14)
<i>Tilia amer</i>										
<i>Ulmus amer</i>	(97 54 110 19 14)				(13+12 32 69 49 46 54 71)					
<i>Ulmus fulva</i>										
<i>Acer neg</i>			1		2					
	30 18 14 24	28 33 21 21	3 34 14 50	10 21 16 50	42 18 38 25	24 25 44 19	3 31 11 42	23 13 30 13	38 30 23 29	11 14 42 51
Distance	11 14 14 30	16 10 18 17	18 16 9 24	5 14 11 19	17 17 8 23	1 4 10 19	4 14 13 26	24 17 8 9	18 11 10 8	12 8 20 8

70 75 40 80 60 65

Some bigger 1s like these went out, these 2 sq were the 2nd + smaller of 2 stems & were left. other strip split.

Stand No. 15

SOUTHERN HARDWOODS

PROJECT RECORD TREES

$A_{0.4}^{1.1-1.2}$

$A_{1.2-3}$

silt loam

STATION NO.

Acer rubrum

A. spicatum

Betula papyr.

Cornus ser.

Cory. cocc.

C. ovata

Celtis occ.

Crotogon sp.

Liquid. styr.

Fraxinus am.

F. nigra

Ligustrum cin.

L. nigra

Osyr. virgin.

Populus grand.

P. tremul.

Prunus serot.

Quercus alba

Q. elliptica

Q. macrocarpa

Q. rubra

Q. velutina

Tilia am.

Ulmus am.

Ulmus fulva

Distance

C.I.																	Av. B.A.		1541	
Tree	No. : Pts.	No. : Tr.	No. : Dom.	No. Pts. : Sap.	No. : Sap.	F. % : Sap.	D. % : Sap.	II : Seed	F. % : Seed	F. % : Tr.	D. % : Tr.	Dom. % : Trees	I. I. : I. I.	C. I. : C. I.	Tr. : Tr.	St. : St.				
Acerrubrum			②																	
A. saccharum	1	1	64	3	3	3.4	2.5	8.8	88.0	1.3	.8	.7	2.8	28.0	64	32				
Carya cord.			③																	
C. ovata	2	2	79	8	8	9.2	6.7	23.8	107.1	2.6	1.7	.9	5.2	23.4	39.5	26.3				
Celtis occiden.	1	2	86	1	1	1.2	.8	3.0	24.0	1.3	1.7	1.0	4.0	32.0	43	43				
Fagus grand.																				
Fraxinus amer.																				
F. lanceolata																				
F. pennsylvani																				
Juglans cinere	1	1	② 141							1.3	.8	1.6	3.7	28.1	141	70.5				
J. nigra																				
Ostrya virgin.																				
Populus grand.	3	5	177							3.8	4.2	2.0	10.0	43.0	35.4	35.4				
P. tremuloides			⑬	1	1	1.2	.8	3.0	3.0											
Prunus serotin	24	39	⑤ 2065	24	39	27.6	32.5	90.1	324.4	30.8	32.5	23.3	86.6	311.8	52.9	32.8				
Quercus alba	20	31	⑤ 1532	13	14	14.9	11.7	39.9	143.6	25.6	25.8	17.3	68.7	247.3	49.4	26.9				
Q. ellipsoidalis																				
Q. macrocarpa				4	7	4.6	5.8	15.6	15.6											
Q. rubra			⑨																	
Q. velutina	22	35	3730	10	11	11.5	9.2	31.0	77.5	28.2	29.2	42.0	99.4	248.5	106.6	41				
Tilia american			②																	
Ulmus american	3	3	938							3.8	2.5	10.6	16.9	77.7	312.7	44.7				
U. rubra			②																	
Acer negundo	1	1	63	18	31	20.7	25.8	69.7	69.7	1.3	.8	.7	2.8	2.8	63	21				
Crataegus			② 49	5	5	5.7	4.2	14.9	14.9											
	78	120	8875	87	120	100	100	299.8	867.8	100	100	100.1	300.1	1042.6						

Ave. Dist.	
Btw'n Trees	
Jap	
12.7	21.4
Ave. BA	
(Total	
PA ÷ 80)	
74	35.6
No. Trees	
Per acre	
270.1	95.1
Dom. per	
acre	
19,987.4	

2.07 stems/tree
Canopy 62.5%

-174.8

Q. Albi
Q. velut.

STEMS	1	2	3	4	5	6	Total	singles	multiple	tree	stem	% multi	t/acre
Q. Albi	11	14	6				31	11	20	31	57	64.5	1.84
Q. velut.	4	17	7	4	2	1	35	4	31	35	91	88.6	2.6
								15	51	66	148	77.3	2.24

mult	stem	stem
20	46	2.3
31	87	2.81
51	133	2.61

#	% sprt	% multi
28	90.3	71.4
35	100	88.6

Ave. BA
(Total)
5A + 80
No. Trees
Per acre
Dom. per
acre

Q. ovata
Q. tinctoria
Fagus grand.
Fraxinus amer.
P. lanceolata
F. pennsylvanica
Juglans cinerea
J. nigra
Ostrya virgin.
Populus grand.
P. tremuloides
Prunus serotina
Quercus alba
Q. ellipsoidalis
Q. macrocarpa
Q. rubra
Q. velutina
Tilia americana
Ulmus americana
U. rubra

1541
CI = 1042

$$CI = 1042$$

Crataegus

120

$$S_{4, CI} = 868$$

#/acre

95

146.2

112.5

11.2

276

Presence or Frequency
(Common species only)

SOUTHERN UPLAND HARDWOODS

Actaea pachypoda
 ✓ Adiantum pedatum
 Agrimonia gryposepala 4
 Allium tricoccum
 Amphicarpa braceata 1310
 Anemone quinquefolia
 A. virginiana
 ✓ Anemonella thalictroides
 Antennaria sp.
 Aplectrum hiemale
 Apocynum androsaemifolium
 Aquilegia canadensis
 Aralia nudicaulis
 A. racemosa
 Arenaria lateriflora
 Arisaema atrorubens
 Asarum canadensis
 Aster macrophyllus
 A. sagittifolius
 A. shortii
 Athyrium filix-femina 3
 Botrychium virginianum 29
 Brachyelytrum erectum
 Campanula americana
 Carex albursina
 C. pensylvanica 25
 Caulophyllum thalictroides
 Celastrus scandens
 Circaea quadrisulcata 2345678910
 Claytonia virginiana
 Cornus alternifolia
 C. femina 2456
 C. rugosa
 ✓ Corylus americana
 Cryptotaenia canadensis
 Cyripedium pubescens
 Cystopteris fragilis
 Dentaria laciniata
 Desmodium glutinosum
 D. nudiflorum
 Dicentra cucullaria
 Dodecatheon meadia
 Dryopteris spinulosa
 Erigeron pulchellus
 Erythronium albidum
 Eupatorium purpureum

Additional species:

Eupatorium rugosum
 Festuca obtusa
 Fragaria virginiana
 Galium aparine 256910
 G. circaeazans
 G. concinnum 46
 G. lanceolatum
 G. triflorum
 Geranium maculatum 1234610
 Gerardia grandiflora
 Geum canadense 12345610
 Goodyera pubescens
 Habenaria bracteata
 Hackelia virginica
 Hamamelis virginiana
 ✓ Helianthus strumosus
 Hepatica acutiloba
 Heuchera richardsonii
 Hydrastis canadensis
 Hydrophyllum virginianum
 Hystrix patula
 Impatiens capensis
 I. pallida
 Isopyrum biternatum
 Lactuca biennis 234
 Laportea canadensis
 Lathyrus ochroleucus
 Lonicera prolifera
 Lysimachia quadrifolia
 Maianthemum canadensis
 Menispermum canadensis
 Mitella diphylla
 Monarda fistulosa
 Orchis spectabilis
 Oryzopsis racemosa
 Osmorhiza clayton. 124568
 O. longistylis
 Osmunda claytoni
 Panax quinquefolia
 Panicum latifolium
 Parietaria pennsylvanica 23456
 Parthenocissus inserta 12345789
 Phlox divaricata
 Phryma leptostachya 12345689
 Podophyllum peltatum
 Polemonium reptans

Polygonatum canaliculatum 5
 Polygonatum pubescens
 Potentilla simplex
 Prenanthes alba
 Pteridium aquilinum 10
 Pyrola elliptica
 Ranunculus abortivus
 R. recurvatus
 R. septentrionalis
 ✓ Rhus radicans
 Ribes americanum
 R. cynosbati 68
 R. missouriense
 Rosa sp.
 Rubus allegheniensis 4
 ✓ R. occidentalis
 R. strigosus
 Sambucus canadensis 2
 Sanguinaria canadensis
 Sanicula gregaria
 S. marilandica
 Smilacina racemosa 14679
 S. stellata
 Smilax ecirrhata
 S. herbacea
 S. tamnoides
 Solidago altissima
 S. flexicaulis
 S. ulmifolia
 ✓ Thalictrum dioicum
 Tovar virginiana
 Trillium cernuum
 T. flexipes
 T. grandiflorum
 T. recurvatum
 Triosteum perfoliatum
 Uvularia grandiflora
 Veronicastrum virginicum
 Viburnum acerifolium
 V. rafinesquianum 7
 Viola cucullata 24789
 V. pubescens
 Vitis aestivalis 479
 V. riparia 2979
 10 Xanthoxylum americ.
 Zizia aurea

• Prunus 8
 Ulmus 2
 • Prun serot 4
 • Celtis 456
 • Acer neg 5710

• Cirsium 145
 • Lonicera canadensis 1
 • Poa prat 1
 • Nepeta cataria 6

• Erigeron annuus 10

SOUTHERN UPLAND HARDWOODS

1541

- | | | |
|------------------------------------|--------------------------------------|-----------------------------------|
| ✓ <i>Actaea pachypoda</i> | ✓ <i>Galium aparine</i> 50 | ✓ <i>Pteridium aquilinum</i> 15 |
| ✓ <i>Adiantum pedatum</i> | <i>G. circaeazans</i> | <i>Pyrola elliptica</i> |
| ✓ <i>Agrimonia gryposepala</i> 15 | ✓ <i>G. concinnum</i> 30 | ✓ <i>Ranunculus abortivus</i> 5 |
| <i>Amelanchier</i> spp. | <i>G. lanceolatum</i> | <i>R. recurvatus</i> |
| ✓ <i>Amphicarpa bracteata</i> 30 | <i>G. triflorum</i> | <i>R. septentrionalis</i> |
| ✓ <i>Anemonella thalictroides</i> | ✓ <i>Geranium maculatum</i> 65 | ✓ <i>Rhus radicans</i> 15 15 20 |
| <i>Apocynum androsaemifolium</i> | ✓ <i>Geum canadense</i> 70 | ✓ <i>R. cynosbati</i> 10 |
| ✓ <i>Aralia nudicaulis</i> 5 | ✓ <i>Hackelia virginiana</i> 10 | <i>R. missouriense</i> |
| <i>A. racemosa</i> | ✓ <i>Helianthus strumosus</i> | <i>Rosa</i> sp. |
| <i>Arenaria lateriflora</i> | <i>Hepatica acutiloba</i> | ✓ <i>Rubus allegheniensis</i> 35 |
| <i>Arisaema atrorubens</i> | <i>Hydrophyllum virginianum</i> | ✓ <i>R. occidentalis</i> 5 |
| <i>Aster macrophyllus</i> | <i>Hystrix patula</i> | ✓ <i>R. strigosus</i> 30 |
| <i>A. sagittifolius</i> | <i>Impatiens biflora</i> | ✓ <i>Sambucus canadensis</i> 10 |
| <i>A. shortii</i> | ✓ <i>Lactuca biennis</i> 20 | <i>Sanguinaria canadensis</i> |
| ✓ <i>Athyrium filix-femina</i> 15 | <i>Laportea canadensis</i> | <i>Sanicula gregaria</i> |
| ✓ <i>Botrychium virginianum</i> 20 | <i>Lathyrus ochroleucus</i> | <i>S. marilandica</i> |
| <i>Brachyelytrum erectum</i> | <i>Lonicera prolifera</i> | ✓ <i>Smilacina racemosa</i> 45 20 |
| <i>Carex albursina</i> | <i>Lysimachia quadrifolia</i> | <i>S. stellata</i> |
| <i>C. convoluta</i> | <i>Monarda fistulosa</i> | ✓ <i>Smilax ecirrhata</i> 5 |
| ✓ <i>C. pensylvanica</i> 10 | ✓ <i>Osmorhiza claytoni</i> 50 | <i>S. herbacea</i> |
| <i>Caulophyllum thalictroides</i> | <i>O. longistylis</i> | <i>Solidago canadensis</i> |
| ✓ <i>Calcestrus scandens</i> 5 | <i>Oxalis violacea</i> | <i>S. flexicaulis</i> |
| ✓ <i>Circaea quadrisulcata</i> 85 | <i>Panicum latifolium</i> | <i>S. ulmifolia</i> |
| <i>Cornus alternifolia</i> | ✓ <i>Parietaria pensylvanica</i> 40 | <i>Thalictrum dioicum</i> |
| ✓ <i>C. femina</i> 25 | ✓ <i>Parthenocissus vitacea</i> 70 | <i>Triosteum perfoliatum</i> |
| <i>C. rugosa</i> | <i>Phlox divaricata</i> | <i>Uvularia grandiflora</i> |
| ✓ <i>Corylus americana</i> 15 | ✓ <i>Phryma leptostachya</i> 90 | <i>Veronicastrum virginicum</i> |
| <i>Cryptotaenia canadensis</i> | <i>Podophyllum peltatum</i> | <i>Viburnum acerifolium</i> |
| ✓ <i>Desmodium glutinosum</i> 5 | <i>Polemonium reptans</i> | <i>V. lentago</i> |
| <i>D. nudiflorum</i> | ✓ <i>Polygonatum canaliculatum</i> 5 | ✓ <i>V. rafinesquianum</i> 5 |
| <i>Dioscorea villosa</i> | <i>P. pubescens</i> | ✓ <i>Viola cucullata</i> 35 |
| <i>Eupatorium purpureum</i> | <i>Polygonum virginianum</i> | <i>V. pubescens</i> |
| ✓ <i>E. rugosum</i> | <i>Potentilla simplex</i> | <i>Vitris aestivalis</i> |
| <i>Festuca obtusa</i> | <i>Prenanthes alba</i> | ✓ <i>V. riparia</i> 20 |
| <i>Fragaria virginiana</i> | ✓ <i>Prunus virginiana</i> 5 | <i>Zanthoxylum americanum</i> |

Additional species:

- *Cirsium* 20
- *Arctium*
- *Bercheria thumbergia*
- *Aster laterif* 5
- *Erigeron annuus* 5

- *Phalaris arundinacea* 5
- *Leonurus card.* 5
- *Poa prat.* 5
- *Nepeta cat.* 5
- *Urtica dio.* 5
- *Rhus glabra*

- *Acer neg.* 15
- *Celtis* 15
- *Prunus serot.* 15
- *Ulmus* 10

11
42
53

Presence or Frequency
(Common species only)

SOUTHERN UPLAND HARDWOODS

Stand No. 1541
Quadrat No.

Page 2
✓ Actaea pachypoda
Adiantum pedatum
Agrimonia gryposepala 58
Allium tricoccum
Amphicarpa braceata 123
Anemone quinquefolia
A. virginiana
Anemonella thalictroides
Antennaria sp.
Aplectrum hiemale
Apocynum androsaemifolium
Aquilegia canadensis
Aralia nudicaulis 10
A. racemosa
Arenaria lateriflora
Arisaema atrorubens
Asarum canadensis
Aster macrophyllus
A. sagittifolius
A. shortii
Athyrium filix-femina 89
Botrychium virginianum 89
Brachyelytrum erectum
Campanula americana
Carex albursina
C. pensylvanica
Caulophyllum thalictroides
Celastrus scandens 3
Circaea quadrisulcata 1245789
Claytonia virginiana
Cornus alternifolia
C. femina 10
C. rugosa
Corylus americana 137
Cryptotaenia canadensis
Cypripedium pubescens
Cystopteris fragilis
Dentaria laciniata
✓ Desmodium glutinosum 8
D. nudiflorum
Dicentra cucullaria
Dodecatheon meadia
Dryopteris spinulosa
Erigeron pulchellus
Erythronium albidum
Eupatorium purpureum

✓ Eupatorium rugosum
Festuca obtusa
Fragaria virginiana
Galium aparine 1367
G. circaeans
G. concinnum 3789
G. lanceolatum
G. triflorum
Geranium maculatum 2345678
Gerardia grandiflora
Geum canadense 1234567
Goodyera pubescens
Habenaria bracteata
Hackelia virginica 4,7
Hamamelis virginiana
Helianthus strumosus
Hepatica acutiloba
Heuchera richardsonii
Hydrastis canadensis
Hydrophyllum virginianum
Hystrix patula
Impatiens capensis
I. pallida
Isopyrum biternatum
Lactuca biennis 6
Laportea canadensis
Lathyrus ochroleucus
Lonicera prolifera
Lysimachia quadrifolia
Maianthemum canadensis
Menispermum canadensis
Mitella diphylla
Monarda fistulosa
Orchis spectabilis
Oryzopsis racemosa
Osmorhiza clayton. 2457
O. longistylis
Osmunda claytoni
Panax quinquefolia
Panicum latifolium
Parietaria pennsylvanica 24
Parthenocissus inserta 35689
Phlox divaricata
Phryma leptostachya 23456789
Podophyllum peltatum
Polemonium reptans

Polygonatum canaliculatum
Polygonatum pubescens
Potentilla simplex
Prenanthes alba
Pteridium aquilinum 34
Pyrola elliptica
Ranunculus abortivus 4
R. recurvatus
R. septentrionalis
Rhus radicans 256
Ribes americanum
R. cynosbati
R. missouriense
Rosa sp.
Rubus allegheniensis 4567810
R. occidentalis 10
R. strigosus 1246910
Sambucus canadensis 1
Sanguinaria canadensis
Sanicula gregaria
S. marilandica
Smilacina racemosa 57910
S. stellata
✓ Smilax ecirrhata
S. herbacea
S. tamnoides
Solidago altissima
S. flexicaulis
S. ulmifolia
Thalictrum dioicum
Tovara virginiana
Trillium cernuum
T. flexipes
T. grandiflorum
T. recurvatum
Triosteum perfoliatum
Uvularia grandiflora
Veronicastrum virginicum
Viburnum acerifolium
V. rafinesquianum
Viola cucullata 29
V. pubescens
Vitis aestivalis
V. riparia
10 Xanthoxylum americ.
Zizia aurea

Additional species:

Prun serot 8 10
Ulmus 10

• Cirsium 1
• Arctium
• Urtica 10
• Berberis vulgaris
• Phlox glauca

• Phalaris arundinacea 2
• Calluna vulgaris 47
• Aster lateriflorus 44

1541

CJ = 1042

SAP = 868 - 1

H = 258 + 1

