



LIBRARIES

UNIVERSITY OF WISCONSIN-MADISON

Site 1520: Rock County, Township 3N, Range 10E, Section 22. 1956-08

[s.l.]: [s.n.], 1956-08

<https://digital.library.wisc.edu/1711.dl/LGHMDDU6MDW6L8T>

This material may be protected by copyright law (Title 17, US Code).

For information on re-use see:

<http://digital.library.wisc.edu/1711.dl/Copyright>

The libraries provide public access to a wide range of material, including online exhibits, digitized collections, archival finding aids, our catalog, online articles, and a growing range of materials in many media.

When possible, we provide rights information in catalog records, finding aids, and other metadata that accompanies collections or items. However, it is always the user's obligation to evaluate copyright and rights issues in light of their own use.

Data Form No. 20

Plant Ecology Research

Univ. of Wisconsin

STAND RECORD

FORESTS

Stand No. 8520

Name:

County: Rock

Date: Aug. 1956

Size of Stand: 25 acres

Forest Type: *Q. velutina* - *Q. alba*

Topography: level

Locality: Magnolia

T: 3N

R: 10E

Sec: NW of SW 22

Observers: Rogers

Size of Area Sampled: 10 acres

Soil Type:

Slope: 0°

Directions:

Condition of Stand:

Clear cut c. 12 yrs.
Mostly stumps & splits

Open Grown Trees: None

% Canopy: 55%

Stumps:

1.	4.	7.	10.
2.	5.	8.	11.
3.	6.	9.	12.

Soil Data:

	pH	N	P	K	Ca	Mg	Org. Mat.	Colloids	W.H.C.
A ₀									
A ₁	5.9								71.6
A ₂									
B									

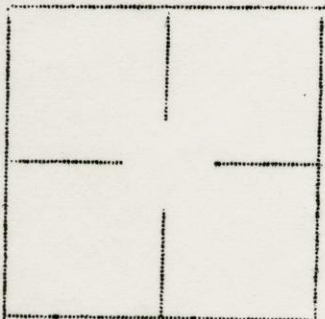
DEPTH

CHARACTERISTICS (Color, Texture, Structure, etc.)

A ₀	$\frac{1}{16}$ "	
A ₁	1½ - 2"	
A ₂		
B		

Parent Material:

Map:



1520 Stand #

Clear

Stand #

1520

[illegible]

1520

POINT RECORD TREES

SOUTHERN HARDWOODS

Stand No. 22

STATION NO.	1	2	3	4	5	6	7	8	9	10
Acer rubrum										
A. saccharum										
Betula papy.										
Carpinus car										
Carya cord								1		
C. ovata					1	1	1	2		1
Celtis occ										
Crataegus sp.										
Fagus grand										
Fraxinus am										
F. nigra										
Juglans cin.										
J. nigra	145									
Ostrya virg										
Populus gran										
P. tremul										
Prunus serot	(30 15)	(12 14 22)		2 15					1 17	
Quercus alba			2 18	1 (18 15+1) (17 12)	(23 13)		28	1 22	1 (17 20+1) (15+2) 3	(19 12)
Q. ellipsoid	23	50	(23 24) (17 1+25)	(50 55) (20 14+1)	(18 27 23) (18+1)	13 13 14 22	(20 40) (15 20 23) (30)		(35 35+2)	
Q. macrocarpa			(14+1)							
Q. rubra								(23+2)		
Q. velutina	1	1		1	2	4	2 (16 18) 16	(17 14) (17 28)	1	
Tilia amer										
Ulmus amer										
Ulmus fulva	(29 26)	3 (40 35) 60	1	2	1	1			1	
	7 10 6 19	12 7 11 11	8 15 10 21	8 19 24 30	12 16 19 22	16 28 17 34	21 19 12 22	10 26 18 35	7 28 7 15	14 11 18 23
Distance	9 17 14 21	10 12 10 9	8 12 9 9	10 13 8 6	14 15 12 11	7 9 8 10	8 15 15 6	9 7 7 14	8 14 22 8	9 13 8 14

Black X Pin complex. Nearly 100% stump sprouts incl. most of sapling shoot (ie. oak)

3rd grth stuff, grow from slup grow trees.



Light 8000 - 7600

100	100
180	120
	140
220	180
200	
180	150
880	1570 - 690

$$\frac{157}{7800} = 2.01\%$$

Soil A₀ $\frac{1}{16}$ "
A₁ 2" - $1\frac{1}{2}$ "

Silt loam verging on sand

5/16 x 9	293
9 x 5	9
5/144	5/207
28.8	41.4
32	32
60° F	72° F
Soil	Air

Temp. Soil 16° C 17°
Air 23° C 23°

71.7%
16.5°
23°

Water ret. capac. 50 cc 10 sec.
15 sec. 12.5 sec

POINT RECORD TREES

SOUTHERN HARDWOODS

Stand No. 22

STATION NO.	1	2	3	4	5	6	7	8	9	20
Acer rubrum										
A. saccharum										
Betula papy.										
Carpinus car										
Carya cord		16 2422			1	1	1	1		
C. ovata			2		2		1			
Celtis occ										
Crataegus sp.										
Fagus grand										
Fraxinus am										
F. nigra										
Juglans cin.										
J. nigra										
Ostrya virg										
Populus gran										
P. tremul										
Prunus serot	2	1	1	20	2	17	1	19	1	2
Quercus alba	19 25 21	1	14				27 16 13 12+1	20 16 28 21	2	13 14+1 3 22 15
Q. ellipsoid		30	22 29 35 21	25 27 30 20 21	12 60 29	23 19 3	22 28 40 23 18			
Q. macrocarpa			40 35		25 22 13		27 29			
Q. rubra										
Q. velutina	19 19 22 23 12	1	50 21	2			13 27 3	18+1	1	22 17+2 19 17 17 17 29+1
Tilia amer										
Ulmus amer										
Ulmus fulva										
Acer neg.										
	7 12 11 36	22 16 18 20	11 18 10 29	8 13 18 15	3 27 16 16	4 20 10 21	19 14 13 32	11 18 20 23	20 10 21 19	22 10 19 16
Distance	9 10 15 14	13 7 7 12	11 8 11 22	6 3 8 13	12 7 4 16	7 14 14 12	16 10 20 17	10 6 12 9	9 14 11 20	6 7 9 18



Q. alba sprouting from top of
stumps which appear to have split
from top of a stump. #16

Q. velut 18 yrs. $R = 3.4''$
B.A. = 36

B.A. at breast ht = 17-18

∴ these *Q. velut* 15-20" B.A. c. 15-20 yrs old

$$A = \pi R^2$$

$$A = 35$$

$$A = 3.7416$$

$$11.56$$

$$188496$$

$$157080$$

$$31416$$

$$31416$$

$$3.4$$

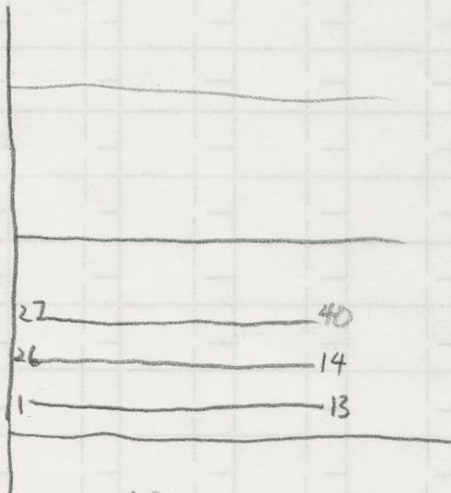
$$3.4$$

$$13.6$$

$$102$$

$$11.56$$

Quite even aged stand of
black oaks. Mostly 3rd growth I think



1520

POINT RECORD TREES

SOUTHERN HARDWOODS

Stand No. 22

STATION NO.	21	2	3	4	5	6	7	8	9	30
Acer rubrum										
A. saccharum										
Betula papy.										
Carpinus car										
Carya cord										1
C. ovata		2	13 15 +2	2	13+2	4				
Celtis occ										
Crataegus sp.										
Fagus grand										
Fraxinus am										
F. nigra										
Juglans cin.										
J. nigra										28
Ostrya virg										
Populus gran										
P. tremul										
Prunus serot	1	1	1		1		3	2	2	3
Quercus alba	15 16 +1			2	24 27 30				1	
Q. ellipsoid		16 23+3 35+2	30 17 26 24+1 13 35	35 35+1	35 21 15 14 14 13	30 13 21 13 14+2	13 20 18 19	18 12 18+		35
Q. macrocarpa										
Q. rubra		35 14 12+1								
Q. velutina	30 13+4 25 30 21	2 18 18 28+1 16+1	16 14	2 12+2		2 13 26 20+2	1 18+1 26+1	12+2	22 18 29 18 22 12 13+1	21+2
Tilia amer										
Ulmus amer										23
Ulmus fulva					1					
Distance	8 22 7 12 6 10 11 20	8 4 13 18 6 8 8 9	8 6 8 22 12 19 22 11	8 24 11 16 11 25 9 7	11 5 12 17 5 14 6 10	11 11 18 14 14 11 19 16	14 11 8 15 10 10 13 13	7 17 11 12 13 10 12 18	7 14 8 19 9 12 10 18	21 12 16 14 10 13 7 14

11

12

13

14

15

POINT RECORD TREES

SOUTHERN HARDWOODS

Stand No. 22

STATION NO.	31	2	3	4	5	6	7	8	9	40
Acer rubrum										
A. saccharum										
Betula papy.										
Carpinus car										
Carya cord										
C. ovata			4 15 13 +2							
Celtis occ										
Crataegus sp.										
Fagus grand										
Fraxinus am										
F. nigra										
Juglans cin.										
J. nigra										
Ostrya virg										
Populus gran										
P. tremul										
Prunus serot	14 2	18	18 21 +2	3	22 15 16 +1 35 +2	2 14			3	2 17 13 15 +1
Quercus alba	22 18 +2							24 16 17 12 +1	19 20 17 18 17 25	1
Q. ellipsoid		50 18 12	28 +2 14 13 +1	12 19 19 +2		15 27 16 +2	15 +3 15 14 +2	30 27 +3		22 14 30 28
Q. macrocarpa				12 22 28 +5				18 +1		
Q. rubra							17 12 +2			
Q. velutina	17 +2 22 +2	2 17 12 12 +4	2 16 12 +1	16 12	20 +3 14	18 16 +1	2 +2 16 15 +2	18 15	25 +2 15 +2	13 +2
Tilia amer						15 22				
Ulmus amer										
Ulmus fulva										
	11 15 22 25	7 9 10 15	3 7 6 6	12 7 12 12	3 14 8 18	6 15 13 19	7 8 8 23	8 11 8 13	17 16 7 13	11 26 10 21
Distance	5 13 13 14	11 9 10 13	10 15 12 25	9 15 18 10	9 16 9 19	21 24 11 15	10 10 10 9	12 10 8 20	11 13 8 19	6 11 8 18

CI 1520

CI = 947

ACER
NEGUNDA

	Sap.	12- 19	20- 28	29- 38	39- 50	51- 63	64- 78	79- 95	96- 113	114- 132	133- 153	154- 176	177- 201	202- 254	255- 314	315- 380	381- 452	
Pop. trem.																		
Quercus ellip.		1																
Q. macrocarp.	10	8	3														6	3
Q. velut.	58	44	42(21)	35(24)	20(25)	6(5)	2(2)										208	105(80)153
Prun. serot.	55	43	8(2)	3(3)	1(1)	1(5)	1(2)										28	14(13)26
Querc. alba	30	23	7(4)	18(23)	2												54	27(27)54
Pop. grand.																		
Carya ovata	27	21	3(2)														6	3(2)4
Querc. rubra																		
Juglans nig.			1							1							4	2
Frax. amer.																		
Acer rubrum																		
Tilia amer.																		
Jug. cinerea																		
Ulmus amer.			1														2	1
Celtis occ.																		
Ulm. rubra	13	10			1(1)	1(1)	1										6	3(2)4
Carya cord.	13	10	1	1(1)													4	2(1)2
Ostrya virg.																		
Acer sacc.																		

160

Sap CI = 1180

160(125)
248

#/ave

207

292.6

23.9

2

318

Tree	:No. :No. :		No.Pts.:No. :		:F.% :D.% :		:F.% :D.% :		:Dom.% :		:I.I. :C.I. :		:Tree :Stem :			
	Pts.	Tr.	Dom.	Sap.	Sap.	Sap.	Sap.	Seed	Seed	Tr.	Tr.	Trees	I.I.	C.I.	Tree	Stem
Acerrubrum																
A. saccharum																
Carya cord.	1	2	③ 62	10	10	9.3	6.2	23.2	199.5	1.2	1.2	1	3.4	29.2	31	20.7
C. ovata	3	3	⑤ 69	13	21	12	13.1	37.6	169.2	3.7	1.9	1.1	6.7	30.1	23	13.8
Celtis occiden.																
Fagus grand.																
Fraxinus amer.																
F. lanceolata																
F. pennsylvani																
Juglans cinere																
J. nigra	2	2	173							2.4	1.2	2.8	6.4	40.3	86.5	
Ostrya virgin.																
Populus grand.																
P. tremuloides																
Prunus serotin	13	14	② 641	26	43	24.1	26.9	76.5	275.4	15.9	8.7	10.3	34.9	125.6	45.8	23.7
Quercus alba	19	27	⑤ 1031	16	23	14.8	14.4	43.8	157.7	23.2	16.9	16.5	56.6	203.8	38.2	19.1
Q. ellipsoidalis																
Q. macrocarpa	2	3	55	6	8	5.6	5	15.9	15.9	2.4	1.9	.9	5.2	5.2	18.3	18.3
Q. rubra			① 85													
Q. velutina	39	105	3999	29	44	26.9	27.5	81.6	204	47.6	65.6	64.1	177.3	443.2	38.1	21.6
Tilia american																
Ulmus american	1	1	23							1.2	.6	.4	2.2	10.1	23	
U. rubra	2	3	⑤ 190	7	10	6.5	6.2	19	155.8	2.4	1.9	3	7.3	59.9	63.3	38
Acer negundo				1	1	.9	.6	2.2	2.2							
			② 85													
	82	160	6243	108	160	100.1	99.9	299.8	1179.7	100	99.9	100.1	300	947.4		

Ave. Dist.
Btw'n Trees
11.7 sap
14.5

Ave. BA
(Total
PA ÷ 80)
39 stem
21.9
No. Trees
Per acre
318.2 sap
207.2

Dom. per
acre
12,409.8

Ave. Dist.

Btw'n Trees

11.7 ^{SAP}
14.5

Ave. BA

(Total

PA ÷ 80)

39 ^{STEM}
21.9

No. Trees

Per acre

318.2 ^{SAP}
207.2Dom. per
acre

12,409.8

1.78 stem/tree

+ 232.3

Trees left Paw. 46 28 1.64 29

99.6%

	12-22	23-33	34-44	45-55	56-66	67-77	78-88	89-99	100-129	130-149	1	2	3	4	5	6
CARYA CORD	2	1									1	1				
CAR. OVATA	5		1	1	1	1	1	1	1	1	1	2				
JUG. NIGRA		1								1	2					
PR. SEROT.	19	1	4	2	1						8	2	3			
Q. ALBA	42	11	1								9	13	1	4		
Q. MAC.	3										3					
Q. VELUT.	121	44	14	5	1						46	42	15	1		
ULM. AMER.		1									1					
ULM. FULVA		2	2		1						1	2				
	192	61	21	7	3						1	285	72	62	19	5

	singles	mult.	trees	stems	% mult.	stems/tree	mult.	stem	stem/tree	#	% split	% mult.
Q. alba	9	18	27	54	66.7	2	18	45	2.5	20	74.1	90
Q. mac	3	0	3	3	0	1						
Q. velut.	46	59	105	185	56.2	1.76	59	139	2.36	85	81	69.4
	58	77	135	242	57	1.79	77	184	2.39			
No Q mac		77	132	239	58.3	1.81						

first signs

SOUTHERN UPLAND HARDWOODS

Presence 1520

- | | | |
|------------------------------------|-------------------------------------|----------------------------------|
| ✓ <i>Actaea pachypoda</i> 5 | ✓ <i>Galium aparine</i> 35 | <i>Pteridium aquilinum</i> |
| <i>Adiantum pedatum</i> | <i>G. circaeazans</i> | ✓ <i>Pyrola elliptica</i> 5 |
| ✓ <i>Agrimonia gryposepala</i> 10 | ✓ <i>G. concinnum</i> 5 | ✓ <i>Ranunculus abortivus</i> 15 |
| ✓ <i>Amelanchier</i> spp. 5 | <i>G. lanceolatum</i> | <i>R. recurvatus</i> |
| <i>Amphicarpa bracteata</i> | <i>G. triflorum</i> | <i>R. septentrionalis</i> |
| <i>Anemonella thalictroides</i> | ✓ <i>Geranium maculatum</i> 70 | ✓ <i>Rhus radicans</i> 35 |
| <i>Apocynum androsaemifolium</i> | ✓ <i>Geum canadense</i> 30 | ✓ <i>R. cynosbati</i> 25 |
| <i>Aralia nudicaulis</i> | ✓ <i>Hackelia virginiana</i> | <i>R. missouriense</i> |
| <i>A. racemosa</i> | ✓ <i>Helianthus strumosus</i> 5 | <i>Rosa</i> sp. |
| <i>Arenaria lateriflora</i> | <i>Hepatica acutiloba</i> | ✓ <i>Rubus allegheniensis</i> 25 |
| <i>Arisaema atrorubens</i> | <i>Hydrophyllum virginianum</i> | ✓ <i>R. occidentalis</i> 10 |
| <i>Aster macrophyllus</i> | <i>Hystrix patula</i> | ✓ <i>R. strigosus</i> 15 |
| ✓ <i>A. sagittifolius</i> 10 | <i>Impatiens biflora</i> | ✓ <i>Sambucus canadensis</i> 15 |
| <i>A. shortii</i> | ✓ <i>Lactuca biennis</i> 20 | <i>Sanguinaria canadensis</i> |
| <i>Athyrium filix-femina</i> | <i>Laportea canadensis</i> | ✓ <i>Sanicula gregaria</i> 5 |
| ✓ <i>Botrychium virginianum</i> 15 | <i>Lathyrus ochroleucus</i> | <i>S. marilandica</i> |
| <i>Brachyelytrum erectum</i> | <i>Lonicera prolifera</i> | ✓ <i>Smilacina racemosa</i> 60 |
| <i>Carex albursina</i> | <i>Lysimachia quadrifolia</i> | ✓ <i>S. stellata</i> 5 |
| ✓ <i>C. convoluta</i> | ✓ <i>Monarda fistulosa</i> | ✓ <i>Smilax ecirrhata</i> 5 |
| ✓ <i>C. pensylvanica</i> 10 | ✓ <i>Osmorhiza claytoni</i> 65 | ✓ <i>S. herbacea</i> |
| <i>Caulophyllum thalictroides</i> | ✓ <i>O. longistylis</i> | ✓ <i>Solidago canadensis</i> 5 |
| <i>Celastrus scandens</i> | <i>Oxalis violacea</i> | <i>S. flexicaulis</i> |
| ✓ <i>Circaea quadrisulcata</i> 65 | <i>Panicum latifolium</i> | <i>S. ulmifolia</i> |
| <i>Cornus alternifolia</i> | ✓ <i>Parietaria pensylvanica</i> 25 | <i>Thalictrum dioicum</i> |
| ✓ <i>C. femina</i> 45 | ✓ <i>Parthenocissus vitacea</i> 40 | <i>Tricostem perfoliatum</i> |
| <i>C. rugosa</i> | <i>Phlox divaricata</i> | <i>Uvularia grandiflora</i> |
| ✓ <i>Corylus americana</i> 45 | ✓ <i>Phryma leptostachya</i> 70 | <i>Veronicastrum virginicum</i> |
| <i>Cryptotaenia canadensis</i> | <i>Podophyllum peltatum</i> | <i>Viburnum acerifolium</i> |
| <i>Desmodium glutinosum</i> | <i>Polemonium reptans</i> | <i>V. lentago</i> |
| <i>D. nudiflorum</i> | <i>Polygonatum canaliculatum</i> | <i>V. rafinesquianum</i> |
| <i>Dioscorea villosa</i> | <i>P. pubescens</i> | ✓ <i>Viola cucullata</i> 10 |
| <i>Eupatorium purpureum</i> | <i>Polygonum virginianum</i> | <i>V. pubescens</i> |
| <i>E. rugosum</i> | ✓ <i>Potentilla simplex</i> 15 | <i>Vitris aestivalis</i> |
| <i>Festuca obtusa</i> | <i>Prenanthes alba</i> | ✓ <i>V. riparia</i> 20 |
| ✓ <i>Fragaria virginiana</i> 5 | ✓ <i>Prunus virginiana</i> | <i>Zanthoxylum americanum</i> |

Additional species:

- *Arctium minus*
- *Asclepias exaltata*
- *Cirsium*
- *Ambrosia trifida* 5
- *Prunus* 10
- *P. velut* 10

- *Hepeta catarina*
- *Poa prat.* 10

- *Urtica dioica* 5

Campy 65 - 75 - 75 - 50 - 65 - 80 - 75
55 - 75 - 80 - 80 - 75 - 70

70.8%

Presence or Frequency
(Common species only)

SOUTHERN UPLAND HARDWOODS

Quadrat No.

Actaea pachypoda 12
Adiantum pedatum
Agrimonia gryposepala 14, 17
Allium tricoccum
Amphicarpa braceata
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 2, 13
A. shortii
Athyrium filix-femina
Botrychium virginianum 11, 16, 17
Brachyelytrum erectum
Campanula americana
Carex albursina
C. pensylvanica 3, 15
Caulophyllum thalictroides
Celastrus scandens
Circaea quadrisulcata 12, 45, 67, 89, 101, 12
Claytonia virginiana 13, 17, 19
Cornus alternifolia
C. femina 23, 46, 11, 12, 16, 19, 20
C. rugosa
Corylus americana 3, 10, 12, 14, 15, 16, 18, 19, 20
Cryptotaenia canadensis
Cypripedium pubescens
Cystopteris fragilis
Dentaria laciniata
Desmodium glutinosum
D. nudiflorum
Dicentra cucullaria
Dodecatheon meadia
Dryopteris spinulosa
Erigeron pulchellus
Erythronium albidum
Eupatorium purpureum

Eupatorium rugosum
Festuca obtusa
Fragaria virginiana 6
Galium aparine 4, 10, 11, 13, 17, 19
G. circaezans
G. concinnum 6
G. lanceolatum
G. triflorum
Geranium maculatum 1, 4, 5, 6, 7, 8, 9, 10, 11
Gerardia grandiflora 15, 16, 17, 18
Geum canadense 12, 34, 79
Goodyera pubescens
Habenaria bracteata
Hackelia virginica
Hamamelis virginiana
Helianthus strumosus 14
Hepatica acutiloba
Heuchera richardsonii
Hydrastis canadensis
Hydrophyllum virginianum
Hystrix patula
Impatiens capensis
I. pallida
Isopyrum biternatum
Lactuca biennis 7, 12, 18, 20
Laportea canadensis
Lathyrus ochroleucus
Lonicera prolifera
Lysimachia quadrifolia
Maianthemum canadensis
Menispermum canadensis
Mitella diphylla
Monarda fistulosa
Orchis spectabilis
Oryzopsis racemosa
Osmorhiza clayton. 14, 67, 89, 101, 112, 14
O. longistylis 16, 17, 19
Osmunda claytoni
Panax quinquefolia
Panicum latifolium
Parietaria pennsylvanica 34, 71, 27
Parthenocissus inserta 4, 5, 7, 8, 9, 11, 17
Phlox divaricata 19
Phryma leptostachya 24, 56, 79, 111, 13
Podophyllum peltatum 14, 15, 16, 17, 18
Polemonium reptans

Polygonatum canaliculatum
Polygonatum pubescens
Potentilla simplex 2, 14, 18
Prenanthes alba
Pteridium aquilinum
Pyrola elliptica 9
Ranunculus abortivus 29, 18
R. recurvatus
R. septentrionalis
Rhus radicans 67, 91, 103, 19, 20
Ribes americanum
R. cynosbati 56, 10, 18
R. missouriense
Rosa sp.
Rubus allegheniensis 6, 11, 14, 15, 20
R. occidentalis 6, 13
R. strigosus 29, 15
Sambucus canadensis 8, 11, 20
Sanguinaria canadensis
Sanicula gregaria 3
S. marilandica
Smilacina racemosa 34, 68, 91, 101, 112
S. stellata 20 135, 19, 20
Smilax ecirrhata 11
S. herbacea
S. tamnoides
Solidago altissima 11
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 14, 17
V. pubescens
Vitis aestivalis
V. riparia 45, 10, 12
Xanthoxylum americ.
Zizia aurea

Additional species:

Urtica dioica 9

Ambrosia trifida 2

Quercus rubra 24

Prunus serotina 4, 15

Poa pratensis 19, 46

Anemone 9

#1520

CI=947

Sap - 1180 + 1

H - 268 + 2

150

100

50

25

10

5

2.5

1

1

4

7

10

13

16

19

22

25

