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Site 1501:Dane County, Township 8N, Range 8E, Section 31. 1956-07

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Data Form No. 20

Plant Ecology Research

Univ. of Wisconsin

STAND RECORD

FORESTS

Stand No. 51501

Name:

County: Dane

Date: July 1956

Size of Stand: 15 acres

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

Topography: level

Locality: Cross Plains

T: 8N

R: 8E

Sec: SW of NE 31

Observers: Rogers

Size of Area Sampled: 10 acres

Soil Type:

Slope:

Directions:

Condition of Stand:

Clean cut c. 17 yrs. (1938-40)
Mostly stump sprouts

Open Grown Trees: None

% Canopy: 60

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	6								88.2
A ₂									
B									

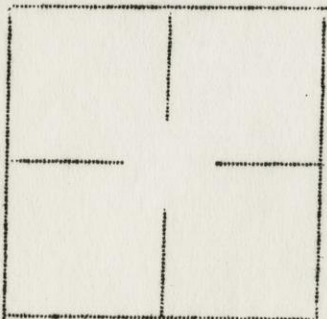
DEPTH

CHARACTERISTICS (Color, Texture, Structure, etc.)

A ₀	1/4 - 1/2"	
A ₁	1 1/2 - 2"	silt loam
A ₂		
B		

Parent Material:

Map:



Stand No. 2c

{

POINT RECORD TREES

SOUTHERN HARDWOODS

Stand No. 50

Soil - A₀ $\frac{1}{4}$ " $\frac{1}{2}$ " ^{texture} ^{type} loam Miami
 A₁ $1\frac{1}{2}$ " 2"

Soil & air temp. soil 18 $\frac{1}{2}$ °C air 22° C
 19 22 $\frac{1}{2}$

84.2%

18.7

22.2

Height 6500 fc outside

90	140
250	110
90	160
140	130
90	100
660	640
1300	

$$\frac{130}{6500} = 2.00\%$$

Soil Water permeability - 50 cc 10 sec.
 8
 5
 7

7.5 sec

Stand No. 2C

tree dist.	tree size	app dist.
1	1	1
2	2	2
3	3	3
4	4	4
5	5	5
6	6	6
7	7	7
8	8	8
9	9	9
10	10	10
11	11	11
12	12	12
13	13	13
14	14	14
15	15	15
16	16	16
17	17	17
18	18	18
19	19	19
20	20	20
21	21	21
22	22	22
23	23	23
24	24	24
25	25	25
26	26	26
27	27	27
28	28	28
29	29	29
30	30	30
31	31	31
32	32	32
33	33	33
34	34	34
35	35	35
36	36	36
37	37	37
38	38	38
39	39	39
40	40	40
41	41	41
42	42	42
43	43	43
44	44	44
45	45	45
46	46	46
47	47	47
48	48	48
49	49	49
50	50	50
51	51	51
52	52	52
53	53	53
54	54	54
55	55	55
56	56	56
57	57	57
58	58	58
59	59	59
60	60	60
61	61	61
62	62	62
63	63	63
64	64	64
65	65	65
66	66	66
67	67	67
68	68	68
69	69	69
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71	71	71
72	72	72
73	73	73
74	74	74
75	75	75
76	76	76
77	77	77
78	78	78
79	79	79
80	80	80
81	81	81
82	82	82
83	83	83
84	84	84
85	85	85
86	86	86
87	87	87
88	88	88
89	89	89
90	90	90
91	91	91
92	92	92
93	93	93
94	94	94
95	95	95
96	96	96
97	97	97
98	98	98
99	99	99
100	100	100

Mr. Aker - Woods 300 X 100 yds
(10 acres)

S. half cut more or less clear 1938-40

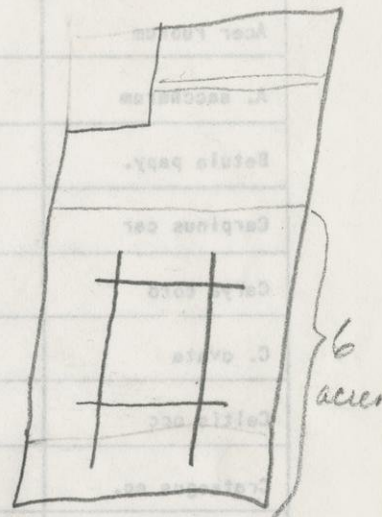
Red, black & white oaks - for lumber

N. half cut, few trees now & then as
needed. A few large ones remain in N $\frac{1}{3}$

Land flat.

Increment borings showed trees to be 10-20 years old

No grazing



1501

July 10

Stand No. 2C

POINT RECORD TREES

SOUTHERN HARDWOODS

STATION NO.	1	2	3	4	5	6	7	8	9	10
Acer rubrum										
A. saccharum										
Betula papy.										
Carpinus car										
Carya cord										
C. ovata										
Celtis occ										
Crataegus sp.										
Fagus grand										
Fraxinus am						15		35		
F. nigra										
Juglans cin.										
J. nigra										
Ostrya virg										
Populus gran										
P. tremul		12	7							45
Prunus serot	30	16	11	35	23	22	20	13	65	60
		8	29	18			28	20	24	40
Quercus alba	35	25	19	18	4	23	24	15	35	17
				13	14	15	28	20	24	26
Q. ellipsoid	40	70		21	11	14	22	14	22	20
	29	50		17	10	35	30	15	16	45
Q. macrocarpa		35								
Q. rubra										
Q. velutina										
Tilia amer										
Ulmus amer			35				26		33	
Ulmus fulva										
Morus sp.										55
Distance	7	8	8	28	4	14	17	10	20	18
	9	13	9	23	4	8	4	21	10	19
	8	9	8	23	25	15	17	10	19	15
	13	15	28	9	15	10	4	18	10	20

Stumps

July 10

Stand No. 2C

POINT RECORD TREES

SOUTHERN HARDWOODS

STATION NO.	1	2	3	4	5	6	7	8	9	10
Acer rubrum										
A. saccharum										
Betula papy.										
Carpinus car										
Carya cord										
C. ovata										
Celtis occ										
Crataegus sp.										
Fagus grand										
Fraxinus am										
F. nigra										
Juglans cin.										
J. nigra										
Ostrya virg										
Populus gran										
P. tremul										
Prunus serot	24	4 35	45 12 30 25	16	32 30	39				
Quercus alba	22 (4)	8	14 23	30 20 (1)	40					
Q. ellipsoid	12	14 21 (4)	5	8 20	11 40 (1)	7				
Q. macrocarpa	35 (1)	30 22 (5)	26		40 35	16				
Q. rubra										
Q. velutina										
Tilia amer										
Ulmus amer										
Ulmus fulva										
Distance	15 20	4 14	8 8	16 7	11 18					
	17 12	8 24	11 21	10 14	11 23					
		4 14		7 16						
		8 17		10 14						

Stumps

POINT RECORD TREES

SOUTHERN HARDWOODS

For det. stems/branches

Stand No. 2

STATION NO.	1	2	3	4	5	6	7	8	9	10
Acer rubrum										
A. saccharum										
Betula papy.										
Carpinus car										
Carya cord										
C. ovata										
Celtis occ										
Crataegus sp.										
Fagus grand										
Fraxinus am										
F. nigra										
Juglans cin.										
J. nigra										
Ostrya virg										
Populus gran										
P. tremul										
Prunus serot	13 19	17 12+1	19+1 24	23 15	12 15	28 55	28 27	14+2	19 15	16 21
Quercus alba	23+1 25	20 40+1	16 25 30	24 12	12+2	26 25 19 12	35 35 25 20	12 14 19 19	35 35	16 24 55 35+1
Q. ellipsoid	40+1	45 35	17 22 12	45 14 16+1	30 35 12	45 35 26	21 30 45 14	35 45 20 45	35 25 71	35 40
Q. macrocarpa										
Q. rubra										
Q. velutina	20 25+1	55 17	21 30 15 15 21	25 29	22 12 25 35 35	13 35 13 35	30 25 18	15 20 25 35	45 28 25	20 12 15
Tilia amer										
Ulmus amer	35									
Ulmus fulva										
Distance										

$$\frac{392}{19} = 20.6$$

$$\frac{28 \times 3}{28 \times 29 \times 25}$$

$$\frac{798}{32} = 24.9$$

$$\frac{1638}{60} = 27.3$$

Not used - Tree B.A. data taken in diff. way from other stands

1501

C.I.

Tree	No. : Pts.	No. : Tr.	No. : Dom.	No. : Sap.	No. : Sap.	F. % : Sap.	D. % : Sap.	II : Seed	F. % : Seed	D. % : Tr.	Dom. % : Tr.	I.I. : Trees	C.I. : Trees	Ave. : BA
Acerrubrum														
A. saccharum														
Carya cord.														
C. ovata														
Celtis occiden.														
Fagus grand.														
Fraxinus amer.	2	2	70	2	2	2.9	1.7	6.9	46.2	2.7	1.7	1.9	6.3	42.2
F. lanceolata														
F. pennsylvani														
Juglans cinere														
J. nigra														
Ostrya virgin.														
Populus grand.														
P. tremuloides														
Prunus serotin	16	22	772	23	46	33.8	38.3	108.1	389.2	21.3	18.3	21.4	61	219.6
Quercus alba	22	34	896	20	29	29.4	24.2	80.4	289.4	29.3	28.3	24.9	82.5	297
Q. ellipsoidalis														
Q. macrocarpa	1	1	28	1	1	1.5	.8	3.4	3.4	1.3	.8	.8	2.9	2.9
Q. rubra														
Q. velutina	28	55	1620	20	40	29.4	33.3	94	235	37.3	45.8	45.0	128.1	320.2
Tilia american														
Ulmus american	4	4	128	2	2	2.9	1.7	6.9	31.7	5.3	3.3	3.6	12.2	56.7
U. rubra	1	1	35							1.3	.8	1	3.1	25.4
Morus alba	1	1	55							1.3	.8	1.5	3.6	3.6
	75	120	3604	68	120	99.9	100	994.9	99.8	99.8	100.1	967.0		

Ave. Dist.
Btw'n Trees

13.9 20.85

Ave. BA
(Total
BA = 80)
30

No. Trees
Per acre

225.5 100.2

Dom. per
acre

6765

Dist. btw stumps

13.6 ft.

No. stumps/ACRE

235.4

Sap. decr.
5.4

+ 28.4

Tree except *P. am.* stems trees 32 31 1.03 4

Size Classes

	12-30	31-50	51-75	76-100	101+	12-22	23-33	34-44	45-55	56-66	67-77	78-88	89-99	100	
<i>Frax. am.</i>		2						2							<i>A. saccharum</i>
<i>Prun. serot.</i>	12	6	4			4	8	5	1	3	1				<i>Carpa cord.</i>
<i>Querc. alba</i>	27	6		1		17	10	4	2						<i>Celtis occident.</i>
<i>Q. mac.</i>	1						1								<i>Ulmus am.</i>
<i>Q. velut.</i>	37	14	3	1		26	11	11	4	1	1		1		<i>V. lanceolata</i>
<i>Ulmus am.</i>	2	2					2	2							<i>P. pennsylvan.</i>
<i>U. fulva</i>		1						1							<i>J. cinerea</i>
<i>Morus</i>			1						1						<i>J. nigra</i>

(Stems)

Stump Sprouts

	1	2	3	4	5	6
<i>Querc. alba</i>	8	5	1	1	1	1
<i>Q. velut.</i>	6	7	5	4	1	1

singles	mult.	tree	stem	% mult.	stem/tree
8	9	17	36	52.9	2.12
6	18	24	62	75	2.58
14	27	41	98	65.9	2.39

mult.	stem	stem/tree
9	28	3.11
18	56	3.11
27	84	3.11

shot origin

	# trees	% shot	# mult.	% mult.	
Q. alba	23	37	62.2	20	87
Q. vel.	37	48	77.1	35	94.6

<i>Q. rubra</i>	23	37	62.2	20	87
<i>Q. velutina</i>	37	48	77.1	35	94.6
<i>Tilia americana</i>					
<i>Ulmus americana</i>					
<i>U. rubra</i>					

Morus
Alba.

[illegible]

July 5, 7, 8, 1956

Stand No. 2 C

Quadrat No.

Presence or Frequency
(Common species only)

SOUTHERN UPLAND HARDWOODS

Actaea pachypoda
 Adiantum pedatum
 Agrimonia gryposepala 8, 15
 Allium tricoccum
 Amphicarpa braceata 6, 19, 20
 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 8, 11, 14
 A. shortii
 Athyrium filix-femina 13
 Botrychium virginianum 48, 12, 13, 14
 Brachyelytrum erectum
 Campanula americana
 Carex albursina
 C. pensylvanica 12, 11, 13, 14, 17, 18
 Caulophyllum thalictroides
 Celastrus scandens
 Circaea quadrisulcata 12, 3, 4, 5, 6, 7, 8, 9, 10, 11
 Claytonia virginiana 12, 13, 14, 15, 16, 17, 18, 19
 Cornus alternifolia
 C. femina 12, 3, 8, 9, 16, 18, 19, 20
 C. rugosa 10
 Corylus americana 10, 12, 13, 15, 17, 20
 Cryptotaenia canadensis
 Cypripedium pubescens
 Cystopteris fragilis
 Dentaria laciniata
 Desmodium glutinosum
 D. nudiflorum
 Dicentra cucullaria
 Dodecatheon meadia
 Dryopteris spinulosa
 Erigeron pulchellus 14
 Erythronium albidum
 Eupatorium purpureum

Eupatorium rugosum
 Festuca obtusa
 Fragaria virginiana 11, 18
 Galium aparine 13, 14
 G. circaeazans
 G. concinnum 6
 G. lanceolatum
 G. triflorum
 Geranium maculatum 36, 9, 10, 11, 14, 15, 16
 Gerardia grandiflora 17, 20
 Geum canadense 4, 5, 10, 11, 13, 16, 20
 Goodyera pubescens
 Habenaria bracteata
 Hackelia virginica
 Hamamelis virginiana
 Helianthus strumosus 13, 6, 8, 16, 18
 Hepatica acutiloba
 Heuchera richardsonii
 Hydrastis canadensis
 Hydrophyllum virginianum
 Hystrix patula
 Impatiens capensis 20
 I. pallida
 Isopyrum biternatum
 Lactuca biennis 4, 10, 16, 19, 20
 Laportea canadensis
 Lathyrus ochroleucus
 Lonicera prolifera
 Lysimachia quadrifolia
 Maianthemum canadensis
 Menispermum canadensis
 Mitella diphylla
 Monarda fistulosa
 Orchis spectabilis
 Oryzopsis racemosa
 Osmorhiza clayton 13, 4, 7, 8, 12, 15, 16
 O. longistylis 19
 Osmunda claytoni
 Panax quinquefolia
 Panicum latifolium
 Parietaria pennsylvanica 14, 7, 10, 15, 19
 Parthenocissus inserta 14, 5, 6, 7, 8, 9, 10
 Phlox divaricata 14, 16, 17, 18, 20
 Phryma leptostachya 12, 3, 5, 6, 7, 8, 13, 15
 Podophyllum peltatum 18, 19
 Polemonium reptans

Polygonatum canaliculatum 27, 9, 10
 Polygonatum pubescens
 Potentilla simplex
 Prenanthes alba 10
 Pteridium aquilinum
 Pyrola elliptica
 Ranunculus abortivus 4, 11, 14
 R. recurvatus 19
 R. septentrionalis
 Rhus radicans 10
 Ribes americanum
 R. cynosbati 6, 9
 R. missouriense 27
 Rosa sp.
 Rubus allegheniensis 3, 9, 10, 14, 15, 16, 17
 R. occidentalis 2, 3, 8, 10, 17, 18, 20
 R. strigosus 2, 3, 8, 10, 17, 18, 20
 Sambucus canadensis 4, 5, 8, 12
 Sanguinaria canadensis
 Sanicula gregaria 11, 13, 14
 S. marilandica
 Smilacina racemosa 11, 14
 S. stellata
 Smilax ecirrhata
 S. herbacea
 S. tamnoides
 Solidago altissima 4, 11, 17
 S. flexicaulis
 S. ulmifolia 17, 18, 19
 Thalictrum dioicum
 Tovarva virginiana
 Trillium cernuum
 T. flexipes
 T. grandiflorum
 T. recurvatum
 Triosteum perfoliatum
 Uvularia grandiflora
 Veronicastrum virginicum
 Viburnum acerifolium
 V. rafinesquianum
 Viola cucullata 12, 3, 5, 8, 9, 15, 16
 V. pubescens 15
 Vitis aestivalis
 V. riparia 12, 20
 Xanthoxylum americ.
 Zizia aurea

Additional species:

- Tarax. offic. 1
 - Acer negundo 5
 - Arctium minus 4
 - Poa prat. 6
 - Amb. 11

- Nepeta cataria 3
 - Prunus virg. 1, 2, 19
 - Urtica dioica 5
 - Lactuca scariola 4, 10, 16, 19, 20
 - Querc. alba 9

- Querc. rubra 9, 14
 - Rhus glabra 20
 - Solidago gigantea 17, 18, 19

- ① Big mint 3 40" high *Nepeta cataria* Extra
 ② Pinch leafed aster 4 (leaf 10" long) *Lactuca* *Ribes*
 Petiole 10" *canadensis*
 ③ Crenate Viola 4 *Ranun. abort.*
 ③ Big "rhubarb" 4 Bardock - *Arctium minus*
 (Compd lenticled 4 *Son. canad.*
 (Bark, wood is white pith)
 ④ *Solidago* 4
 ⑤ ~ *Laportea* 5 *Urtica dioica*
 ④ ~ *Geum* (i flower) 4, 5 *Geum canadense*

~~Schizoglo~~ 8 — 70m 13
Off claw small 8 — Fuzzzy thing alt. 15 *Agrimonia gryposepala*

Solidago 17, 18, 19

Stem glabrous & glauc.
leaves serrate, acute, smaller at bottom of stem
sessile & ciliate margin

SOUTHERN UPLAND HARDWOODS

Total freq + Presence

1501

- Actaea pachypoda
 Adiantum pedatum
 Agrimonia gryposepala 10
 Amelanchier spp.
 Amphicarpa bracteata 15
 Anemonella thalictroides
 Apocynum androsaemifolium
 Aralia nudicaulis
 A. racemosa
 Arenaria lateriflora
 Arisaema atrorubens
 Aster macrophyllus
 A. sagittifolius 15
 A. shortii
 Athyrium filix-femina 10
 Botrychium virginianum 25
 Brachyelytrum erectum
 Carex albursina
 C. convoluta
 C. pensylvanica 40
 Caulophyllum thalictroides
 Celastrus scandens
 Circaea quadrisulcata 100
 Cornus alternifolia
 C. femina 45
 C. rugosa 5
 Corylus americana 30
 Cryptotaenia canadensis
 Desmodium glutinosum
 D. nudiflorum
 Dioscorea villosa
 Eupatorium purpureum
 E. rugosum
 Festuca obtusa
 Fragaria virginiana 10
- Galium aparine 10
 G. circaezans
 G. concinnum 5
 G. lanceolatum
 G. triflorum
 Geranium maculatum 50
 Geum canadense 35
 Hackelia virginiana
 Helianthus strumosus 30
 Hepatica acutiloba
 Hydrophyllum virginianum
 Hystrix patula
 Impatiens biflora 5
 Lactuca biennis 25
 Laportea canadensis
 Lathyrus ochroleucus
 Lonicera prolifera
 Lysimachia quadrifolia
 Monarda fistulosa
 Osmorhiza claytoni 45
 O. longistylis
 Oxalis violacea
 Panicum latifolium
 Parietaria pensylvanica 35
 Parthenocissus vitacea 65
 Phlox divaricata
 Phryma leptostachya 55
 Podophyllum peltatum
 Polemonium reptans
 Polygonatum canaliculatum 20
 P. pubescens
 Polygonum virginianum
 Potentilla simplex
 Prenanthes alba 5
 Prunus virginiana 15
- Pteridium aquilinum
 Pyrola elliptica
 Ranunculus abortivus 15
 R. recurvatus 5
 R. septentrionalis
 Rhus radicans 5
 R. cynosbati 10
 R. missouriense
 Rosa sp.
 Rubus allegheniensis 40
 R. occidentalis 35
 R. strigosus
 Sambucus canadensis 20
 Sanguinaria canadensis
 Sanicula gregaria 15
 S. marilandica
 Smilacina racemosa 10
 S. stellata
 Smilax ecirrhata
 S. herbacea
 Solidago canadensis 10
 S. flexicaulis
 S. ulmifolia 15
 Thalictrum dioicum
 Triosteum perfoliatum
 Uvularia grandiflora
 Veronicastrum virginicum
 Viburnum acerifolium
 V. lentago
 V. rafinesquianum
 Viola cucullata 40
 V. pubescens
 Vitris aestivalis
 V. riparia 15
 Zanthoxylum americanum

Additional species:

Poa sp.
 Anemone quinquefolia
 Arctium minus 5
 Erigeron pulch. 5

Acer neg. 5
 Prunus serot 10
 P. alba 5
 P. rubra 10

Poa 10
 Nepeta cat. 5

Taraxacum 5
 Urtica dioica 5
 Rhus glabra 5

76.8%

Canopy 95-80-70-55-80-90-65-70-80-95-65

1501

CI = 967

Sap - 995 + 1

H - 294 + 2

