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Land Economic Inventory of The State of Wisconsin

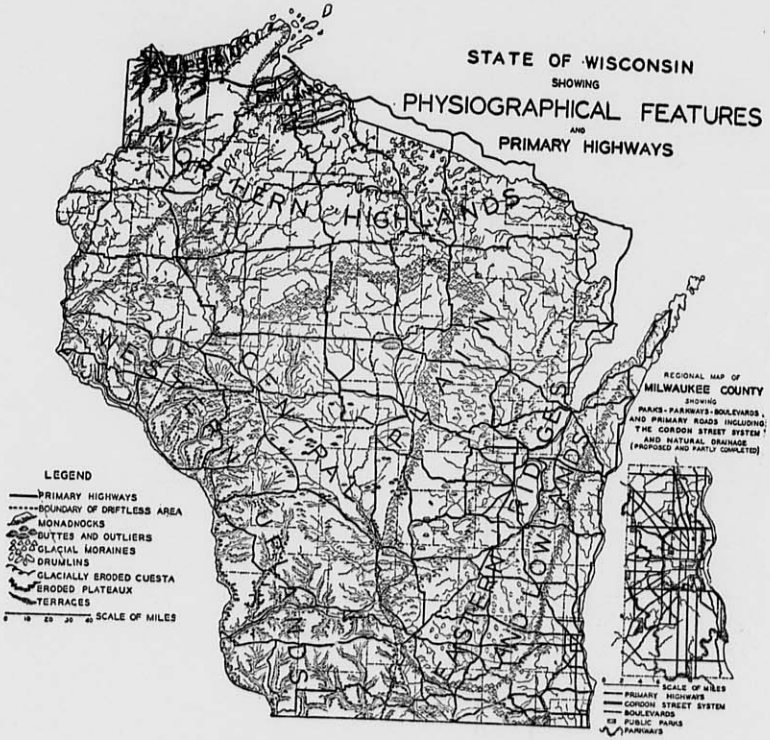
Issued by the Executive Office
PHILIP F. LA FOLLETTE
Governor

JOHN S. BORDNER, *In charge*
WILLIAM W. MORRIS, *Forester*
EARL D. HILBURN, *Engineer and Draftsman*

Division of Land Economic Inventory
411 W. Wing, Capitol Building

STATE OF WISCONSIN

Division of Land Economic Inventory



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Land Economic Inventory

of

The State of Wisconsin

WAUKESHA, RACINE AND KENOSHA COUNTIES

By

JOHN S. BORDNER, *In charge*
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Division of Land Economic Inventory

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INTRODUCTION

The primary need for a Land Economic Inventory of the counties in the south eastern Wisconsin industrial area is to determine what lands are better adapted to non agricultural uses. In the early occupation of this region, population density was as low as it still remains in non industrial areas. Concentration of industry and commerce along the Lake Michigan waterfront has increasingly required more land for urban and recreational use. The time has therefore arrived when planless procedure in land use is no longer feasible and is becoming less and less economic. Haphazard urban development, undue exploitation of forested areas, pollution of water supply and water courses, drainage of spongy swamp areas, and unnecessary extension of cultural services in streets, roads, etc., have depleted the land resources of this region, and made it increasingly difficult for the owners to pay the taxes made necessary by such an unplanned procedure.

In order that the County Planning Commissions, in conjunction with the State Planning Board, may proceed intelligently with a planned use of land and that the National Resources Board may know with definiteness the present status of Wisconsin's Land Resources, the Land Economic Division of the Executive Office of the State of Wisconsin submits the following Land Economic Inventory of Waukesha, Racine and Kenosha counties.

Planting trees in wide shallow furrows.

A LAND INVENTORY OF WAUKESHA, RACINE AND KENOSHA COUNTIES

EARLY HISTORY

Evidence of Early Occupation

Implements of copper, stone, bits of pottery and numerous mounds are mute evidence of the occupation of this region for a long time prior to the discovery of America. Deep worn trails leading to the mineral springs in what are now Waukesha, Racine and Kenosha counties, indicate that the region was possibly a mecca for medicine men and the afflicted of many tribes.

First Explorers and the Indians

The first white men to paddle their canoes along the Lake Michigan shore line are supposed to have been Louis Joliet and Father James Marquette. This was about 1673 and approximately 40 years after Nicollet's first visit to the state. Nicollet, himself, may have been in this region, for it is known that he went up the Fox River to within about three days journey of the Wisconsin River. These first visitors found the region inhabited by bands of Indian tribes. The Foxes, Sacs, and Pottawattamies predominated. Of these the Foxes and Sacs were the better farmers, raising large quantities of corn and vegetables. They were also more experienced in the arts of war, because they had been in long and continuous conflict with Iroquois tribes to the east, by whom they were forced westward into Wisconsin.

Traders

When traders first entered this region the Pottawattamies were in possession and the Winnebagoes and Menominees were living with them in friendly relations. Indian villages surrounded by cornfields were scattered from Lake Pewaukee south along the Fox River. The last chief with this band before its removal to the region of the Missouri river was Chief Leatherstrap, who is buried in what is now the city of Waukesha.

Little is known of the traders who visited this region prior to 1800, except that long before this territory passed from French into British control, traders from Mackinaw annually came this far south with liquor, hatchets, cloth and trinkets. The earliest trader and adventurer known to have remained was the Frenchman Jok Jambeau, who married an Indian woman, and operated a trading post in the Indian settlement near Skunk Grove in the northwestern part of the present town of Mount Pleasant, Racine county. Jambeau had been here a long time prior to 1834.

Early Settlement

White settlers began to arrive in this territory following the Blackhawk war. Among the earliest settlers were Morris D. and Alonzo R. Cutler who in 1834 settled where Waukesha is now located. Here the first school house was erected in 1836, and the Waukesha Congregational Church was organized in 1838. Waukesha at this early date was known as Prairieville. This village was granted a post office in 1837.

Settlement in Racine and Kenosha counties also dates from 1834. The first permanent settler was Captain Gilbert Knapp, who with William and A. J. Luce rode up along the Indian trail from Chicago and located near the mouth of the Root River. Here Captain Knapp built a log cabin and named the place Fort Gilbert. A little later this name was changed to Racine.

Saw mills and planing mills were the first industries to appear and grist mills soon followed. Flour and other food supplies were obtained with great difficulty during these early years. Records show that during the winter of 1837; Andrew Place, Alva and Zadock Newman made a trip to St. Joseph, Michigan with ox teams and returned with loads of flour for the settlers. This haul of approximately 250 miles round trip required two months.

The First Land Sales

A United States Land Office was opened in Milwaukee about 1839. Those who entered this region prior to that time and established claims to land, had done so without governmental authority. Frequent quarrels resulted from claim jumpers attempting to dispossess the earlier settlers. To meet this evil the first settlers organized what came to be known as the Milwaukee Union, to protect priority land rights of the members.

First Roads

The Congress of 1839 appropriated $10,000 to build a road from Racine to Green Bay, and a like amount for a road from Racine to Janesville. These roads were built under the supervision of Thomas J. Cram of the U. S. Topographical Engineers.

Nationality of First Settlers

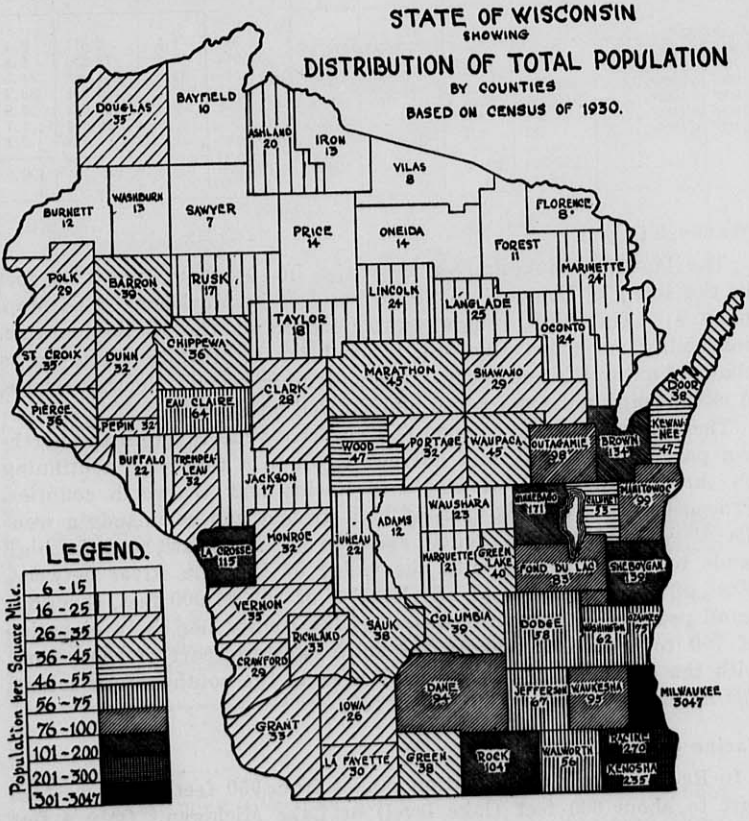
The settlers coming before 1840 were almost entirely from eastern states, with Yankee names prevailing. Following 1840, when land was offered for sale by the government, immigrants from England, Ireland, Wales, Germany and the Scandinavian countries began coming in large numbers. Social unrest and insecurity also brought some roving bands of religious and economic idealists. Among them was a communistic society of Fourierites organized in England under the leadership of Thomas Hunt. Like similar attempts elsewhere, their project was soon abandoned.

The cheap labor of all these immigrants made possible the wild speculative and exploiting schemes of the enterprising Yankees.

THE GEOGRAPHY OF WAUKESHA, RACINE AND KENOSHA COUNTIES

Location

The location of these counties in what has become known as the Lake Michigan waterfront made them among the earliest settled in Wisconsin. Opportunity for shipping by water aided in an early and highly diversified use of land. Next to Milwaukee county, Racine and Kenosha counties are today the most densely populated counties in the state. (See Map, Page 7) Waukesha county also has numerous industries as well as a highly developed agriculture and a relatively high population density. Waukesha county lies west of Milwaukee. Racine and Kenosha counties are south and have shore line on Lake Michigan.



Elevation

From the water front on Lake Michigan to the highest part on Government Hill (Elevation 1232 ft.) in Waukesha county the difference in elevation is about six hundred and thirty five feet. Seventy

per cent of the land in these three counties lies at an elevation of from 700 to 900 feet above sea level and less than three hundred feet above lake level. The highest portion is part of the ridge commonly called the "kettle moraine", which crosses Waukesha in a southwesterly direction. From northern Waukesha county there is a gradual slope eastward toward Lake Michigan and southward to the shoreline in Kenosha county where over 2500 acres of land is approximately at lake level. (For elevation maps see pages 9, 10, 11) The following table shows the acreage of land lying at different elevations.

ACREAGE OF LAND AT DIFFERENT ELEVATIONS IN THE THREE COUNTIES

Elevation	Waukesha	%	Racine	%	Kenosha	%	Total	%
Under 600'								
600' to 700'			37,767	18.3	2,617	1.5	2,617	0.4
700' to 800'	39,452	11.1	124,300	60.2	34,042	19.6	71,809	9.8
800' to 900'	177,388	49.9	44,130	21.4	91,247	52.6	254,998	34.5
900' to 1000'	115,590	32.5	160	0.1	44,743	25.8	266,261	36.2
1000' to 1100'	22,914	6.4			921	0.5	116,671	15.9
1100' to 1200'	513	0.1					22,914	3.1
							513	0.1
Total	355,857	100.0	206,357	100.0	173,570	100.0	735,784	100.0

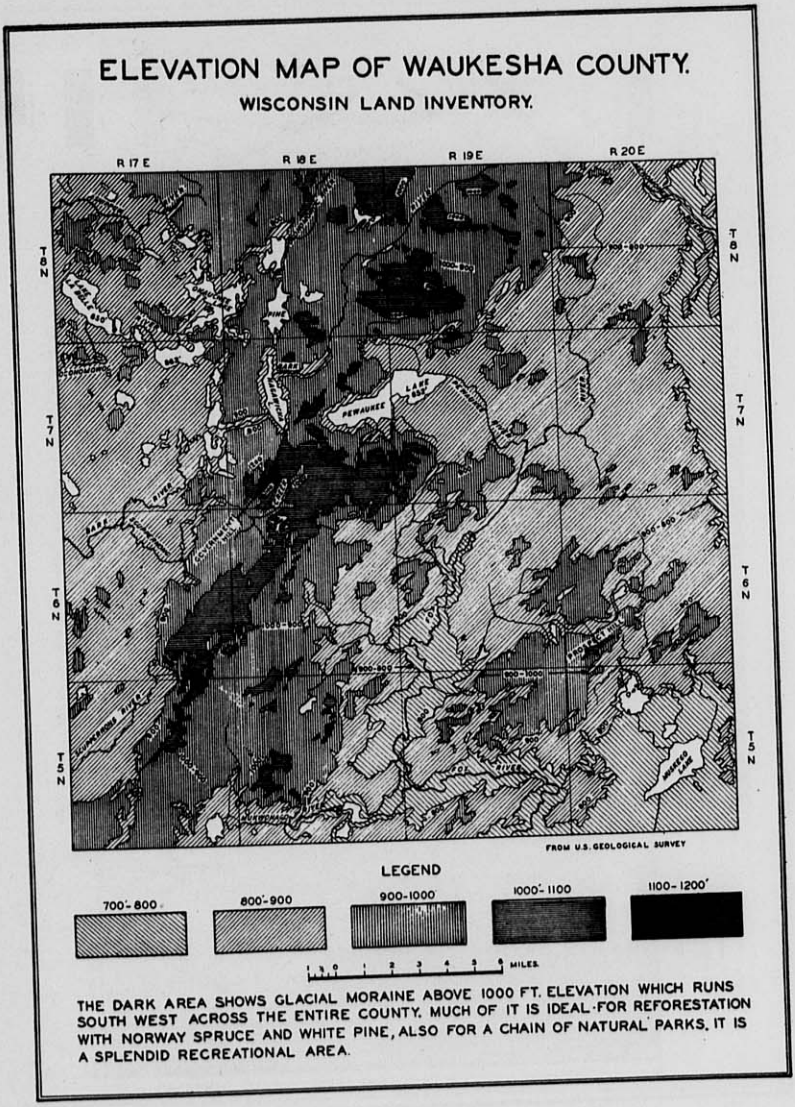
Waukesha County

The land in Waukesha county varies in elevation from 1233 feet in the town of Delafield to about 760 feet in Muskego. (See Map, page 9) This high, rough country known as the Kettle moraine, containing much gravelly soil, is ideal for reforestation, and for a chain of natural forest parks. The native hardwoods, Norway spruce, Austrian pine and some white pine do well on this land.

The elevation of 900 to 1000 feet covers a wide range in the northern part of the county and narrows down to a thin strip continuing on through the town of Eagle to Racine and Walworth counties. Prospect Hill is on this area of high ground and commands a wonderful view of the "Muskego Lakes" to the southeast, and the high lands to the northwest with the valley of the Fox River between. Most of this valley lies at an elevation of 800 to 900 feet, though a small portion in the southern part of the county lies at an elevation of 700 to 800 feet. Almost the entire western part of the county with the exception of a very small area in the southwestern corner, lies at an elevation of 800 to 900 feet.

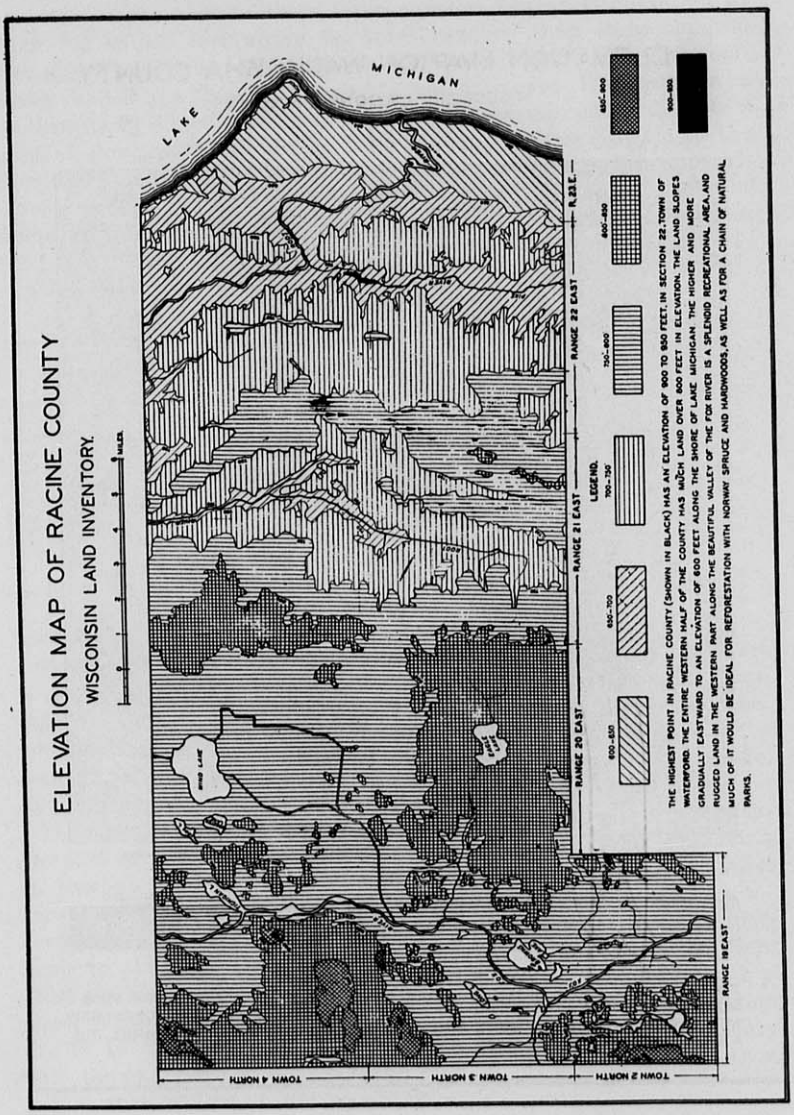
Racine County

In Racine county the elevation ranges from 950 feet in the western part to about 600 feet (lake level) at Lake Michigan. Only a few points in the extreme western section are over 900 feet in elevation. (See map, page 10) Possibly 40% of the land area of the western part of Racine county has an elevation of 800 feet. It is on this higher morainal land that reforestation should be encouraged.



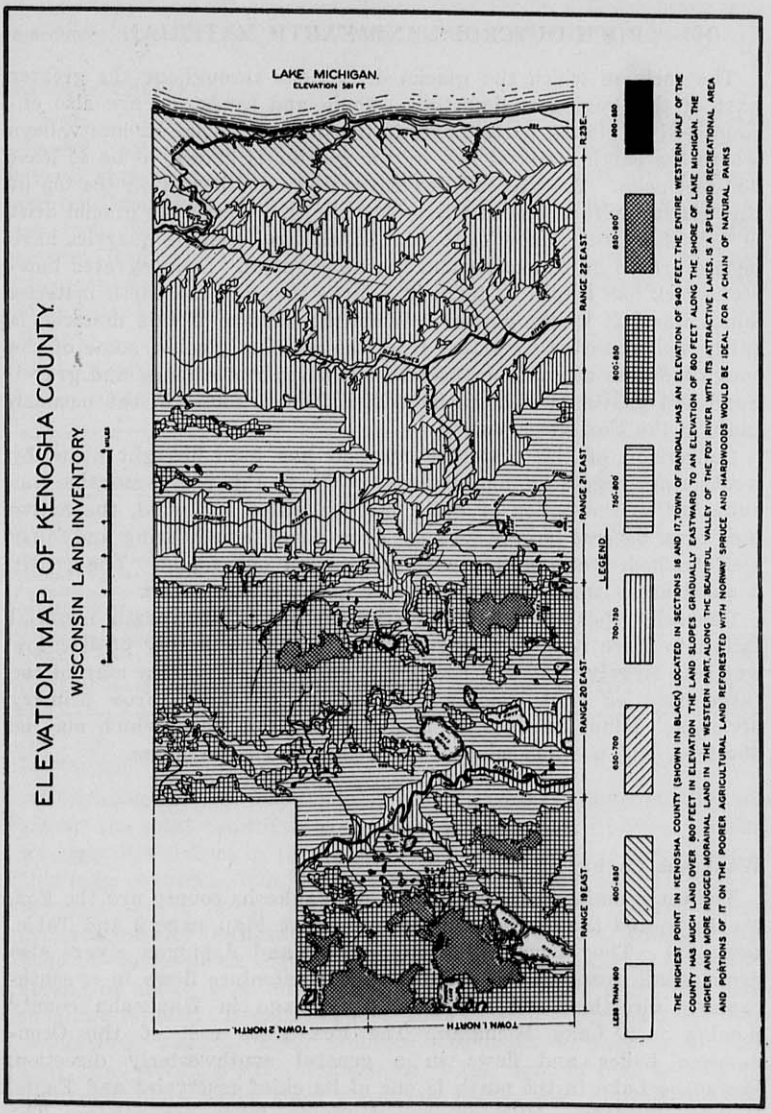
Kenosha County

The highest point (940 feet above sea level) in Kenosha county is on the morainal ridge near the western border. The area along the Lake Michigan shoreline in this county, as in Racine county, is low and flat. The higher land in the western lake region of the county offers the best opportunity for reforestation. (See Map, page 11)



TOPOGRAPHY

The relief of these counties is level to rolling except in the higher elevations where hills in many cases have steep slopes. Here tillage is impractical and should be discouraged. Much of the timber has been cut from these hills and exposure to wind and quick surface drainage has resulted in carrying away much of the surface soil, leaving an exposure of partially decomposed rock. This region is an



unusual formation, in that it is the result of two lobes of the glacier meeting and dropping their loads of earth material as they receded. (See Map, inside front cover) Numerous buried blocks of ice were left by the receding glaciers. These ice blocks finally melted and some of the depressions thus formed became lakes and swamps. This accounts for the numerous lakes, swamps and dry kettles of this region.

ROCK OUTCROPS AND EARTH MATERIAL

The rock on which the glacial drift rests throughout the greater part of this region is limestone. Shale and sandstone are also encountered at places; particularly in the old pre-glacial stream valleys where the earth material left by the glacier is known to be at least 300 feet deep. The present Fox River flows southward on the top of this glacial drift in one of these old valleys. Where the glacial drift is very thin, rock is now exposed. Extensive limestone quarries have been operated in Waukesha and Racine counties. Disintegrated limestone rock has helped to form in a large measure the earth material which was left by the glacier. While the surface of this material is fairly well assorted by water from the melting glacier, some of the rough moraine contains unassorted boulders, cobblestones and gravel. Sand and gravel in well assorted deposits are found in the outwash plain of the Fox River Valley.

Conversion of this material into soil has been brought about by weathering, vegetation and drainage. Where this rough moraine was subjected to the action of quick moving water and wind, the native land cover became largely forest. Areas level to undulating and fairly well drained, were prairie with some open oak forest. The poorly drained areas were covered by peat forming vegetation.

Generally speaking, therefore, the surface of this earth material falls into three relatively large classes, viz., land largely prairie, low wet land largely peat, and rough moraine. The elevation map of the three counties show clearly the location of these three primary divisions. Minor detail is delineated in the soil maps, which may be obtained, and use and adaptation in the land cover maps.

DRAINAGE

Waukesha County

The three main drainage systems of Waukesha county are the Fox, the Bark, and the Oconomowoc rivers. (See Map, page 9 and Table, page 13) The Menominee, Scuppernong and Ashippun rivers also drain small areas of the county. The Menominee flows in a southeasterly direction, and is the only drainage in Waukesha county flowing into Lake Michigan. The Fox rises east of the Oconomowoc Lakes and flows in a general southwesterly direction. Pewaukee Lake in the north is one of its chief reservoirs and Eagle, Howitt, Phantom, Millpond and Muskego lakes are others. The Oconomowoc Lakes in the northwestern part of the county drain southwesterly through the Oconomowoc river into the Rock River. Lake Nagawicka, the upper and lower Nahmabin and the Nashotah lakes drain into the Bark river, a tributary of the Rock River.

Racine County

The two main drainage systems for Racine county are the Fox and Root Rivers. The Root River flows southeasterly through the

county into Lake Michigan at Racine, and the Fox River flows in a southwesterly direction. (See Map, page 10 and Table, page 13)

Kenosha County

Most of Kenosha county is drained by the Fox and Desplaines rivers. Both of these rivers flow in a southerly direction. The Fox river drains most of the lake region in the western part of the county and the Desplaines river which rises in southern Racine county drains the more level region. The Pike, a small river, rising in southeastern Racine county, flows south parallel to the shore of Lake Michigan and empties into the lake just north of Kenosha. (See Map, page 11) (see Table, page 13)

LAND AREAS OF VARIOUS DRAINAGE BASINS IN WAUKESHA, RACINE AND KENOSHA COUNTIES

Drainage Basin	Acres in Waukesha Co.	Acres in Racine Co.	Acres in Kenosha Co.	Total
Fox River	217,421	97,900	60,900	376,221
Bark River	45,056	----------	----------	45,056
Oconomowoc River	43,800	----------	----------	43,800
Menominee River	20,550	----------	----------	20,550
Scuppernong River	19,430	----------	----------	19,430
Ashippun River	9,600	----------	----------	9,600
Root and Lake Michigan Drainage	----------	90,657	----------	90,657
Pike and Lake Michigan Drainage	----------	11,400	36,480	47,880
Desplaines River	----------	6,400	76,190	82,590
Total Land area of counties ex. of lakes	355,857	206,357	173,570	735,784

Lakes

The lakes of the Oconomowoc (or Waukesha) Lake District are among the most beautiful in the state. Samuel A. Storrow, passing through this district in 1817 gives us probably our first description of this lake country. "On the morning of the 27th (Sept. 27, 1817) I found a severe frost. At about ten o'clock, after having passed grounds inferior to those of yesterday, came to a small and handsome body of water, about eight miles in circumference, shortly after to a second of about three miles, after that to a third of about five miles in circumference. I remained some time to admire the beauty of these sequestered waters. Their stillness was disturbed only by the wild fowl, that were too little accustomed to the sight of man to heed my approach. The lands shortly became better, and more abundantly wooded and watered than those of yesterday, the white oaks being the largest I had ever seen."

Pewaukee Lake is the largest with an area of over three and one half square miles, while Garvin Lake has an area of only about 22 acres. Nagawicka Lake, the deepest, has a depth of 94.5 feet. All the lakes drain westward except Pewaukee. (For these and other lakes see Table, page 14)

SURVEY OF PRINCIPAL LAKES OF WAUKESHA, RACINE AND KENOSHA COUNTIES.

DRAINAGE BASIN	LAKE	COUNTY	TOWNSHIP	RANGE	ELEVATION (FT.)	LENGTH (MI.)	BREADTH (MI.)	SHORE LINE (MI.)	AREA (ACRES)	MAX. DEPTH (FT.)	MEAN SLOPE OF BOTTOM (%)	VOLUME (MILL. CU. YDS.)
ASHIPPUN	FOWLER	WAUKESHA	8	17E.	861	0.94	0.44	2.00	83.5	50.0	5.2	1.92
BARK RIVER	CROOKED	"	7	17E.	868	0.67	0.31	1.08	54.8	16.0	1.9	0.55
	GENESEE NORTH	"	7	17E.	866	0.51	0.42	1.5	101.9	36.4	3.4	1.23
	GENESEE SOUTH	"	7	17E.	865	0.40	0.30	1.2	62.7	47.6	6.1	1.38
	NAGAWICKA	"	7	18E.	890	2.75	1.12	7.0	917.6	94.5	4.2	53.65
	NASHOTAH UPPER	"	7	17E.	872	0.81	0.40	2.2	136.7	51.2	4.4	5.08
	NASHOTAH LOWER	"	7	17E.	871	0.79	0.25	1.9	100.3	46.2	5.3	3.26
	NEMAHBIN UPPER	"	7	17E.	876	1.05	0.56	2.8	271.1	62.0	3.5	13.03
	NEMAHBIN LOWER	"	7	17E.	870	0.93	0.60	2.5	265.5	35.2	1.8	3.49
	OTIS	"	7	17E.	866	0.43	0.37	1.1	40.0	28.3	5.1	1.02
FOX RIVER	BROWNS	RACINE	2&3	19E.		1.25	0.75		390.4	23.0		
	CAMP	KENOSHA	1	20E.		2.40	1.00		256.0	19.7		
	DENOON	WAUKESHA	5	20E.		0.81	0.44		185.6	62.3		
	EAGLE	"	5	17E.		0.87	0.56		211.2	4.9		
	EAGLE	RACINE	3	20E.		1.31	1.00		486.4	13.1		
	LONG	"	4	20E.		1.00	0.25		134.4	19.7		
	MINISTER	"	4	20E.		0.75	0.50		160.0	65.6		
	MUSKEGO BIG	WAUKESHA	5	20E.		3.75	2.00		2,739.2	26.2		
	MUSKEGO LITTLE	"	5	20E.		1.50	0.87		518.4	46.0		
	PHANTOM	"	5	18E.		0.68	0.37		108.8	27.9		
	PEWAUKEE	"	7	18&19E.	852	4.50	1.20	4.50	2,298.0	45.3	0.9	48.06
	POWERS	KENOSHA	1	18&19E.		1.12	.62		416.0	32.8		
	ROCKLAND	RACINE	2&3	19E.		0.50	0.25		52.2	26.2		
	SILVER	KENOSHA	1	20E.		1.25	0.87		582.4	42.6		
	TWIN	"	1	19E.					1,075.2			
	WIND	RACINE	4	20E.		2.00	1.50		1,408.0	49.2		
OCONOMOWOC	BEAVER	WAUKESHA	8	18E.	910	1.10	0.44	3.4	305.4	49.0	3.0	8.26
	GARVIN	"	8	18E.	873	0.31	0.17	0.87	21.6	36.1	4.8	0.59
	LA BELLE	"	8	17E.	854	2.70	1.12	7.8	14.2	46.6	1.5	19.85
	MOUSE	"	8	18E.	877	0.82	0.21	2.4	90.3	66.3	6.9	4.04
	NORTH EAST PART	"	8	18E.	897	1.35	0.47	3.3	329.0	76.0	6.2	22.29
	NORTH WEST PART	"	8	18E.	897	0.67	0.36	1.7	115.0	73.6	7.4	6.96
	OCONOMOWOC MAIN	"	7	17E.	862	1.75	0.85	4.7	631.3	62.6	3.2	31.84
	OCONOMOWOC N.E.	"	7	17E.	862	0.75	0.50	2.3	180.0	49.2	3.8	7.53
	OKAUCHEE	"	8	17&18E.	873	2.37	1.80	11.1	1,057.0	94.0	3.2	57.27
	PINE	"	8	18E.	903	2.30	1.05	6.8	755.7	90.0	4.7	48.48
	SILVER	"	7	16E.	864	0.97	0.56	2.9	231.9	44.0	3.0	5.88
	GOLDEN	"	7	16&17E.		1.37	0.50		256.0	42.6		
	KEESUS	"	8	18E.		0.87	0.81		236.8	41.0		
DES PLAINES	HOOKER	KENOSHA	1	20E.		0.75	0.37		64.0	23.0		
	PADDOCK	"	1	20E.		0.62	0.37		96.0	31.1		

LAND ADAPTATION

Basic factors which determine land adaptation within any region are *markets, climate* and *soil.* Density of population and the means by which this population earns its livelihood determines at least the local market for products of the land. These counties have relatively a dense population. (See Map, page 7 and following table)

County	Total Population	Average per Sq. Mile Where Cities Are Included	Total Rural Population	Av. per Square Mile for Rural Population
Waukesha	52,358	94.5	30,992	55.9
Racine	90,217	270.0	18,561	55.6
Kenosha	63,277	235.2	13,015	48.4
Average	205,852	177.9	62,568	54.2

This table shows that at least 75% of these people do not obtain their livelihood by farming. Farm produce also finds ready market in Milwaukee county where the average population per square mile is 3045 of which possibly 3000 also purchase all their food supplies. Much land in this region is in farm use which at a greater distance from industrial centers would not be so used. With improved transportation, land better adapted for certain types of production elsewhere is becoming a competitor for the consuming market of this industrial area. Therefore, greater rhyme and reason must enter into the selection of land for specific use here in the near future. Land adaptation for uses other than agriculture make this region ideal for a relatively dense population. Topography, lakes, streams and forests though depleted offer environment for recreation and also for further extension of urban use. There are adequate roads for such an extension of urban use; for these counties have 2469 miles of highway divided as follows:

Improved gravel	1,639 miles
Hard surfaced	474 "
Private and dirt improved	258 "
Improved dirt	39 "
Unimproved gravel	59 "
Total	2,469 "

There are also 640 miles of railroad, 1360 miles of power line and 2254 miles of telephones. (This includes telephone lines along railroad right-of-ways.)

LAND UTILIZATION

The present status of the use of land in these counties is shown in the Land Classification Tables (inserted opposite pages 16, 17, 18) and is set forth graphically in plates on pages 16, 17, 18. A very high percentage of cleared land and pasture obtains for every county. A comparison of the land utilization in the three counties follows:

	Waukesha		Racine		Kenosha		Total	
	Acreage	Per cent	Acreage	Per cent	Acreage	Per cent	Acreage	Per cent
Cleared crop land	226,843	61.6	149,796	71.1	110,349	62.1	486,988	64.4
All pasture	24,028	6.5	16,068	8.1	18,408	10.4	59,404	7.9
Marsh land	45,808	12.4	14,252	6.7	20,078	11.9	80,138	10.5
Woodlands	46,165	12.5	17,953	8.5	14,848	8.4	78,968	10.4
Water	12,817	3.5	4,459	2.5	3,652	2.1	20,968	2.8
Urban	13,012	3.5	7,408	3.5	9,880	5.6	30,306	4.0
	368,673	100.0	210,836	100.0	177,222	100.0	756,731	100.0

The above table shows a total area of 756,731 acres. Of this total area, 72% is cleared land and pasture. Forests including timbered swamps cover 10.4% and the marshy peat land 10.5% of the total. The Plates on pages 16 to 30 inclusive show this relationship which is just about the reverse of what obtains in the northern part of the state.

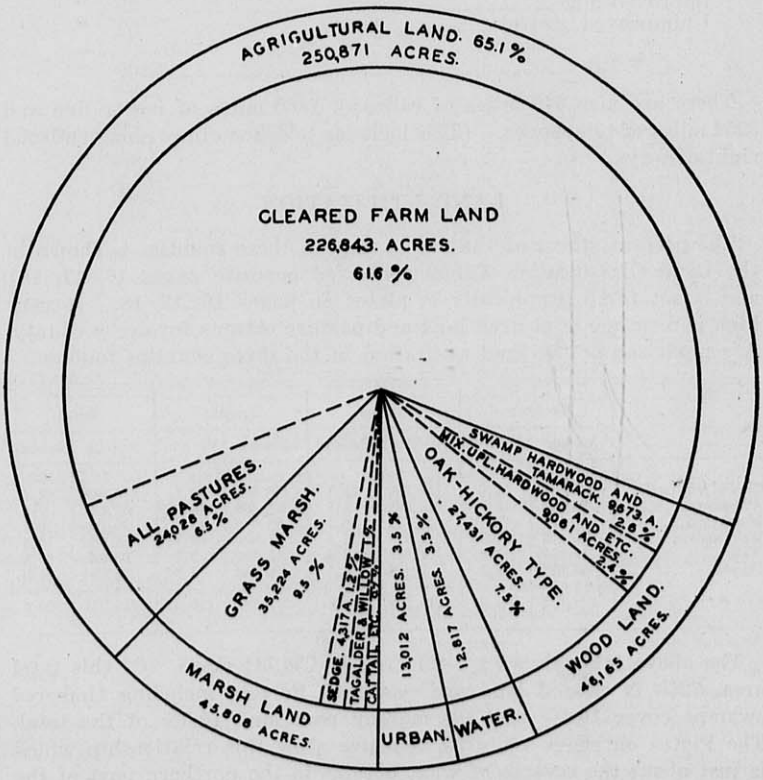
Considering the nature of the physiographic base, it is quite apparent that some land has been cleared and continues in farm use which should not have been cleared. This is particularly true of Waukesha county where there is so much land with rugged topography. Reforestation should therefore be extended on some of the agricultural land designated as permanent pasture, and on land formerly cropped, but which has reverted to permanent pasture, on account of stoniness and steep topography. This latter type of land has been designated on the land use maps by the symbol "CPP". Some of the marshy and weedy peat land designated as "C4" and "E4" also offers opportunity for an extension of wood lots. This increase in wood-

CLASSIFICATION OF TOTAL AREA

TOTAL AREA 368,673 A.

WAUKESHA COUNTY.

1934.



PLATE

TABLE III

WAUKESHA COUNTY COVER CLASS

	AGRICULTURAL ACRES									MARSH ACRES								WOODLANDS 4619
DESC. TOWNSHIP	RANGE	CLEARED	PASTURE	C.S.	STUMP PASTURE	PERMANENT PASTURE	C.P.P.	ORCHARDS	ABANDONED	OPEN	GRASS	SEDGE	TAG ALDER	CAT TAIL	LEATHER LEAF	WEEDY PEAT	WATER	URBAN
5 N	17 E	12312	129		149	1359		18		162	3421	248	325		47		329	406
5 N	18 E	12121	126		343	1480	10	22	10	25	3754	828	152	180	22		522	286
5 N	19 E	15307	169		298	650		79		22	3552	314	82	100	52		6	339
5 N	20 E	14485	33		351	746		10	70		1334		136	1285			2084	86
6 N	17 E	11178	21		187	1291		8		16	4930	780	396	25			215	5537
6 N	18 E	13605			82	1315	593	17	21	132	2168	1027	267	95			86	283
6 N	19 E	12725	253		301	1004	185	87	35	203	3432	190	351			10	15	2202
6 N	20 E	17481			348	387	35	225			953		380	31	25	66	22	415
7 N	17 E	12171	138	41	37	861	114	102			2371	409	438	6			2129	742
7 N	18 E	11159	317		263	1088	756	133	13	476	1678		54	70			1942	658
7 N	19 E	14165	356		255	600	119	68	28	290	2227	81	300	15		55	997	1654
7 N	20 E	15561			157	911		108	149		1415	409	106	7	221			1495
8 N	17 E	14438	8		33	903	249			6	1536	20	255	17			2233	1803
8 N	18 E	13263	465		72	539	232		6	11	838	11	112	7			2147	1008
8 N	19 E	18112			84	646	160				997							620
8 N	20 E	17828			397	614		30	93		622		470		107		90	960
TOT. BY DENSITY																		
TOT. BY TYPES		225,911	2,015	41	3,357	14,394	2453	907	425	1,343	35,224	4,317	3,824	1,838	474	131	12,817	13,012
% BY TYPES		61.5	.5		.9	3.6	.7	.2	.1	.4	9.6	1.2	1.0	.5	.1		3.5	

	OAK-HICKORY TYPE												MIXED UPLAND HARDWOODS												SWAM			
	0—6			6—12			12—18			18—24			0—6			6—12			12—18			18—24			0—6		6—	
	G	M	P	G	M	P	G	M	P	G	M	P	G	M	P	G	M	P	G	M	P	G	M	P	M	P	G	M
5 N 17 E			20		1741	1593		208	474			33														25		
5 N 18 E		147	150		472	1533	35	110	474		12	30		10				12							49			
5 N 19 E		8	10	44	192	194	179	355	133		158	24			16		84	13	9	51	20					15		
5 N 20 E				126	422	806	97	264	115						7		11	39			36							
6 N 17 E	37	113	282	439	572	553	70	569	154				19			12	49	49								74		
6 N 18 E		4	22	127	1087	1504	91	111	89	116	30	12					19	22						18		50		
6 N 19 E		35	10	18	274	226		106	47			3			20	20	85	197	40	87	85		18		30	80		2
6 N 20 E			31		61	235			82						41		40	149		213	824					53		
7 N 17 E	2		137	64	517	270	109	316	44	20	31	33			5	263	549	30	29	421	6						19	
7 N 18 E			102	40	2167	1463	95	232	72					11			9											
7 N 19 E	6		18	42	262	256	104	283	269								25	9									18	
7 N 20 E		6	37		187	146	44	41	103						42	8	311	129		183	54	40				13		
8 N 17 E					32	130	24	43	40						33		324	345	22	40	79			23		19		
8 N 18 E			26		903	359		92					110	166	173		580	303		47	19			5	4	31	55	2
8 N 19 E		65			225	575			10						7		326	276								18		
8 N 20 E						70	50							17	6	81	130	209	66	11	62			10	23	32		
TOT. BY DENSITY	45	378	845	900	9,114	9,913	898	2,730	2,106	136	231	135	129	204	350	382	2,542	1,782	166	1,053	1,185	40	18	56	106	410	92	10
TOT. BY TYPES											27,431												7,907					
% BY TYPES											7.5												2.2					

AGRICULTURAL

CS — CULTIVATED STUMP LAND — AREA BEING CULTIVATED AND STUMPS BEING REMOVED.
STUMP PASTURE — CUTOVER LAND USED FOR PASTURE.
PERMANENT PASTURE — LAND NOT TILLABLE DUE TO TOPOGRAPHY STONINESS ETC.
C.P.P. — POOR LAND PREVIOUSLY CROPPED.
ABANDONED — NOT USED AT PRESENT
OPEN — LAND NOT USED AS PASTURE. MAY INCLUDE A FEW SCATTERED TREES.

MARSH

GRASS — MARSH GRASSES SUCH AS BLUE JOINT AND RED TOP
SEDGE — ALL COARSE AND ANGULAR "GRASSES."
TAG ALDER — LOWLAND BRUSH SUCH AS ALDER WILLOW AND RED DOGWOOD
CAT TAIL — COMMON VARIETY
LEATHER-LEAF — HEATHER GROWTH INCLUDING BLUEBERRY CRANBERRY AND LABRADOR TEA.
WEEDY PEAT — PEAT LAND CHANGED BY DRAINAGE AND FIRE NOW COVERED WI

WAUKESHA COUNTY COVER CLASSIFICATION AND INVENTORY BY TOWNSHIPS AND BY TYPES

WOODLANDS 46190 ACRES

MIXED UPLAND HARDWOODS

18-24		0-6			6-12			12-18			18-24		
M	P	G	M	P	G	M	P	G	M	P	G	M	P
	33												
12	30		10				12						
58	24			16		84	13	9	51	20			
				7		11	39			36			
		19			12	49	49						
30	12					19	22						18
	3			20	20	85	197	40	87	85		18	
				41		40	149		213	824			
31	33			5	263	549	30	29	421	6			
			11			9							
						25	9						
				42	6	311	129		183	54	40		
				33		324	345	22	40	79			23
		110	166	173		580	303		47	19			5
				7		326	276						
			17	6	81	130	209	66	11	62			10
31	135	129	204	350	382	2542	1,782	166	1,053	1,185	40	18	56
27,431												7,907	
75												2.2	

SWAMP HARDWOODS

0-6		6-12			12-18			18-24		
M	P	G	M	P	G	M	P	M	P	
	25			17						
49										
	15		88	39		161	10	4	8	
			9	67		58	31		10	
	74			24						
	50		8	31						
30	80		250	45	35	70	60			
	53			62		360	155			
		19	51	7		34	6		17	
	13		107	297		21	64	4	59	
	19			55	6		51			
4	31	55	285	733		39	74	0	74	
	18		187	417			98			
23	32		38	214	27	66	90			
106	410	92	1,043	2057	68	88	68	18	208	
									5,734	
									1.6	

TAMARACK

0-6			6-12		
G	M	P	G	M	P
	4			47	9
				72	5
		27	67	81	
32		512	40	149	
					3
208		37	52	103	42
					26
					3
	196	123		198	18
	41	76	20	214	81
	15	3		4	
	34	41		86	154
				48	653
240	290	899	181	1002	1,327
					3,939
					1.1

POPPLE WHITE BIRCH

0-6			6-12		
G	M	P	G	M	P
43		4			
	55			10	40
	20			29	
72		92			
	10	20			
	15	5			
		10			
				25	21
13	32	10			
	14			10	
5					
				22	4
133	146	172		96	68
					615

RED CEDAR

0-6		6-12		
M	P	M	P	
	14	14		
24	32	32	35	
	38			
41	340	46	35	
				462

CON.

6-12		12-	
M	P	P	
	10		
7	10	18	
			35

W.P.

0-6	
G	M
22	20
42	

R.

17
4
4
25

COMMU

TOTAL	HOUSES OCCUPIED	HOUSES UNOCCUPIED	SUMMER HOMES	SCHOOLS	CHURCHES	CEMETERIES	STORES	CREAMERIES	GAS STATION	GRIST MILL	PEA VINERY	HARD SURFACE	IMP. GRAVEL
23133	165	10	96	3		2		1		1		12.9	45
23097	171	7	102	6								8.3	42
23036	253	8	1	6	5	5	1		2			12.8	47
22821	283	3	467	6	3	3	7		2			12.8	52
23043	161		4	4	3	2			2			.3	44
23065	253	3		4	2	3			1			18.0	47
22854	190	5		7		1						7.0	51
22999	435	1		9	4	2	7		5			18.9	57
23205	303	10	661	4	5	1	1		2		1	14.0	49
22904	530		293	4	2	1						16.7	50
22833	333	10	307	4	1	2	2		4	1		34.9	37
23012	494	16	1	13	5	2	13	1	18		1	19.7	58
23274	264	18	83	3	5	2	3	3			3	13.7	53
23134	434	8	293	5	4	7						10.8	61
23138	231	3		5	1	2						9.0	60
23125	426	6		6	3	12	7	1	10		3	17.6	60
368,673	4,926	108	2308	89	43	47	41	6	46	2	8	227.2	818
100													

MARSH

ARSH GRASSES SUCH AS BLUE JOINT AND RED TOP.

L COARSE AND ANGULAR "GRASSES."

—LOWLAND BRUSH SUCH AS ALDER WILLOW AND RED DOGWOOD

- COMMON VARIETY

EAF—HEATHER GROWTH INCLUDING BLUEBERRY CRANBERRY AND LABRADOR TEA.

AT—PEAT LAND CHANGED BY DRAINAGE AND FIRE NOW COVERED WITH PRAIRIE GROWTH

WATER—INCLUDES LAKES, PONDS, AND LARGE STREAMS.

URBAN—ALL LAND INSIDE CORPORATE LIMITS OF CITIES T AND SOCIAL INSTITUTIONS.

NUMBERS SUCH AS 0—6 6—12 DENOTE DIAMETER OF TR

G—M—P DENOTES DENSITY OF FOREST

G—GOOD M—MEDIUM P—POOR

S

														COMMUNICATION FACILITIES MI.								DRAINAGE MI.						GAME COUNT											DESC.	
		TOTAL	HOUSES OCCUPIED	HOUSES UNOCCUPIED	SUMMER HOMES	SCHOOLS	CHURCHES	CEMETERIES	STORES	CREAMERIES	GAS STATION	GRIST MILL	PEA VINERY	HARD SURFACE	IMP. GRAVEL	UNIMP. GRAVEL	IMP. DIRT	UNIMP. DIRT	RRIVATE ROAD	RAILROADS	TELEPHONE L.	POWER LINES	SMALL STREAMS	LARGE STREAMS	DRAINAGE DITCH	DRAINAGE CANAL	SPRINGS	GRAVEL PITS	QUARRIES	NURSURIES	FUR FARM	MUSKRAT HS.	PARTRIDGE	PHEASANT	QUAIL	BLACK FOX	PRAIRIE CH.	GEESE	MINK	TOWNSHIP	RANGE
		23133	165	10	96	3		2		1		1		12.9	45.1	1.6	3.5		7.0	7.5	48.9	15.9	10.5	7.0	23.8		15	13					14	10						5 N	17 E
		23097	171	7	102	6								8.3	42.3	2.7	1.5		17.0	7.0	43.9	36.4	7.6	10.8	16.4		9	9		1	3	36	8						5 N	18 E
	17	23036	253	8	1	6	5	5	1		2			12.8	47.2		.7		8.4	9.7	63.8	50.3	11.6	15.0	12.4		1	5		1	25	12	14	9					5 N	19 E
		22821	283	3	467	6	3	3	7		2			12.8	52.9		.1	4	11.5	10.1	66.2	55.4	17.7		20.3	.8	9	17				1	2	1					5 N	20 E
		23043	161		4	4	3	2			2			.3	44.6	60	4.4		11.1	6.5	32.8	12.7	13.8	4.2	15.0	.2	6	10		1	1	4	62	6					6 N	17 E
		23065	253	3		4	2	3			1			18.0	47.6		.9		10.0	14.4	54.9	26.6	39.9	1.3	.8	.3	20	17	10		1	22	23	3					6 N	18 E
		22854	190	5		7		1						7.0	51.2				27	13.1	55.4	38.3	25.5	8.6	1.2		24	15		3		7	12	6					6 N	19 E
		22999	435	1		9	4	2	7		5			18.9	57.5	.4			6.9	6.0	60.5	107.4	31.5		2.4	7.8	2	8					38						6 N	20 E
		23205	303	10	66	1	4	5	1	1	2		1	14.0	49.4		10.7		12.4	7.9	56.7	46.3	9.8	4.4			2	6		1	2	2	54	36	6		1			7 N	17 E
		22904	530		293	4	2	1						16.7	50.1	.3			18.7	12.8	62.7	31.5	12.4	4.3						1	1								7 N	18 E
		22833	333	10	307	4	1	2	2		4	1		34.9	37.4		1.2		9.9	21.3	85.0	69.2	15.7	7.7	18.9	.8	15	5					21	1			1	1	7 N	19 E
	4	23012	494	16	1	13	5	2	13	1	18		1	19.7	58.4	1.0	.9		5.3	13.7	75.3	65.2	16.8	1.7	17.0	.2	5	3		1			52						7 N	20 E
	4	23274	264	18	83	3	5	2	3	3			3	13.7	53.1	.8	.8		6.6	10.5	44.3	35.1	9.7	11.8			4	9					14	14			4		8 N	17 E
0		23134	434	8	293	5	4	7						10.6	61.6	3.4	2.4		34.9	9.7	77.1	46.5	8.2	10.7	.2		13	5		1						5			8 N	18 E
		23138	231	3		5	1	2						9.0	60.0				5.9	17.9	68.6	43.8	20.7	.6			1	7	1	1					4				8 N	19 E
		23125	426	6		6	3	12	7	1	10		3	17.6	60.1	1.0	.5	.4	6.8	15.7	74.8	63.0	19.4	8.4	11.4			27	3		1		3					1	8 N	20 E
0	25																																							
2	25	368,673	4,926	108	2308	89	43	47	41	6	46	2	8	227.2	818.5	17.2	27.6	.8	175.1	183.8	970.9	743.6	270.8	96.5	139.8	10.1	126	156	14	7	10	64	353	99	15	4	7	5	1		
		100																																							

WATER—INCLUDES LAKES, PONDS, AND LARGE STREAMS.
URBAN—ALL LAND INSIDE CORPORATE LIMITS OF CITIES TOWNS AND SOCIAL INSTITUTIONS.
NUMBERS SUCH AS 0—6 6—12 DENOTE DIAMETER OF TREES
G—M—P DENOTES DENSITY OF FOREST
G—GOOD M—MEDIUM P—POOR

CON.—CONIFERS SUCH AS PINE AND SPRUCE
W.P.—WHITE PINE.
P.L.—FOREST PLANTATION.

Classification Table.

entory 1934.

LANDS (ACRES)
52.8 ACRES

	A1 — 6-12			A3 — 6-12			C3 — 6-12			RC — 0-6		
P	G	M	P	G	M	P	G	M	P	G	M	P
	30.4	44.4				35						
	21.7	43	30	14.5	57.5							
6					91	35.9		17.3				
	32.5		29.5		9.5	18		246.7				
56		135			9.5	12.7		37.8				
37		54.5	119.5					12.3				
21								24				
51	19.5	4			7.5			43			9	
		20										
						6.5						
171	104.1	300.9	179	14.5	175	108.1		381.1			9	
.08	.05	.15	.09		.09	.05		.2				

GAME (NO.)				HIGHWAYS (MI.)																	
HUNG. PART.	PHEASANT	QUAIL	SQUIRREL	HARD SURFACED	IMPROVED GRAVEL	UNIMPROVED GRAVEL	LANE	POWER LINE	TELEPHONE LINE	RAILROAD	OCCUPIED HOUSE	UNOCCUPIED HOUSE	SUMMER HOME	SCHOOL	CHURCH	CREAMERY	STORE	FILLING STATION	TOTALS
				9.5	19.5		2.1	23.7	20.3	6	216		63	3	1		2	2	8610.7
				18.6	51.5		3.5	43.6	51.2	18.5	381	8	1	11	2		4	9	22634.8
62	3	18		13.5	58.3		13	31.6	67.1		330	6		8	3	1	6	7	22659.2
9	1	7		6.5	44.2		12.6	29.2	43.5	5.5	194	5	209	5	3		7	3	22777.1
55	3		4	14.5	40.5		17.7	39.9	35.7	4	203	6	378	8			3	1	22087.8
30	12		12	9.2	18.1	1	7	11.8	23.2	6	77		3	4	1				11265.5
	2			6	16.2		4.1	18	21.5	9	87	3		1	1				11509.8
				4.2	28.1	2.5	6.1	19.9	25.6	7	110	1	48	3				1	15370.6
19	17			13	48.3	2	8.9	27.2	40.7	6	196	5	141	7	2	2	6		23107
	15			22.5	45.8	2	4	38.8	54.8	6	273	5		11	2		2	6	23098.7
10	2			22.5	55.6		3.2	42.8	57	18	451			9	2		6	4	22996.8
				7.2	10.8	5	.3	11.2	11.9	6.7	141	2	2	3			1		4718
85	55	25	16	147.2	437	12.5	82.5	332.7	452.5	92.7	2659	41	845	73	17	3	37	33	210836
																			100%

B. F. HENRY
E. O. LARSEN
RACINE, WIS.
8-18-34

Racine County General Classification Table.

Wisconsin Land Inventory 1934.

WOODLANDS (ACRES)
17952.8 ACRES

NDS (ACRES) SEDGE C4	LEATHERLEAF D4	WEEDY PEATLAND E4	CRANBERRY F4	D1 — 0-6 G	D1 — 0-6 M	D1 — 0-6 P	D1 — 6-12 G	D1 — 6-12 M	D1 — 6-12 P	D1 — 12-18 G	D1 — 12-18 M	D1 — 12-18 P	D1 — 18+ G	D1 — 18+ M	D1 — 18+ P	A1 — 6-12 G	A1 — 6-12 M	A1 — 6-12 P	A3 — 6-12 G	A3 — 6-12 M	A3 — 6-12 P	C3 — 6-12 G	C3 — 6-12 M
				4			15.6	108.4	116.8		22	58.8				30.4	44.4				35		
83.3					6					167.5	607.5	431.8				21.7	43	30	14.5	57.5			
		28				7	14	406.1	448.5	1	191.5	72.5	77.1	138.9	6					91	35.9		17.3
56		1756.5	1	12				40	71	87.5	995.5	561.2				32.5		29.5		9.5	18		246.7
30.5				9.5	31.5		287.9	700.2	214.5	195.5	647.3	412.9	37		56		135			9.5	12.7		37.8
3	96.5			4		12.8	242.2	198.4	342.8	184.9	283.4	209.5	96	131.8	37		54.5	119.5					12.3
574.5			35				42	20	415.4	81	219.5	384			21								24
					66.5	72.5	152	606.5	739.5	134	282.3	441.5		75	51	19.5	4			7.5			43
539.4		6		3			210.5	210.5	294.5	81	608	578.5					20						
34							42.7	246.9	271.6	56.2	409.1	201.7											
							55	149.5	58.5	2	53.3	42.3											
				12	22.5	40.5	40		95.5			91									6.5		
1320.7	96.5	1790.5	36	44.5	126.5	132.8	1101.9	2686.5	3068.2	990.6	4317.6	3485.7	210.1	345.7	171	104.1	300.9	179	14.5	175	108.1		381.1
.63	.04	.85	.01	.02	.06	.06	.52	1.27	1.45	.47	2.05	1.66	.1	.16	.08	.05	.15	.09		.09	.05		.2

(INCHES)
18+

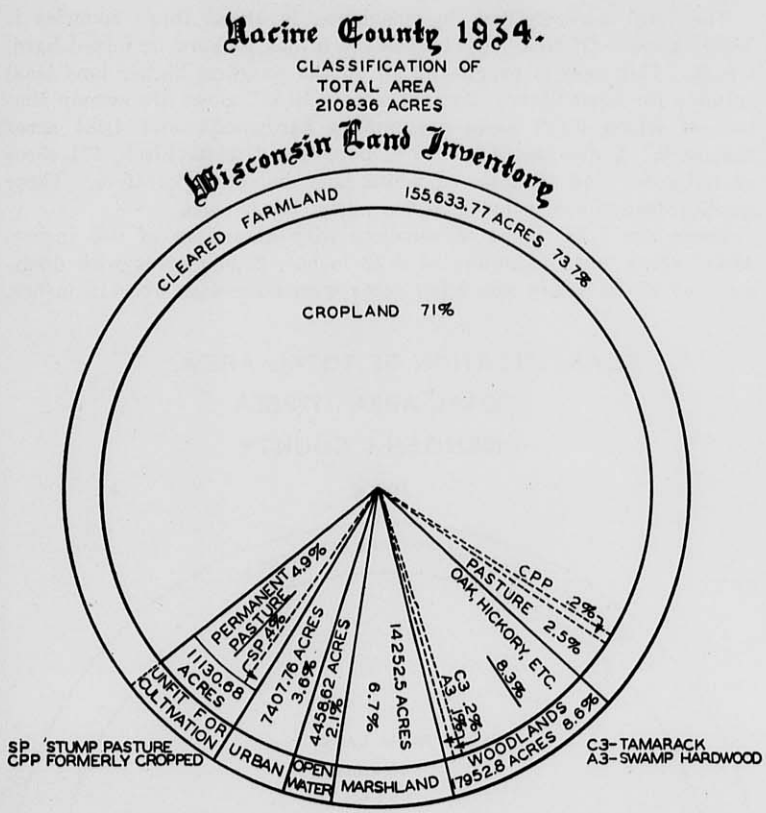
Racine C

DESC. TOWNSHIP AND RANGE	AGRICULTURAL (ACRES)													MARSHLANDS (ACRES)										
	C CLEARED	P PASTURE	SP STUMP PASTURE	PP PERMANENT PASTURE	CPP FORMERLY CROPPED	ORCHARD	FUR FARM	EROSION	A ABANDONED	U URBAN	BURIAL PLOT	GRAVEL PIT	L OPEN WATER	A4 TAG ALDER-WILLOW	B4 CATTAIL	C4 GRASS	C4 SEDGE	D4 LEATHERLEAF	E4 WEEDY PEATLAND	F4 CRANBERRY	DI — 0-6 G	DI — 0-6 M	DI — 0-6 P
CALEDONIA T4N - R23E	6927.2	167.1	19.2	198.9		6.4		7		632.3			110.2	32.4		74.6					4		
CALEDONIA T4N - R22E	19719.2	159	168.6	471.7		42				430.8	9.5		72.3			100.7	83.3					6	
RAYMOND T4N - R21E	19069.1	5328	80	933.9	29	24				42.5	12.4	5	54.5	12.5	39.1	289.6			28				7
NORWAY T4N - R20E	13569.5	290.9	72	1370.6						240.5	7		1363.5	217.2	45.5	1683.5	56		1756.5	1	12		
WATERFORD T4N - R19E	12910.8	422	152	949.5			20		9	475	5	3.5	1179	69	185	2890.2	30.5				9.5	31.5	
ROCHESTER T3N - R19E	6222.4	504.3	95.1	1095.4		9	7		9.5	130.2		7.5	117.9	69.3	24.8	944.5	3	96.5			4		12
BURLINGTON T3N - R19E	5497.5	177.5		1023.9	364.5					1480.5	37		679.5	43.5		389.5	574.5			35			
BURLINGTON T2N - R19E	7695	677.6	71.8	1228.2	61	36	8		6.5	176		29.5	286.2	96.7	37	2257.7						66.5	72
DOVER T3N - R20E	15397.7	1158.6	111	1546.5		4			23	862	11		526.5		21.5	893.8	539.4		6		3		
YORKVILLE T3N - R21E	18955.1	977.2	49	1116.5		28				322.5	2.5		46		6	333.7	34						
MT. PLEASANT T3N - R22E	20567.1	179.2		372.9		110			18	1115.5	26			7	7	233.5							
MT. PLEASANT T3N - R23E	3006.4	63.5		4						1245.1	48	16	23			4					12	22.5	40
TOT. BY TYPE	149537	5309.7	818.7	10312	454.5	259.4	35	7	66	7152.9	158.4	61.5	4458.6	547.6	365.9	10095.3	1320.7	96.5	1790.5	36	44.5	126.5	132
% BY TYPE	70.95	2.52	.39	4.89	.22	.12	.01		.03	3.39	.07	.03	2.11	.26	.17	4.78	.63	.04	.85	.01	.02	.06	.06

KEY - G - GOOD
M - MEDIUM
P - POOR

DI - OAK HICKORY TYPE
AI - UPLAND HARDWOOD
A3 - SWAMP HARDWOOD
C3 - TAMARACK
RC - RED CEDAR

DIAMETER CLASSES (INCHES)
0-6 6-12 12-18 18+



land would be helpful in reducing dust storms and erosion, as well as in raising the water table, reducing rapid runoff and excessive evaporation.

Of the present marsh or peat land, not now used for crop production, 50,000 acres would probably support a tree growth of Norway spruce, tamarack and black ash. Much of the balance of the marsh land would be eliminated by a raise of a few feet in lake levels. (See Plates on pages 28, 29, 30)

Of the woodlot area of 78,991 acres, about 68,000 acres are upland hardwoods, mainly oak-hickory, and the balance of nearly 11,000 acres are swamp hardwoods and tamarack.

STATUS OF THE WOODLANDS

Formerly these counties were well timbered with oak and other varieties of hardwoods. Samuel Storrow when he travelled through this region in 1817 mentions the white oak trees as the largest he had ever seen. He also mentions the oak openings, or natural clearings, looking as if made by the hand of man.

The total acreage now in woodlands in these three counties is 78,991 acres. Of this, 68,134 acres are in oak-hickory or mixed hardwoods. This area is practically all on the rougher, higher land least suitable for agriculture. Approximately 10,857 acres are swamp timber, of which 6,173 acres are swamp hardwoods, and 4,684 acres tamarack. There are 615 acres of popple and white birch, 471 acres of red cedar and 77 acres of white pine and other conifers. These small acreages are included in the mixed hardwoods.

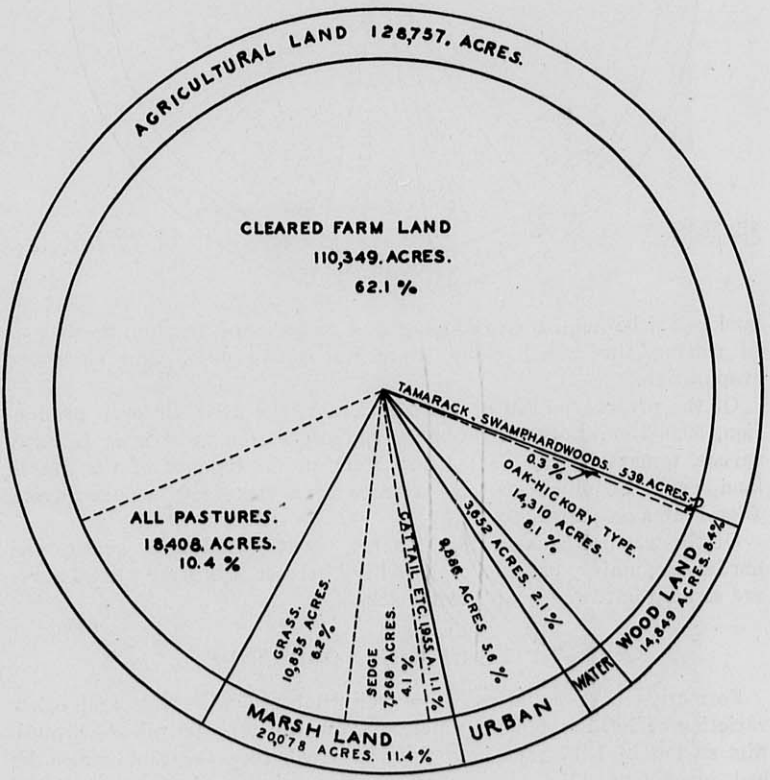
There are 5,389 acres of woodlots with diameters of 0–6 inches, 48,413 acres with diameters of 6–12 inches, 22,985 acres with diameters of 12–18 inches and 2,180 acres with diameters over 18 inches.

CLASSIFICATION OF TOTAL AREA.

TOTAL AREA 177,222 A.

KENOSHA COUNTY.

1934.



PLATE

KENOSHA COUNT

PHYSICAL INVENTORY OF KENOSHA COUNTY INCLUDING LAND COVER CLASSI

ACRES

DESC.		AGRICULTURAL																OAK-HICKORY D-1									SWAMP HARDWOOD A-3						TAMARACK C-3					
TOWNSHIP	RANGE	CLEARED	PASTURE	STUMP PASTURE	PERMANENT PAST.	POOR LAND PREVIOUSLY CROPPED	ORCHARDS & VINEYARDS	ABANDONED	OPEN	URBAN	AIR PORT	CAMPSITE	CEMETERY	COMMERCIAL GRAVEL PITS	GOLF COURSE	NURSERY	PARKS	0-6			6-12			12-18			18 & OVER			0-6			6-12			0-6			6-12	
		C	P	SP	PP	CPP	Y	A	O	U			⊞	⌀				G	M	P	G	M	P	G	M	P	G	M	P	G	M	P	G	M	P	G	M	P	G	M
1N	20E	11,060	497	69	794	236	2	145	188	1,310			11	262	123		48	58	35		188	833	795	220	326	188			11			7	32						33
2N	22E																																						
2N	23E	20,933	446	9	430	246	94	208		2,696	120		44		225	80	321	29	6	10	236	140	189		42	80			6				89	5					
1N	19E	8,297	244	68	680	171	94			740			6	26	289					49	20	451	424		392	457		116		8									
1N	22E																																						
1N	23E	15,100	786	56	778	525	35	2,108		3,238	147		2		51						84	878	327	18	449	34			23										
2N	21E	17,029	1,137	255	301	456	20			29			3						31		36	400	380	48	202	267			30										
1N	19E																																						
2N	19E	8,011	159	30	893	291		3		230			8	12				3			81	629	386		174	323		22	76									168	179
1N	21E	14,872	1,163	376	1,507	82	37	60		104			1					12	5		221	762	243		80	158		6										
2N	20E	14,677	1,134	297	668	615	7					140							8	44	144	745	585	71	486	387		72	79						8				
TOTAL		109,979	5,566	1,160	6,051	2,622	289	2,524	188	8,347	267	140	75	300	688	80	369	102	85	103	1,010	4,838	3,329	357	2,151	1,894		216	225	8		7	121	5		8		168	212
PERCENT		62.06	3.14	.65	3.41	1.48	.16	1.42	.11	4.71	.15	.08	.04	.17	.39	.05	.21	.048	.05	.06	.57	2.73	1.88	.20	1.21	1.07		.12	.13	.005		.004	.07	.003		.005		.09	.12

0-6, 6-12, ETC. DIAMETER IN INCHES. ABBREVIATIONS: G-GOOD, M-MEDIUM, P-POOR.

KENOSHA COUNTY 1934

Y INCLUDING LAND COVER CLASSIFICATION IN ACRES-BY CIVIL TOWNSHIPS AND BY TYPES.

18 & OVER G	18 & OVER M	18 & OVER P	SWAMP HARDWOOD A-3 0-6 G	SWAMP HARDWOOD A-3 0-6 M	SWAMP HARDWOOD A-3 0-6 P	SWAMP HARDWOOD A-3 6-12 G	SWAMP HARDWOOD A-3 6-12 M	SWAMP HARDWOOD A-3 6-12 P	TAMARACK C-3 0-6 G	TAMARACK C-3 0-6 M	TAMARACK C-3 0-6 P	TAMARACK C-3 6-12 G	TAMARACK C-3 6-12 M	TAMARACK C-3 6-12 P	MARSH CAT TAIL B4	MARSH SEDGE C4	MARSH WEEDY PEAT E4	MARSH TAGALDER-WILLOW A4	MARSH GRASS C4	WATER (LAKES) L	TOTAL ACRES	NUMBERS: HOUSES OCCUPIED	HOUSES UNOCCUPIED	SUMMER HOMES	SCHOOLS	CHURCHES	STORES S	FILLING STATIONS	CREAMERIES C	ARMORY	SANITARIUM	GREENHOUSES	HANGAR	GRAVEL PITS	EROSIONS	SPRINGS	FUR FARMS	GAME COUNT: GEESE	HUNG. PART.	PHESANT	MILES: HIGHWAYS: HARD SURFACED	GRAVEL IMPROVED	GRAVEL UNIMPROVED	DIRT IMPROVED	DIRT UNIMPROVED	TELEPHONE & POWER LINES: TELEPHONE	POWER	RAILROADS
		11				7	32						33	9	144	1,004		68	2,658	1,754	23,108	221	12	182	10	1	1	8						11	1	2	3		17	3	14.74	52.96	3.22	1.42		52.78	47.73	12.96
		6					89	5							9	74		7	153		26,927	496	4		8		3	9		1	1				6	1			29	3	22.27	55.21	8.18	3.50	.57	62.90	60.36	24.41
	116			8											22	167	125	87	902	1,520	15,355	141	2	376	4		2		1				3	2				11		8.48	40.45	1.65	.93		39.96	20.82	5.96
		23													344	1,393		80	1,217		27,673	470	5	2	13	1		14				5	1	1					13	1	29.21	58.27	2.30	.47	.25	51.98	57.73	26.22
		30													71	990	4	13	1,118	12	22,832	201	5		11	3		1						1	3				88	9	10.43	36.10	4.50	.50		42.08	14.35	
	22	76										168	179		202	972		190	2,167	171	15,380	156	2	10	7	3	2	3	1						7	2			11	1	8.29	30.73	1.20	3.52		36.49	22.04	4.15
	6														166	1,277	324	18	1,443	181	23,098	221	2		7	2	1	5						8	2				36	12	7.00	53.13	1.77			44.97	32.09	6.10
	72	79								8					45	1,391		35	1,197	14	22,849	171	5		8	1		1						5	3	1	1	15	57	7		56.75	6.15	.75		42.57	28.21	
	216	225		8		7	121	5		8		168	212	9	1,003	7,268	453	498	10,855	3,652	177,222	2,077	37	570	68	11	9	41	2	1	1	5	1	29	24	6	4	15	262	36	100.42	383.60	28.97	11.09	.82	373.73	283.33	363.13
	.12	.13		.005		.004	.07	.003		.005		.09	.12	.005	.57	4.10	.26	.28	6.13	2.06	100.																									

ATIONS: G-GOOD, M-MEDIUM, P-POOR.

WISCONSIN LAND

MILES

UNT	HIGHWAYS					TELEPHONE & POWER LINES		RAILROADS		DESC.		
PHESANT	HARD SURFACED	GRAVEL IMPROVED	GRAVEL UNIMPROVED	DIRT IMPROVED	DIRT UNIMPROVED	TELEPHONE	POWER	RAILROADS	R.R. ABANDONED	TOWNSHIP	RANGE	
3	14.74	52.96	3.22	1.42		52.78	47.73	12.96		1 N	20 E	SALEM
3	22.27	55.21	8.18	3.50	.57	62.90	60.36	24.41		2N 2N	22 E 23 E	SOMERS
	8.48	40.45	1.65	.93		39.96	20.82	5.96	4.12	1 N	19 E	RANDALL
1	29.21	58.27	2.30	.47	.25	51.98	57.73	26.22		1 N 1 N	22 E 23 E	PLEASANT PRAIRIE
9	10.43	36.10	4.50	.50		42.08	14.35			2 N	21 E	PARIS
1	8.29	30.73	1.20	3.52		36.49	22.04	4.15		1 N 2N	19 E 19 E	WHEATLAND
12	7.00	53.13	1.77			44.97	32.09	6.10		1 N	21 E	BRISTOL
7		56.75	6.15	.75		42.57	28.21			2 N	20 E	BRIGHTON
36	100.42	383.60	28.97	11.09	.82	373.73	283.33	363.13	4.12	TOTAL		
ATI										PERCENT		

WISCONSIN LAND INVENTORY.

There is practically no reproduction. This is due to grazing, and many woodlots are rapidly becoming open pasture. (See Plates and Cuts on pages 19, 21–27 inclusive) Plates on pages 21, 22, 23 show the acreage of the woodlands density. The following table shows the approximate acreage, size, density and cords of the various kinds of woodlots in the three counties.

Note the dead trees in this heavily grazed woodlot.

Note the condition of this ungrazed woodlot.

	Waukesha County			Racine County				Kenosha County			
Acres	Size	Density	Cords	Acres	Size	Density	Cords	Acres	Size	Density	Cords
569	0–6	Good	None	44	0–6	Good	None	102	0–6	Good	None
1,185	0–6	Med.	None	136	0–6	Med.	None	101	0–6	Med.	None
3,016	0–6	Poor	None	133	0–6	Poor	None	103	0–6	Poor	None
1,555	6–12	Good	46,650	1,220	6–12	Good	36,600	1,185	6–12	Good	35,550
13,850	6–12	Med.	207,750	3,543	6–12	Med.	53,145	5,171	6–12	Med.	77,565
15,192	6–12	Poor	75,960	3,355	6–12	Poor	16,775	3,343	6–12	Poor	16,715
1,132	12–18	Good	45,280	991	12–18	Good	39,640	357	12–18	Good	14,280
4,664	12–18	Med.	93,280	4,318	12–18	Med.	86,360	2,151	12–18	Med.	43,020
3,990	12–18	Poor	31,920	3,486	12–18	Poor	27,888	1,894	12–18	Poor	15,152
176	18 up	Good	7,040	210	18 up	Good	8,400				
437	18 up	Med.	8,740	346	18 up	Med.	6,920	216	18 up	Med.	4,320
399	18 up	Poor	3,192	171	18 up	Poor	1,368	225	18 up	Poor	1,800
46,165			519,812	17,953			277,096	14,848			208,402

Av. per rural home.....105 Av. per rural home.....104 Av. per rural home.....100 c'ds
Av. per acre..... 1.4 Av. per acre..... 1.3 Av. per acre..... 1.25
Total fuel wood in the three counties 1,005,310 cords.

Note. Table based on the following:

No. of cords in good stand 6–12" 30 per acre
No. of cords in med. stand 6–12" 15 per acre
No. of cords in poor stand. 6–12" 5 per acre

No. of cords in good stand 12" and up 40 per acre
No. of cords in med. stand 12" and up 20 per acre
No. of cords in poor stand 12" and up 8 per acre

In connection with the cutting and depletion of the woodlands, it is interesting to note the percentage of recently cut over land as compared to the total acreage of woodland. The following table shows this relationship.

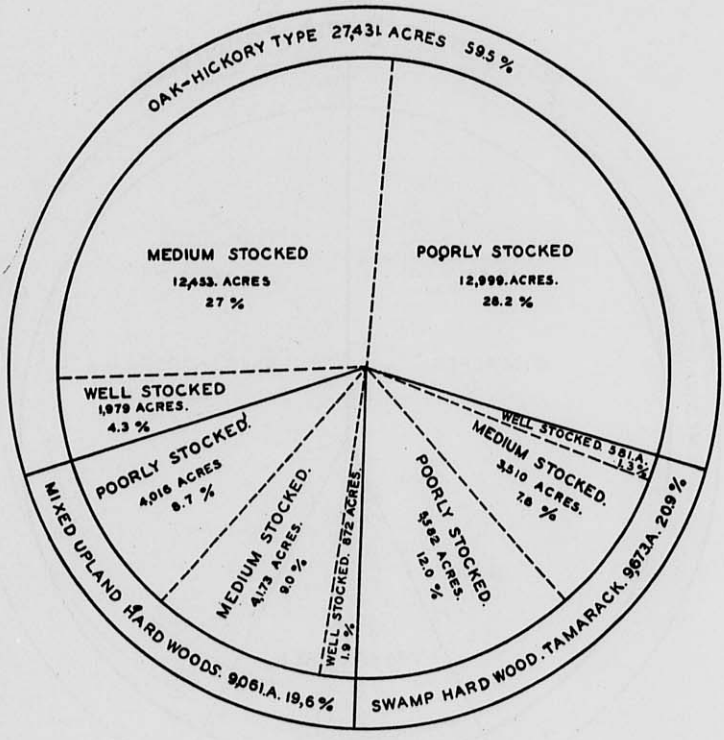
	Total Stumpland	Woodland	Total	%
Waukesha Co.	3398	46,190	49,588	6.8
Racine Co.	819	17,953	18,772	4.4
Kenosha Co.	1160	14,848	16,008	7.2
Total	5377	78,991	84,368	6.4

The present total stumpland cut very recently is 5,377 acres. This represents 6.4% of the total wooded area of the region. If this amount were cut every year the entire area of woodlands in this district would be gone in about fifteen years.

FARM WOODLOT MANAGEMENT

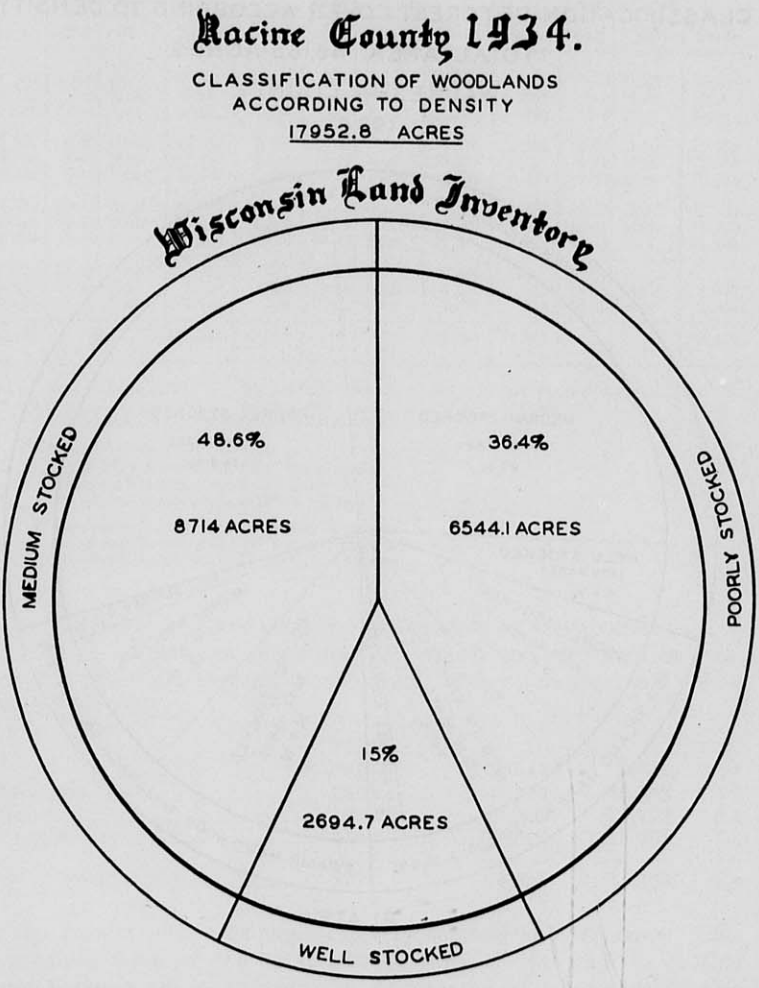
The present trend toward more intensive use of the best land on the farm leaves more steep, stony and wet land relatively idle. Such lands should be growing timber, because a farm is never operated at its greatest efficiency unless all its land is producing to capacity. Other reasons why such land should again be placed under forest cover are:

CLASSIFICATION OF FOREST COVER ACCORDING TO DENSITY.
TOTAL AREA 46,165 ACRES.
WAUKESHA COUNTY.
1934.



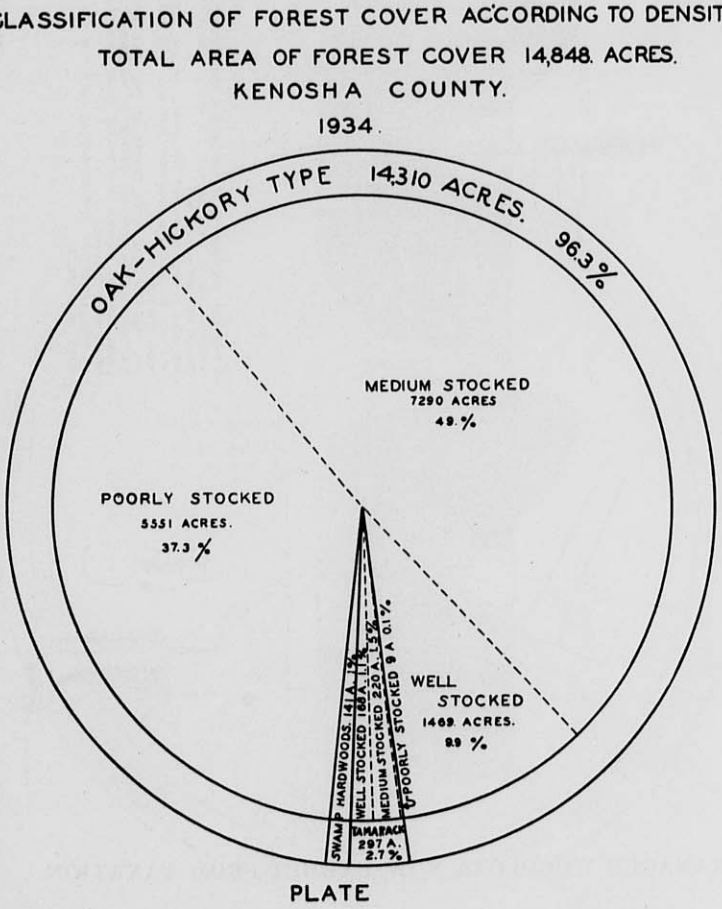
PLATE

1. Conservation of soil moisture not only of the forested land, but extending out to adjacent open fields.
2. Erosion control by holding the ground from washing. (The forest floor prevents water from running off as fast as in the open; absorbing and checking the beating rain, and the roots hold the soil.)
3. The need of windbreaks to reduce evaporation and stop dust storms.
4. To provide fuel, lumber, fence posts, poles, ties, pulp wood, as well as maple sugar and other products.
5. Woodlots provide work for winter and late fall.



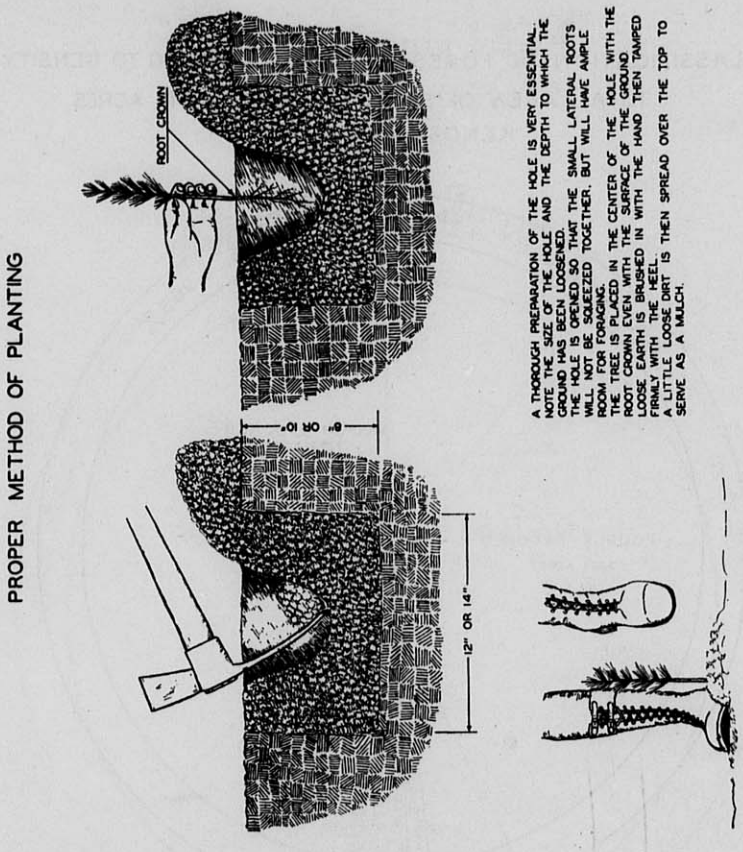
6. By utilization of the poorer lands of the farm the gross value of the farm is increased.
7. Woodlands provide a refuge for game and all forms of wild life, and add much to the beauty of the landscape.
8. More woodlands are needed for recreational use along the densely populated Lake Michigan water front. (See Cut page 7)

One of the first things necessary in the proper care of a woodlot is improvement cutting. This consists of cutting out the defective



PLATE

trees and those trees of inferior species that may be crowding the better ones. This can be done best when cutting fuel wood. In all thinnings, care should be taken that the remaining stand is not injured. This cutting opens the stand enough to give the remaining trees light and space, so they will grow more rapidly. In cutting out building material use should be made of mature or over mature trees. Clear cutting should be avoided especially on steep slopes where erosion is liable to occur. Large open spaces can be planted with young trees, or an open stand can be underplanted with small trees which are shade tolerant.



MANAGED WOODLOTS NOW EXEMPT FROM TAXATION

In order that a growth in acreage of farm woodlots might be encouraged, new laws have been recently enacted which exempt woodlots from *taxation* under certain restrictions. The new state law relating to woodlots exempts the following type of land from taxation.

(a) "Any woodlot or woodlots forming an integral, even though detached, part of any improved and regularly operated farm, and not exceeding one-fifth of the total area of such farm, if the same is enclosed with a legal fence sufficient to keep out horses, cattle, sheep, hogs or other grazing animals.

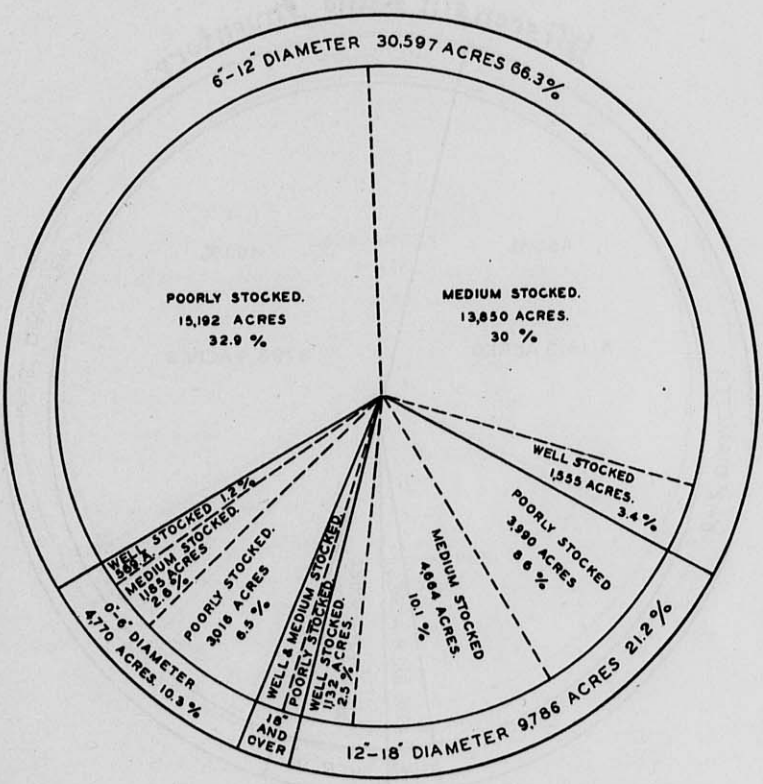
(b) "In addition to the land described in paragraph (a) any portion of a regularly operated farm, the slopes of which are at a gradient of more than thirty per cent, if the same is enclosed with a fence consisting of not less than three barbed wires and the owner refrains from cultivating or mowing such portion, grazing any type of live-

CLASSIFICATION OF FOREST COVER ACCORDING TO SIZE.

TOTAL AREA 46,165 ACRES.

WAUKESHA COUNTY.

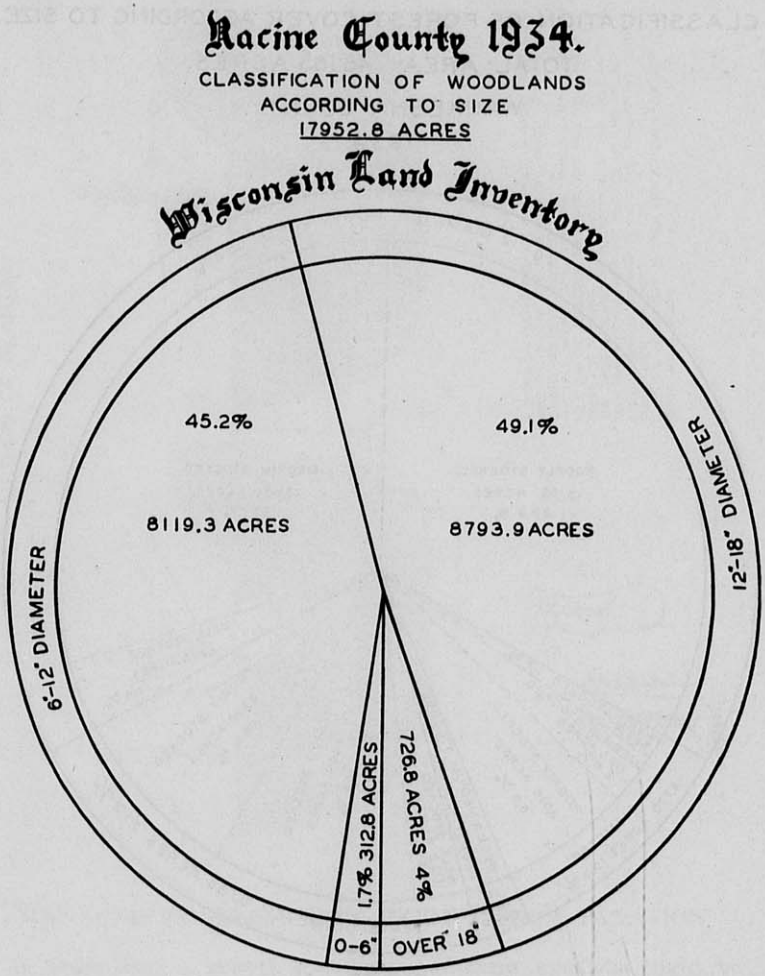
1934.



PLATE

stock thereon, and from burning over such land or takes reasonable precaution to prevent such burning; and if the owner makes a reasonable effort to reforest such portion or to revegetate the same with grass or shrubs such as will prevent erosion or excessive run-off."

In order to obtain such an exemption the owner must file with the town clerk a sketch of the property to be exempted, giving proper dimensions etc., and certifying that the land will not be grazed or burned over, and that he will endeavor to practice forestry upon the land or otherwise revegetate with grass or shrubs the sloping portions liable to erode.

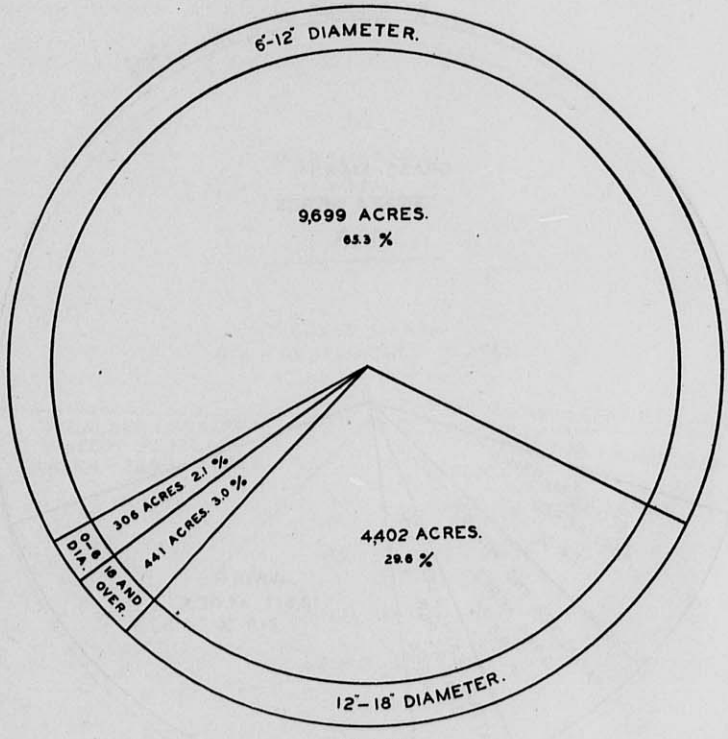


FOREST PLANTING AREAS

High Land

There are 35,300 acres of poorly stocked woodlots in the three counties upon which planting of additional trees would be advisable. About 5,530 acres have reverted from crop land to permanent pasture. (CPP) To this should be added 1343 acres of open land (unused land). This makes a total of 42,175 acres that is better adapted to forest use than to farm crops and pasture. The following table shows the acreage of the above types in the three counties:

CLASSIFICATION OF FOREST COVER ACCORDING TO SIZE.
TOTAL AREA OF FOREST COVER 14,848 ACRES.
KENOSHA COUNTY.
1934.

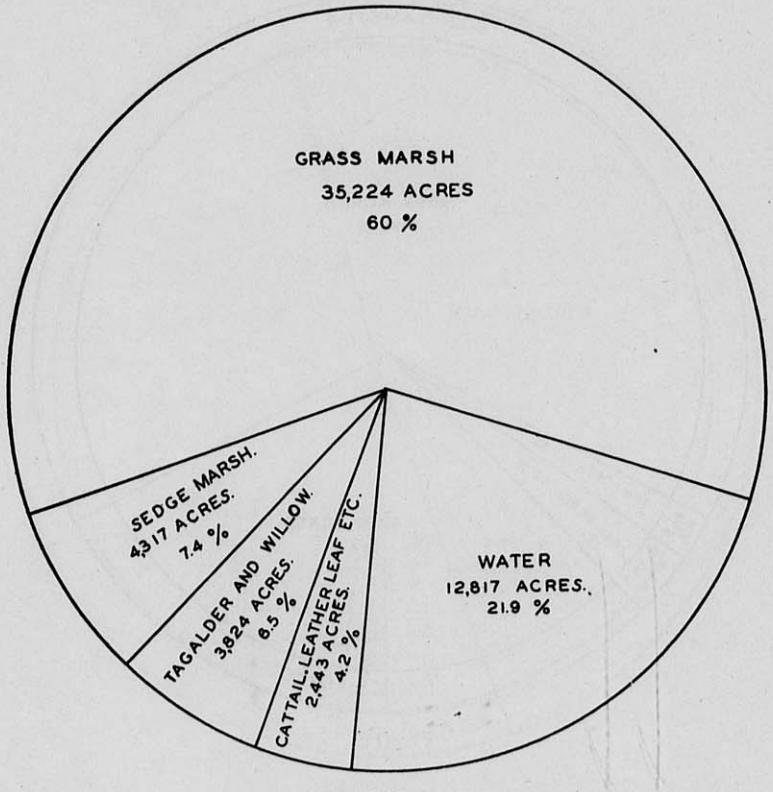


PLATE

PLANTING AREAS ON HIGH LAND

Type	Waukesha	Racine	Kenosha	Totals
CPP	2,453	455	2,622	5,530
Poorly stocked woodlands	22,597	7,145	5,560	35,302
Open land	1,343	----	----	1,343
	26,393	7,600	8,182	42,175

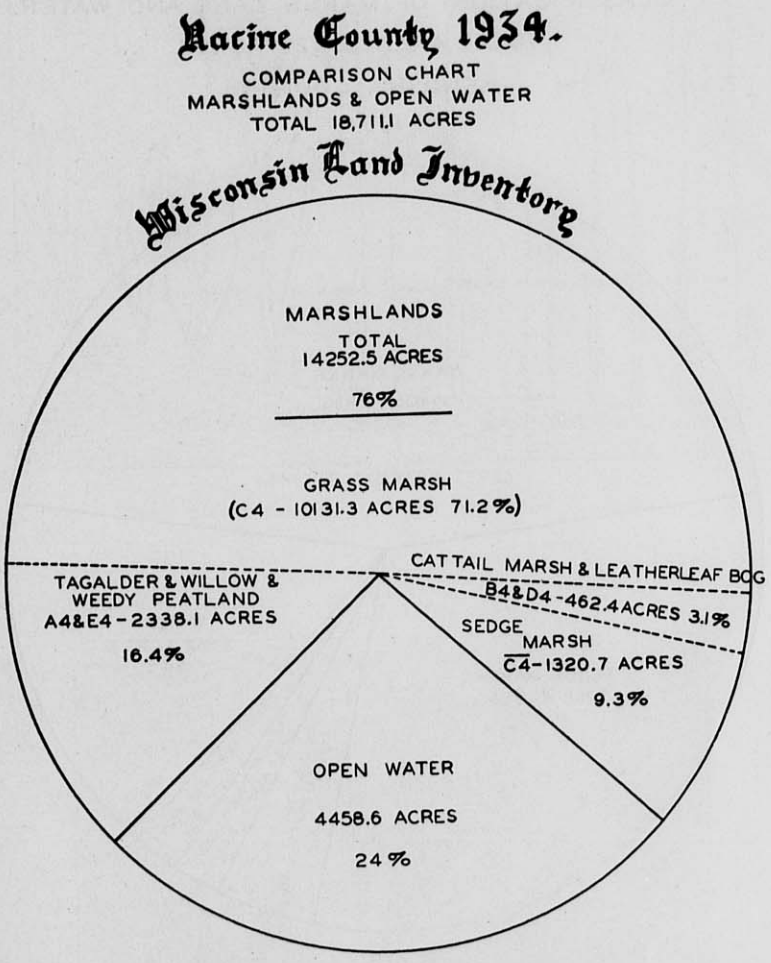
CLASSIFICATION OF MARSH LAND AND WATER.
TOTAL AREA 58,625 ACRES.
WAUKESHA COUNTY.
1934.



PLATE

Marsh Land

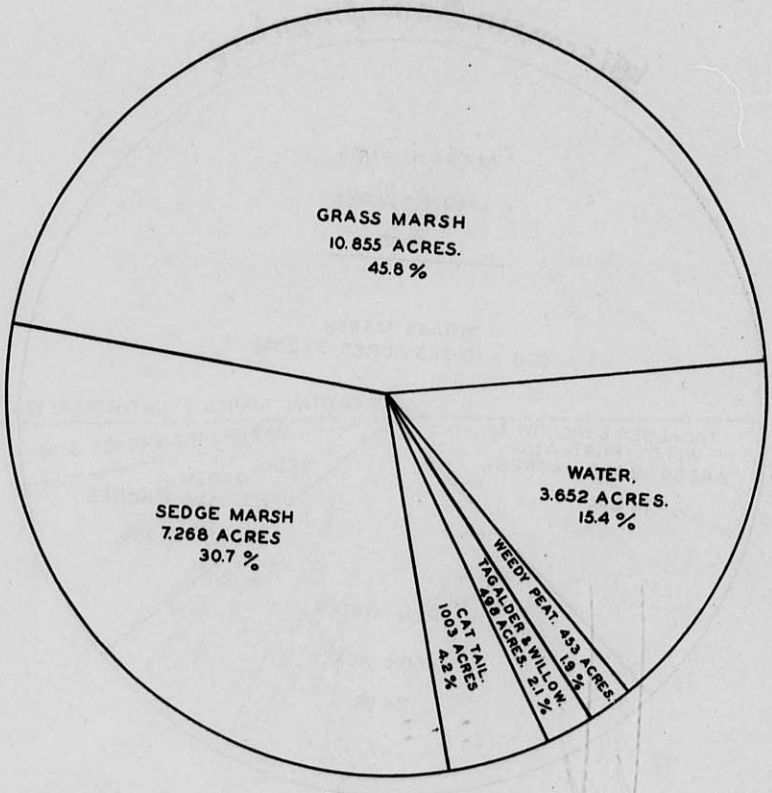
Beside the above high land, there is a total of 76,325 acres of marsh land that should in part be covered with forest growth. Of this 12,906 acres are sedge marsh, 56,174 acres are grass marsh, 2,375 acres are weedy peat land, and 4,870 acres are low brush land. Much of the grass marsh land is used for pasture and, therefore, should not be considered in a forest planting program.



PLANTING AREAS ON MARSH LAND

Type	Waukesha	Racine	Kenosha	Totals
Sedge	4,317	1,321	7,268	12,906
Grass	35,224	10,095	10,855	56,174
Weedy Peat	131	1,791	453	2,375
Brush	3,824	548	498	4,870
	43,496	13,755	19,074	76,325

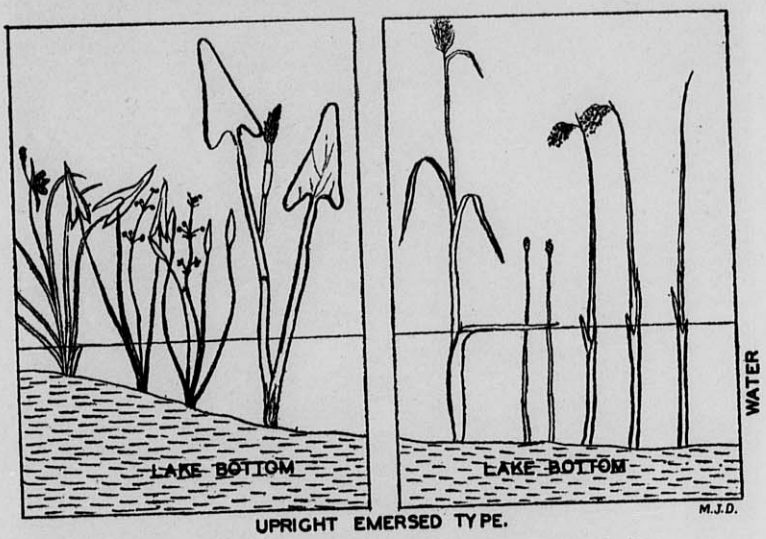
CLASSIFICATION OF MARSH LAND AND WATER.
TOTAL AREA 23.729 ACRES.
KENOSHA COUNTY.
1934.



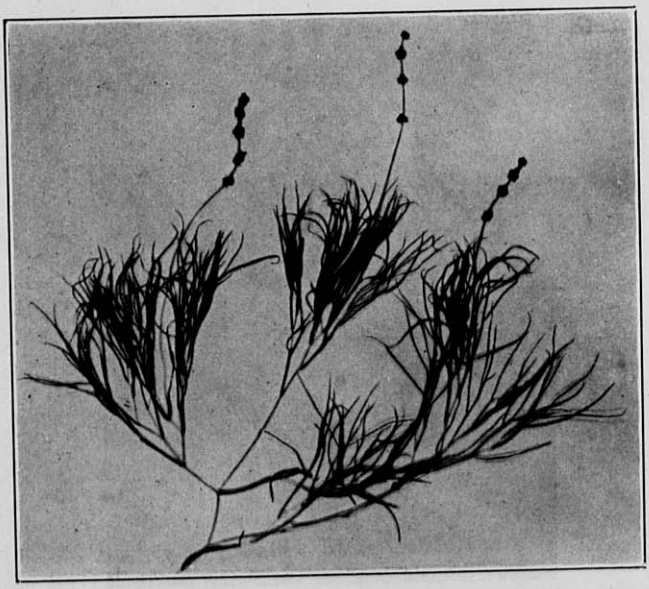
PLATE

The total area, including the high and low land on which forest planting is immediately possible, is 62,324 acres. Planting this area would not decrease the permanent upland nor grass marsh land pasture.

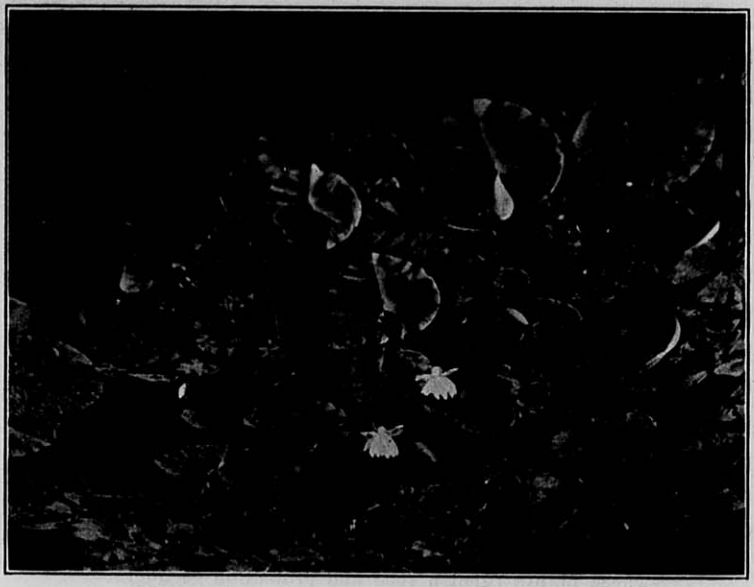
Waukesha county has 34,665 acres of the above amount of land in need of planting, Racine county has 11,260 acres and Kenosha county has 16,399 acres. (For the proper planting method see page 24)



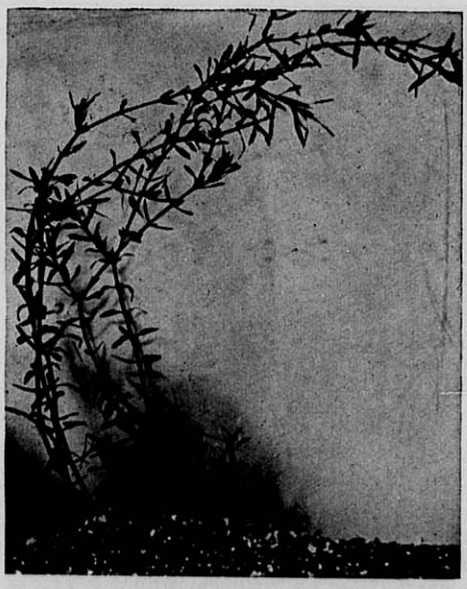
These plants furnish food and protection to ducks.



Sago pondweed also an important duck food.



Lily pads are common where game fish live.



The common water weed *(Elodea)* Important to fish life.