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MICHIGAN'S Agriculture

LOCATION AND CHANGES IN MAJOR PRODUCTS, NUMBER FARMS AND INCOME

County and State Data

A sourcebook based on information from 1969 Census Reports, supplemented by other reports to 1973

By K. T. WRIGHT
Department of Agricultural Economics

COOPERATIVE EXTENSION SERVICE MICHIGAN STATE UNIVERSITY

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MICHIGAN AGRICULTURE

by
K. T. Wright, Department of Agricultural Economics

I. Introduction

A. Purposes, Sources of Data, etc.

1. Purpose

The major purpose of this publication is the presentation of physical and economic information on the areas of concentration of production and rate of change in the agriculture of Michigan. State maps presenting the data by counties are the principal method used. These are supplemented by tables giving district data, along with other relevant information. The objective back of all this is better informed farmers, farm leaders and others concerned about Michigan agriculture.

More specifically, data are presented on the acreage of major crops and the number of livestock: (a) in the state for the last five census years (to give a 20-year view), (b) in each of the 9 districts in the state for 1964 and 1969, and (c) in all the individual counties for 1964 and 1969.

Major emphasis has been placed on presenting county information, indicating areas of concentration of production of crops and livestock in 1969 and areas of significant change from 1964 to 1969; crop and livestock receipts for 1969 by major groups; followed by data on the number of farms by size and income; average farm income and expenses; the percent of the farmers working off the farm and farm population.

2. Sources of Data

Data for most of the maps and tables presented are either shown in the 1964 and 1969 Census of Agriculture reports for Michigan, published by the U. S. Department of Commerce, or calculated from those reports. Unless otherwise noted, the above is the source. Sometimes annual data are presented, which were obtained from either "Michigan Agricultural Statistics," published by the Michigan Crop Reporting Service, or some publication of the U.S.D.A., such as the "National and State Livestock-Feed Relationships" by the Economic Research Service, U.S.D.A. for the animal units of livestock. Data also were obtained from the Population Census reports for use in the population section of the bulletin.

B. Long-Term State Trends

Even though the major focus of this publication is on county data relative to the location of agricultural production in 1969 and the changes of 1964 to 1969, it is thought that information on longer term trends in agriculture for the state as a whole, carrying up to 1973, would help put the data on the shorter period in proper perspective. To this end, general information is presented on state trends in crop acreages and production, livestock numbers and production, farm prices and income and in the number and size of farms.

Crops - The land in farms in Michigan reached a peak of 18.5 million acres in 1935, according to Census reports, and was still 18.4 million in 1945. It has been decreasing steadily since. To indicate more accurately agricultural trends for the past decade, averages of data in "Michigan Agricultural Statistics" have been computed for 1961-63 and 1971-73 (along with a three year average for 1966-68) and are presented in Table 1. This shows that the land in farms in the state decreased from 14.8 to 12.4 million acres, or 16 percent in this 10 years. There was a similar decrease of 16 percent in the preceding decade (17.5 to 14.8 million acres).

Cropland harvested in the state declined from 6.8 to 5.9 million acres (13 percent) during the 10 years 1961-63 to 1971-73, and 15 percent, or 1.2 million acres, in the preceding decade. Thus, the land in farms and the acreage of cropland harvested in the state, have both been declining at about 15 percent in 10 years for the past two decades.

The harvested acreage of the major feed and feed-grain crops, and food crops annually since 1959 are shown in Fig. 1. (Since census data are used in the county analysis in this publication, the census years of 1959, 1964 and 1969 are indicated in this graph. The total acreage of the crops shown in the graph was 98 percent of the total for all crops each of the census years.)

It is obvious that there have been significant changes in the acreages of many of the major crops in this 14 years. Among the feed and feed-grain crops, corn acreage decreased from 1959 until 1969, but since then has increased nearly 500,000 acres. Hay acreage decreased sharply until 1969, but has remained about the same since. The acreage of oats and barley decreased throughout the entire period. Soybean acreage, on the other hand, increased from 236,000 acres in 1959 to 693,000 in 1973. Wheat, the major food crop, was grown in 1973 on about one-half the acreage in 1959. Summarizing, the 1971-73 acreage of feed and feed-grain crops was 93 percent of 1961-63, while food-crops was only 77 percent as much (wheat decrease) and all crops, 87 percent, or a decline of 13 percent (Table 1).

Fig. I - Harvested Acreage of Selected Crops, Michigan, 1959-73--Source: "Michigan Agricultural Statistics"

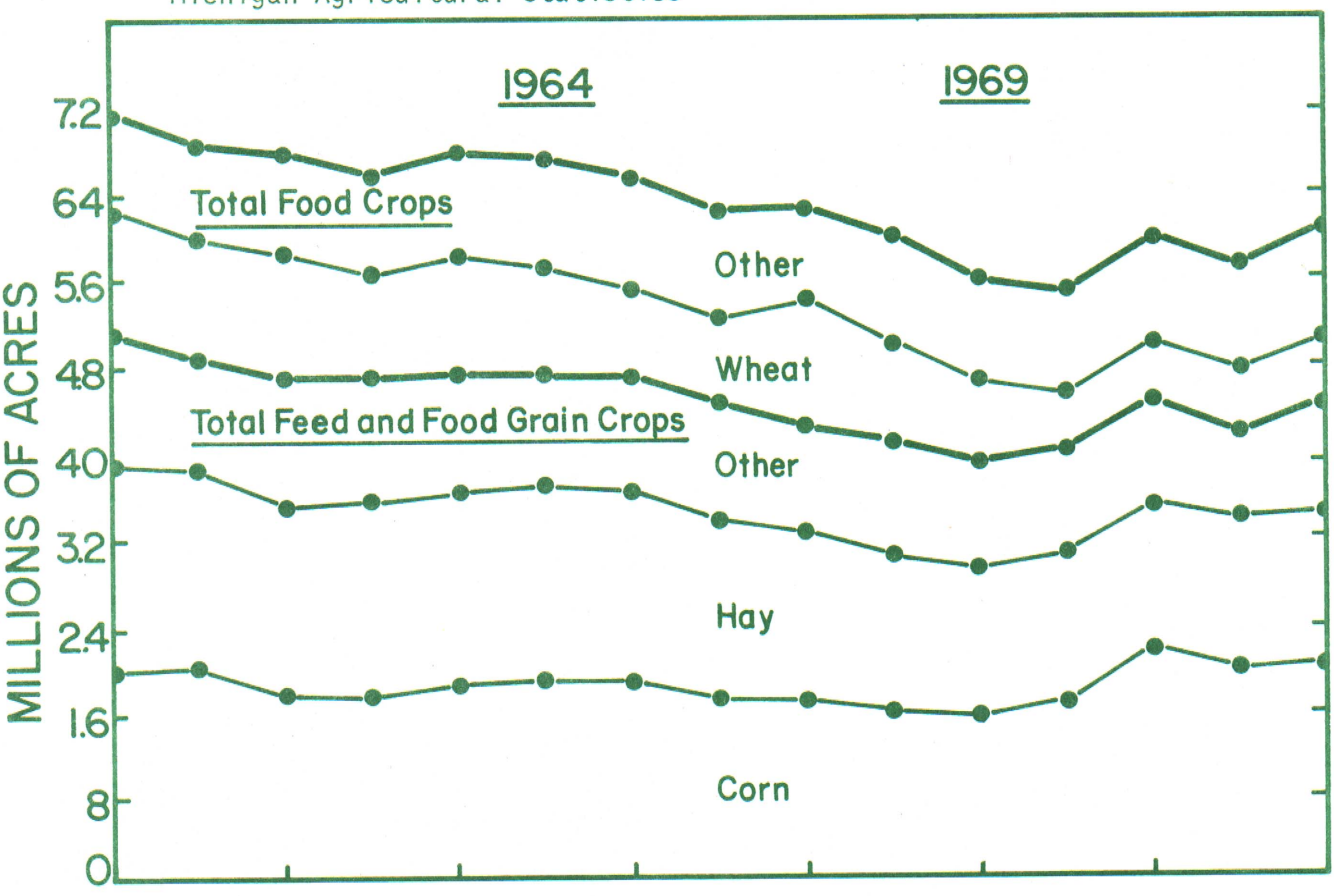
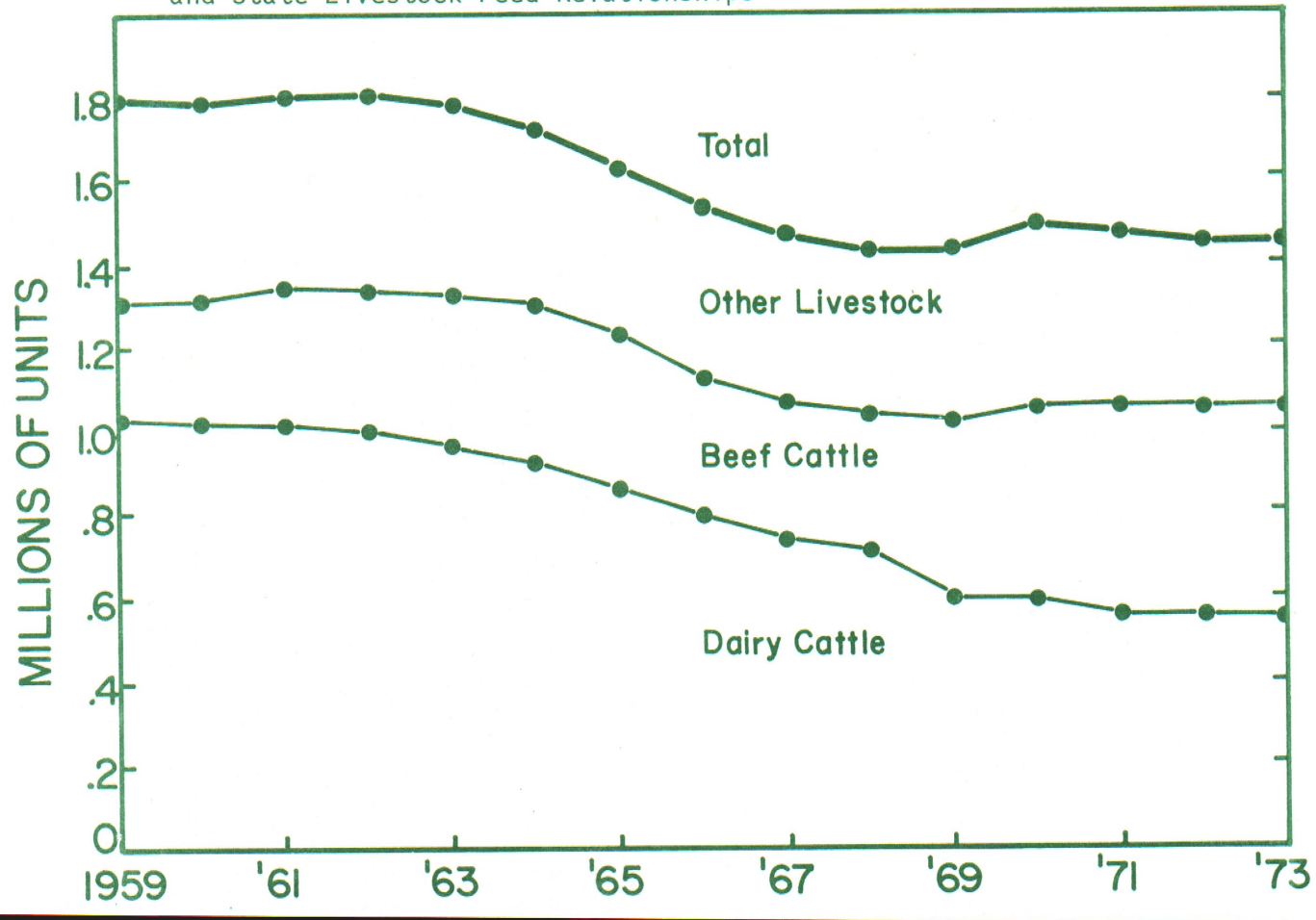


Fig. 2 - Animal Units of Livestock, Michigan, 1959-73--Source: "National and State Livestock-Feed Relationships"



Yields per acre of the nine major field crops (excluding fruits and vegetables), as combined into an index, increased 25 percent in the decade from 1948-50 to 1958-60. In the 10 years of 1961-63 to 1971-73, yields of these crops rose only 10 percent (Table 1). It should be pointed out that many yields were low in 1973.

The total production of major crops indicates very striking changes in the past decade (Table 1). The increase in the production of corn and soybeans in 1971-73, over 1961-63 of 42 percent and 85 percent respectively, is particularly outstanding. This change was nationwide. On the other hand, there was a sharp decline in oats and wheat production, and a 20 percent drop in field bean production, while the production of hay and fruit during '71-'73 was only slightly below 10 years earlier. Of course, the above comment on yields in 1973 affected the total production discussed here.

The index of total crop production during 1971-73 lacked 1 percent of being as much as in 1961-63. That is to say, the increase in yields in this decade was not sufficient to offset the decrease in acres of crops. Shifting our attention to the situation in 1964 and 1969, used in the major portion of this publication, total overall crop production was practically the same both years.

Livestock - The number of livestock of the various kinds on hand January 1 over recent years has shown some marked trends. For instance, back in the 1940s, Michigan had over 1 million milk cows, but now has 420,000. On the other hand, the number of beef cows have increased from approximately 30,000 in the early '40s to 200,000 now. Likewise, the number of beef cattle put in the feedlot for fattening have increased from about 90,000 in 1949 to 250,000 now. The number of hogs has shown cyclical fluctuations with quite high numbers in recent years. The number of hens and pullets reached a peak in the early '40s, declining rather sharply to the early 1960s and remaining between 6 and 7 million since.

It is obviously impossible to add the number of head of the different kinds of livestock to measure the overall trend and the relative importance of the various kinds of livestock. The U.S.D.A. calculates and publishes figures on animal units, based on feed consumption. An average milk cow's feed consumption is considered one unit. The grain- and roughage-consuming (total feed) units by major livestock kinds in Michigan from 1959 to 1973 are shown in Figure 2. One is immediately struck by the sharp decrease in animal units of dairy cattle from approximately 1 million in 1959 to 563,000 in 1973. Animal units of beef cattle increased about 220,000 from 1959 to 1973, compared with a 470,000 unit decrease in dairy cattle. Relatively small changes took place in the other livestock, although all the changes are decreases. Thus, total units of livestock declined from approximately 1,800,000 in the early '60s to 1,427,000 in 1969 and have remained at about the same number since.

To put the changes in clearer focus and confine our consideration to the last decade, let's turn to Table 1 again, where averages for 1961-63 and 1971-73 are presented. During 1961-63, total animal units averaged 1,798,000, with dairy cattle making up 55 percent of that total. Beef cattle accounted for 19 percent with livestock comprising 26 percent.

During 1971-73, the total units of livestock were 19 percent less than 10 years earlier (acres of cropland harvested declined 13 percent). Of the total for these last 3 years, dairy cattle made up 39 percent, and beef cattle 34 percent with other livestock 27 percent. Looking at the changes during the 10 years by kinds of livestock, the average units for 1971-73 of beef cattle were 44 percent more than 1961-63, but all the rest showed decreases--hogs 11 percent, poultry 13 percent, sheep 35 percent, and dairy cattle 44 percent. For the years used in county comparisons, there were 17 percent fewer animal units in the state in 1969 than in 1964.

Production per head of livestock, of course, has a very important impact on total livestock output and consequently on livestock income. Milk production per cow increased from an average of 8,663 pounds during 1961-63 to 11,287 pounds in 1971-73 (even though 1973 was less than 1972), an increase of 30 percent, or about 260 pounds per year. Egg production per layer increased from 216 to 230, or about 6 percent. Pigs weaned per sow averaged 7.4 in both 71-73 and 10 years earlier. If one computes an index of both the animal units of livestock and total livestock output in the two periods, and divides the latter by the former, he will get an index of livestock production per animal. This index increased from 88 during 1961-63 (1967=100) to a preliminary 105 for 1971-73, or a 19 percent increase in the past decade, due mainly to higher milk production per cow.

Total livestock production, expressed in million pounds of milk, cattle and calves and hogs, and number of eggs, is shown in Table 1. There was 12 percent less milk produced during 1971-73 than 10 years earlier, but 6 or 7 percent more cattle, hogs and eggs. The index of total livestock output, with the relative importance of dairy, declined from 109 during 1961-63 (again 1967=100) to 105 for 1971-73, or a decline of 4 percent.

Thus, to recapitulate for the decade, even though there were 13 percent fewer harvested acres of crops in 1971-73 than in 1961-63, total crop production was only 1 percent less; and although 17 percent fewer animal units of livestock, livestock output during 1971-73 is estimated to be down only 4 percent from 10 years previous. This means that total agricultural output during the past 3 years was about 2-3 percent less than 10 years ago. (If state sales of crops and livestock are converted to 1967 prices, thus putting the sales at constant prices, the volume of products sold during 1971-73 was 1 percent less than during 1961-63, closely checking the previous calculation of total output. See Fig. 3A)

The 1971-73 agricultural output was produced by 26 percent fewer farmers than 10 years earlier. Thus, output per farm was approximately one-fourth greater than 10 years ago (Fig. 3c). Labor input per farm during the past 3 years is estimated to have been 25-30 percent less than during 1961-63, so labor efficiency in the 10 years increased around 50 percent, largely as a result of higher crop and livestock yields and capital input in the form of greater mechanization, plus more usage of purchased inputs and services.

Farm Prices and Income - As anyone knows who has observed farm product prices in 1973, they can fluctuate widely. This has not been so true in the past, in fact, average farm prices in 1964 were practically the same as five years earlier. There has been, however, an upward trend in recent years. Average prices received by Michigan farmers rose from an index of 84 for 1961-63 (1967=100) to 100 for 1966-68 and 132 for 1971-73, or an increase of 57 percent in the decade (Table 1). The 1971-73 average covers drastic changes in 1973, when prices

TABLE I. SOME MAJOR TRENDS IN MICHIGAN AGRICULTURE, 1961-63 to 1971-73

Item	Unit	Averages for Selected Years 1961-63	1966-68	1971-73	% '71-73 of '61-'63
Land in farms	Mil. A.	14.8	13.6	12.4	84
Cropland harvested					
Feed and Feed-grains	Th. A.	4,747	4,295	4,400	93
Food crops	"	1,968	1,878	1,511	77
All crops	"	6,838	6,268	5,911	87
Crop yield index ('67=100)	Index	98	104	108	110
Crop production					
Corn	Mil.Bu.	92.9	94.0	131.9	142
Oats	"	38.5	27.4	17.9	46
Wheat	"	36.5	33.7	19.7	54
Hay	Mil. T.	3.26	3.38	3.05	93
Field beans	Mil.Cwt.	7.78	6.57	6.23	80
Soybeans	Mil.Bu.	7.28	11.00	13.50	185
Fruit (1966-68=100)	Index	124	100	116	94
All crops (1966-68=100)	"	109	100	108	99
Livestock Animal Units					
Dairy cattle	Thous.	996	754	562	56
Beef cattle	"	345	324	495	144
Hogs	"	249	199	222	89
Poultry	"	145	145	126	87
Sheep	"	37	27	24	65
Horses	"	26	25	24	92
Total		1,798	1,474	1,453	81
Index of Units ('67=100)		123	101	99	80
Production Per Head					
Milk/cow	Lbs.	8,663	9,490	11,287	130
All livestock products/ Animal Unit	'67 Index	88	101	104	119
Livestock Production					
Milk	Mil.Lbs	5,497	4,787	4,816	88
Cattle & Calves	"	463	469	493	106
Hogs	"	263	219	279	106
Eggs	Millions	1,380	1,574	1,483	107
Prices Received by Farmers	'67 Index				
Crops	"	85	98	131	154
Livestock	"	84	101	133	158
All products	"	84	100	132	157
Farm Income (current prices)	Mil. $				
Crops	"	345	391	544	158
Livestock	"	401	464	598	149
Total	"	746	855	1,142	153
Farm Income at 1967 prices	"				
Crops	"	405	399	418	103
Livestock	"	476	460	450	95
Total	"	881	859	868	99
No. Farms*	Thous.	110	92	81	74
Av. Size of Farms	Acres	135	148	153	113

*As reported by the Michigan Crop Reporting Service.

Sources: "Michigan Agricultural Statistics," except for animal units (U.S.D.A.) and index numbers, computed by author.

rose from an index of 135 in January to 205 in December, and the rise in crop prices was still greater.

With the rise in prices received, cash income from marketings of farm products rose from an average of [illegible]6 million during 1961-63 to $1,142 million for 1971-73, or 53 percent, and to $1,414 million for 1973 (Fig. 3A). If income from farm marketings is computed at 1967 prices for these years, eliminating price variations, the income from crops at constant prices increased from $405 to $418 million from 1961-63 to 1971-73, or 3 percent, while livestock income decreased from $476 to $450 million, or 5 percent (Table 1). Total income at constant prices, or volume of agricultural marketings, declined 1 percent from 1961-63 to 1971-73 (Fig. 3A). This graph shows that the peak output, as measured this way, was reached in 1964. This was when livestock production was the highest (Fig. 3B). Crops have become more important in agricultural marketings, based on sales at 1967 prices. Back in 1949, crop income accounted for 38 percent of the total. By 1959 this had increased to 46 percent, the same as it was for 1961-63. By 1969, crop income at 1967 prices slightly exceeded livestock income, but livestock volume increased after that, so that crop marketings slipped back to 48 percent of the total for 1971-73.

Number of Farms and Income Per Farm - According to the Michigan Crop Reporting Service, the number of farms in the state declined from 110,000 for 1961-63 to 81,000 for 1971-73, for a decrease of 26 percent. The number of farms with gross farm incomes of less than $10,000, except for the part-time farmers whose numbers have declined slowly, have decreased quite rapidly. At the same time the number with $20,000 or more gross income, has increased substantially.

Income per farm, at current prices, and as an average for all farms, was $6780 for 1961-63, rising to $14,100 for 1971-73 and $17,675 for 1973 alone (Fig. 3C). If, however, the income is figured at constant prices in an attempt to measure volume of output per farm, it rose from $8050 for 1961-63 to $10,700 for 1971-73, for an increase of over 30 percent. This compares with a 13 percent increase in average acreage (135 to 153), with the remaining 17 percent due to higher crop and livestock yields.

Farms are becoming more specialized. The total acreage of the 10 major crops in 1959 and 1969 divided by the number of farmers growing those crops, shows that a) there were almost 50% fewer growing the crops, and b) the average acreage of the individual crops being grown per farm was 45% greater in 1969 than in 1959. The number of farmers keeping the five major kinds of livestock declined about 65 percent and the average number of the kind kept per farm was about double that in 1959.

C. Short-Term State Trends

The preceding discussion has provided a general, overall background of longer-term state trends, generally for the decade 1961-63 to 1971-73, extending on both sides of the short-term 1964 to 1969 five-year period of changes covered in the state, district and county data and discussion, which constitute the bulk of this publication.

A brief discussion of some of the major differences between the 1964 to 1969 5-year changes and the 10-year changes is in order. The decrease in land in farms from 1964 to 1969 was proportionately faster than for 1961-63 to 1971-73; the same was true of acreage of cropland harvested, which was due in large part to the rapid increase in corn acreage after 1969. Most of the other major crops showed about the same general trend during the 5-year period as for the 10 years. In the case of livestock -- the decrease in the number of milk cows from 1964 to 1969 was much more rapid than for the 10 years, as most of the decrease took place in that 5 years; the increase in beef cattle was at about the same rate as for the decade; the decrease in hogs was twice as fast, due mainly to the large number in 1961-63; while the poultry decrease during the 5 years was at the same rate as for the longer period; and total animal units decreased 300,000 in the 1964 to 1969 period vs. 345,000 for the 10 years. The number of farms decreased somewhat faster during the 5-year period, according to the Census, than the 10-year rate shown by the Michigan Crop Reporting Service.

D. District and County Changes

The state averages, which have been presented, do not necessarily apply uniformly to all districts and counties. Since the Michigan Crop Reporting Service has delineated 9 districts and published much data on that basis, we have computed sub-totals and averages for the same districts (Fig. 4). These are presented along with the appropriate crop and livestock maps. The data on change in land in farms illustrate the variation over the state. While the state average decrease was 12.5 percent, the rate ranged from 23 percent in the Upper Peninsula and the Northeast district to approximately 7 percent in two southern and one central districts. In practically every comparison there was a wide variation among districts.

Not only were there variations among the district averages, but there were also wide variations among the counties within the district. This is shown by the acreage of the various crops and numbers of livestock in 1969 as well as in the amount of change from 1964 to 1969. There was wide variation in the average size of farm in the different counties and equally wide variation in income per farm. Thus, we have generally presented long-term trends for the state, but placed major emphasis on: a) the areas of concentration in production in 1969, and b) the areas of most rapid change from 1964 to 1969 for the districts of the state and for all the counties.

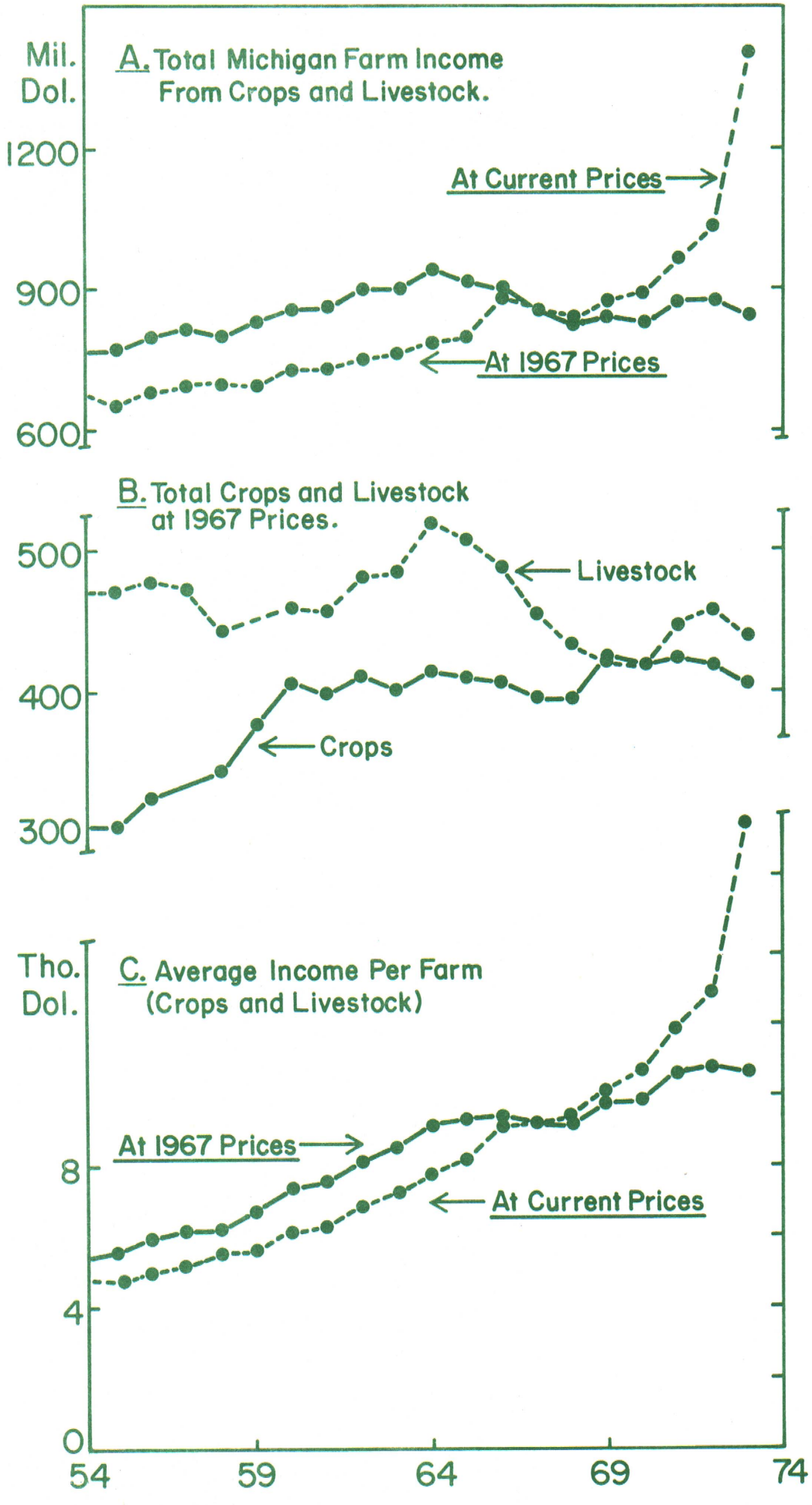
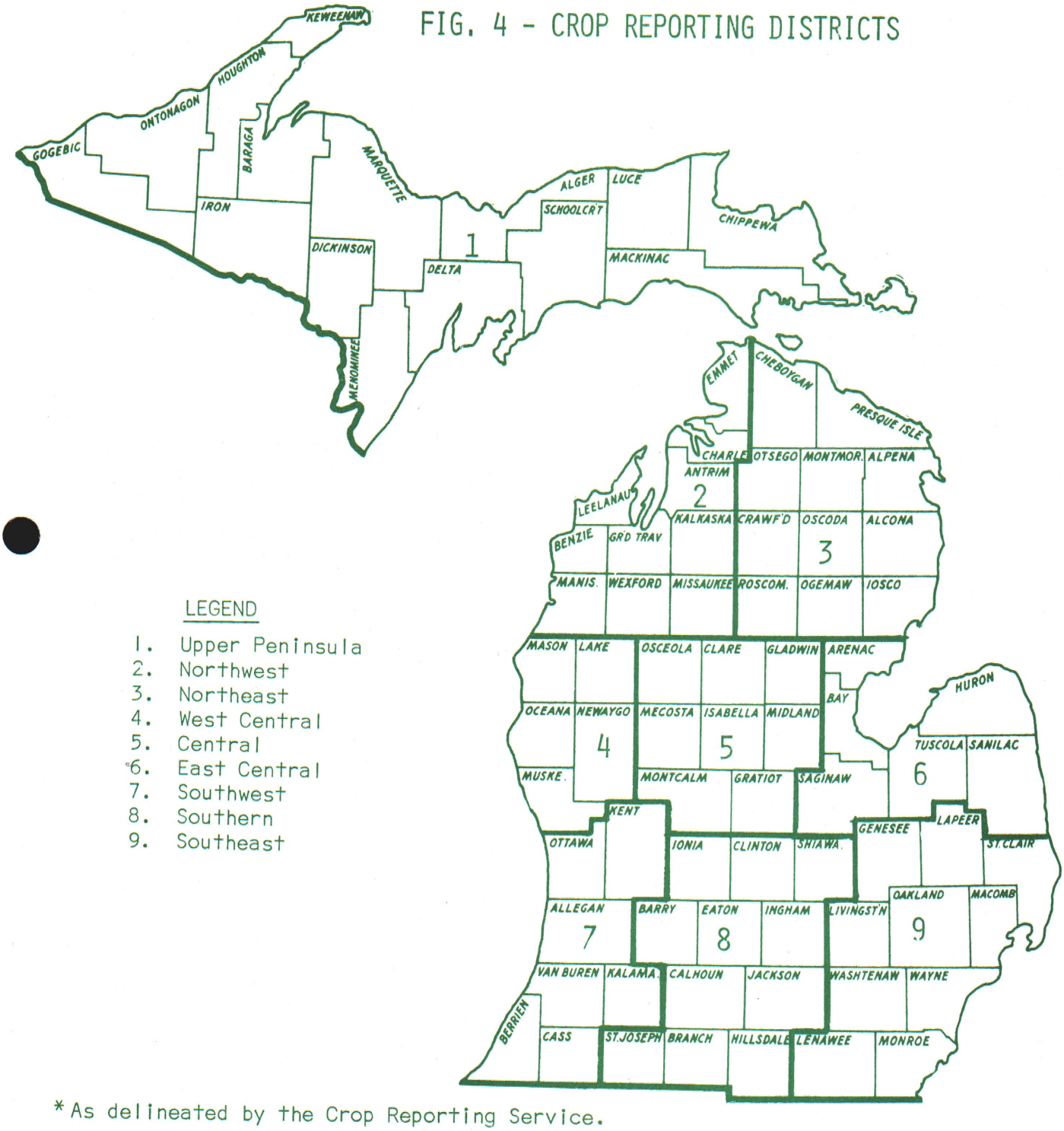

Mil. Dol.
A. Total Michigan Farm Income From Crops and Livestock.
1200
900
600
At Current Prices
At 1967 Prices
B. Total Crops and Livestock at 1967 Prices.
500
400
300
Livestock
Crops
Tho. Dol.
C. Average Income Per Farm (Crops and Livestock)
8
4
0
At 1967 Prices
At Current Prices
54
59
64
69
74

FIG. 4 - CROP REPORTING DISTRICTS



LEGEND

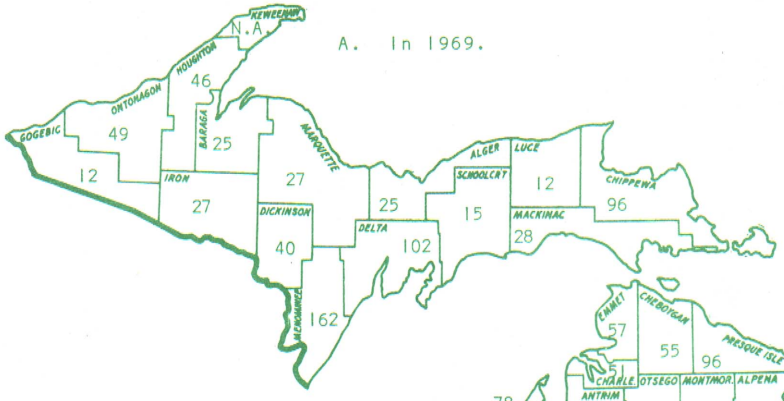
1. Upper Peninsula
2. Northwest
3. Northeast
4. West Central
5. Central
6. East Central
7. Southwest
8. Southern
9. Southeast

*As delineated by the Crop Reporting Service.

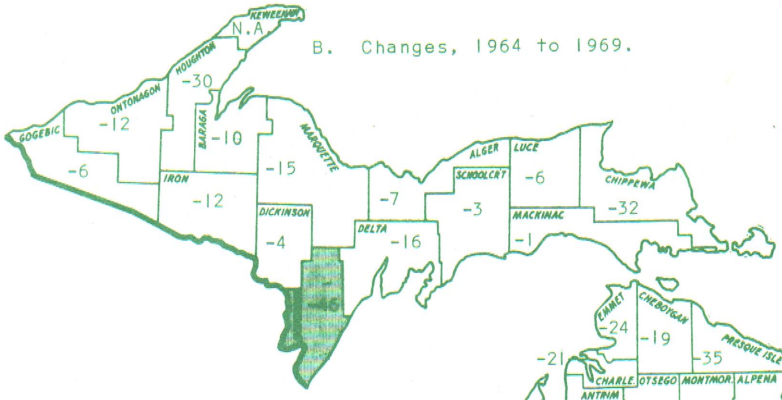
FIG. 5 - LAND IN FARMS (THOUS. A.)

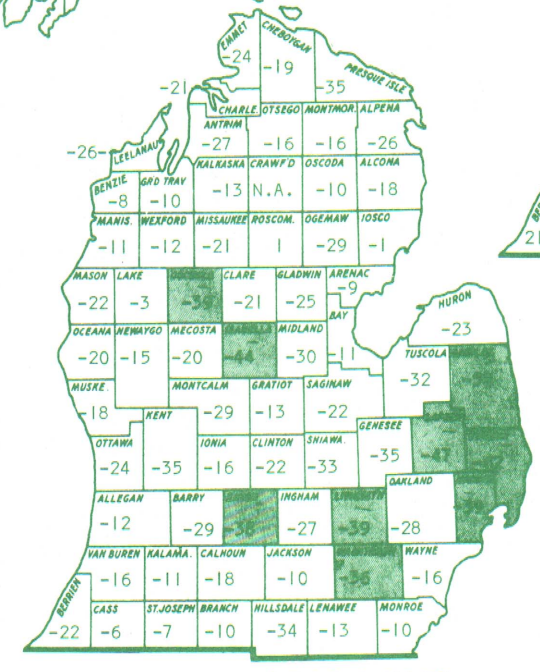
Top 10 Counties		Next 10 Counties	
1. Sanilac	461	11. Allegan	276
2. Huron	426	12. Montcalm	270
3. Lenawee	404	13. Branch	263
4. Tuscola	359	14. Washtenaw	260
5. Saginaw	348	15. Eaton	259
6. Gratiot	302	16. Shiawassee	258
7. Calhoun	289	17. Jackson	258
8. Clinton	287	18. Monroe	254
9. Ionia	280	19. Lapeer	246
10. Hillsdale	279	20. Kent	241

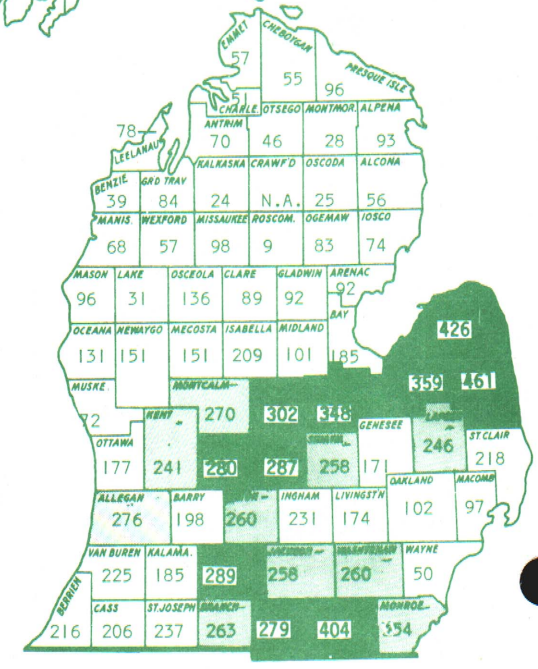
A. In 1969.



B. Changes, 1964 to 1969.







STATE 20 YEAR TREND (THOUS. A)

1949 - 17,269 1964 - 13,599
1954 - 16,467 1969 - 11,901
1959 - 14,783

Most Decrease Counties	
1. St. Clair	62
2. Sanilac	58
3. Lapeer	47
4. Menominee	46
5. Isabella	44
6. Osceola	39
7. Macomb	39
8. Livingston	39
9. Eaton	38
10. Washtenaw	36

STATE DECREASE - 1,698 THOUS. A (12.5%)

- = decrease

No mark = Increase

District Data

Dist. (Map p.)	Acreage (thous.) 1964	1969	Change	% dec.
1	867	667	-200	23
2	799	625	-174	22
3	734	565	-169	23
4	560	481	- 79	14
5	1570	1348	-222	14
6	2025	1871	-154	8
7	1652	1526	-126	8
8	3085	2841	-244	8
9	2300	1975	-325	14
State	13,599	11,901	-1698	12

There were about 12 million acres of land in farms in the state in 1969, according to the agricultural census. The top 10 counties were located in the Thumb, Saginaw Valley, and in the central and southern parts of the state (Fig. 5A). These counties had from 279 to 461 thousand acres, and the 10 had 29 percent of the state's total.

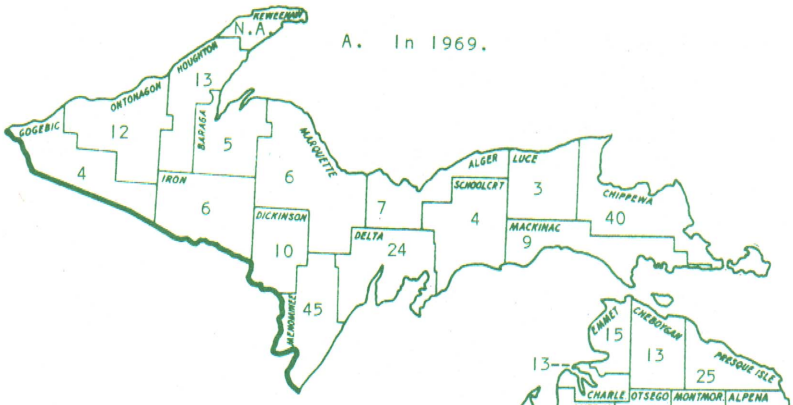
From 1964 to 1969 there was a decrease of 1.7 million acres, or 12 percent. This was faster than in the thr previous 5-year periods. The decrease in the various state districts* ranged from 8 percent in 6, 7 and 8 to 23 percent in 1 and 3 (See Fig. 4 map and "district data" above). Six of the 10 counties showing the greatest acreage decrease were in the Detroit fringe area; three in central Michigan, and Menominee in the U. P. (Fig. 5B). On a percentage basis, the following counties had 5 percent or less decrease: Allegan, Branch, Cass, Gratiot, Huron, Ionia, Jackson, Lenawee, Monroe and St. Joseph.

*The same as used by the Michigan Crop Reporting Service.

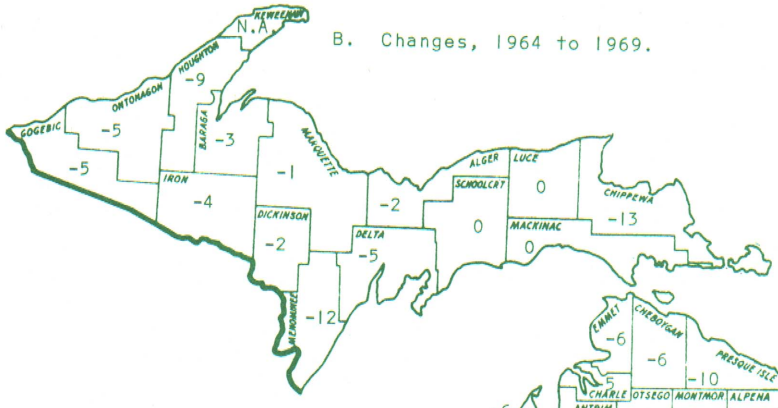
FIG. 6 - CROPLAND HARVESTED (THOUS. A.)

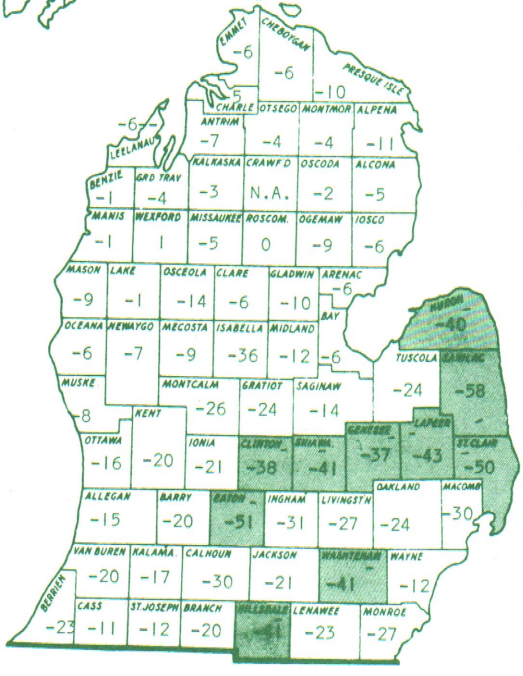
Top 10 Counties		Next 10 Counties	
1. Huron	274	11. Allegan	133
2. Sanilac	263	12. Bay	128
3. Lenawee	241	13. Hillsdale	127
4. Tuscola	239	14. Washtenaw	126
5. Saginaw	238	15. Montcalm	121
6. Gratiot	192	16. Calhoun	120
7. Monroe	163	17. Branch	120
8. Clinton	146	18. St. Joseph	114
9. Shiawassee	142	19. Berrien	112
10. Ionia	139	20. Kent	111
		21. Lapeer	111

A. In 1969.



B. Changes, 1964 to 1969.

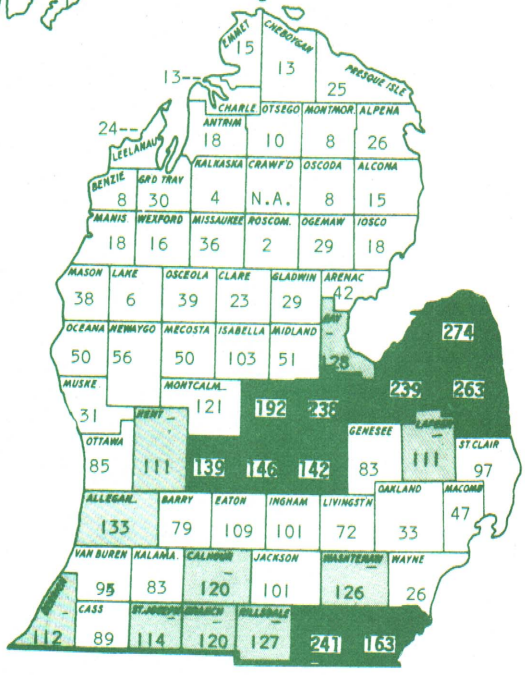




Most Decrease Counties

1.	Sanilac	58
2.	Eaton	51
3.	St. Clair	50
4.	Lapeer	43
5.	Shiawassee	41
6.	Washtenaw	41
7.	Hillsdale	41
8.	Huron	40
9.	Clinton	38
10.	Genesee	37

STATE DECREASE - 1,236 Thous. A. (18.3%)



STATE 20 YEAR TREND (Thous. A)

1949 - 7,797
1954 - 7,659
1959 - 7,155
1964 - 6,738
1969 - 5,502

District Data

Dist.	Acreage (thous.)			% dec.
	1964	1969	Change	
1	246	187	- 59	24
2	221	184	- 37	17
3	210	154	- 56	27
4	213	182	- 31	15
5	746	608	-138	18
6	1331	1183	-148	11
7	832	708	-124	15
8	1627	1297	-330	20
9	1312	999	-313	24
State	6738	5502	-1236	18

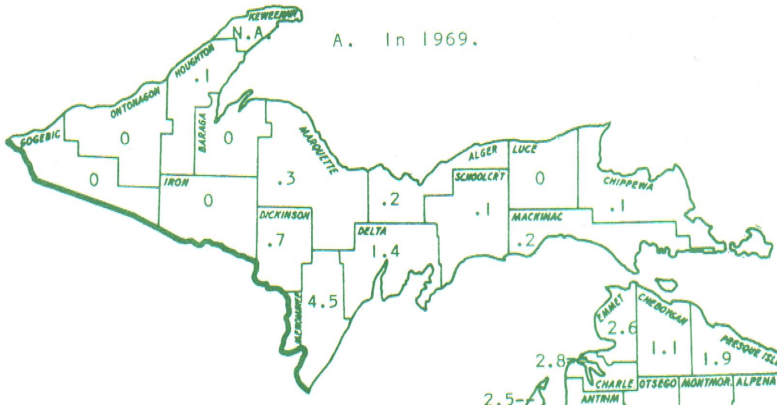
Of the 11.9 million acres of land in farms reported in the 1969 census, only 8.6 million was cropland. Out of that, crops were harvested from 5.5 million acres, 1.1 million was pastured and 2.0 million was in such uses as soil bank, soil improvement crops, crop failure, cultivated summer fallow and idle. The top 10 counties in acreage of cropland harvested in 1969 were largely the same as with land in farms (Fig. 6A). These 10 counties 37 percent of the state total.

From 1964 to 1969, cropland harvested acreage declined 18 percent, or nearly three times as fast as in the previous three 5-year periods. The decrease in the different districts of the state ranged from 11 to 27 percent, with one-fourth of the total acreage decrease in district 9 (southeast Michigan). Individual counties with large acreage decreases were located over a wider area. Some counties had small percentage decreases, such as Bay (4 percent), Saginaw (6 percent),and Tuscola (9 percent).

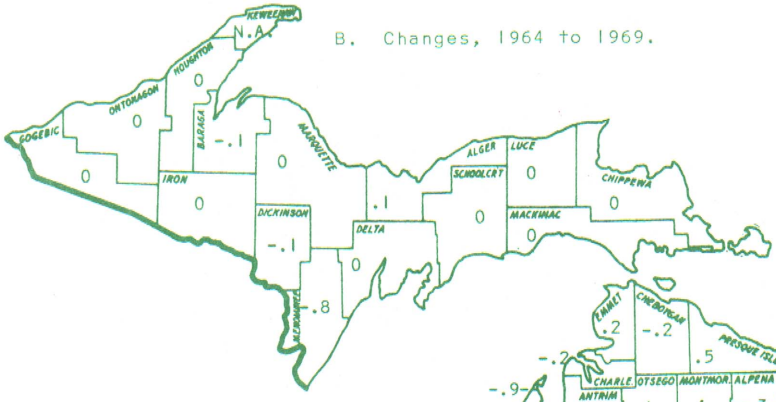
FIG. 7 - CORN (THOUS. A.)

Top 10 Counties		Next 10 Counties	
1. Lenawee	89.7	11. Washtenaw	44.6
2. Sanilac	69.7	12. Ingham	44.2
3. Huron	64.3	13. Monroe	42.8
4. Allegan	55.7	14. Tuscola	42.6
5. Ionia	52.2	15. St. Joseph	42.4
6. Hillsdale	50.9	16. Jackson	40.6
7. Calhoun	50.1	17. Cass	40.1
8. Branch	49.9	18. Isabella	37.0
9. Clinton	48.2	19. Kent	36.7
10. Gratiot	46.1	20. Eaton	36.7

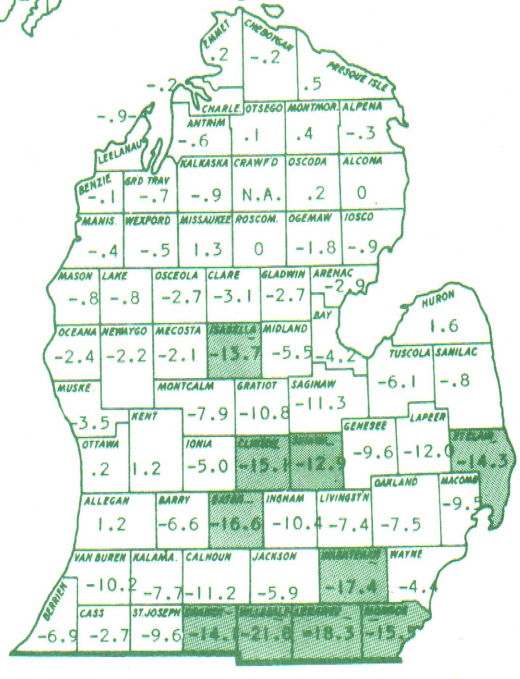
A. In 1969.



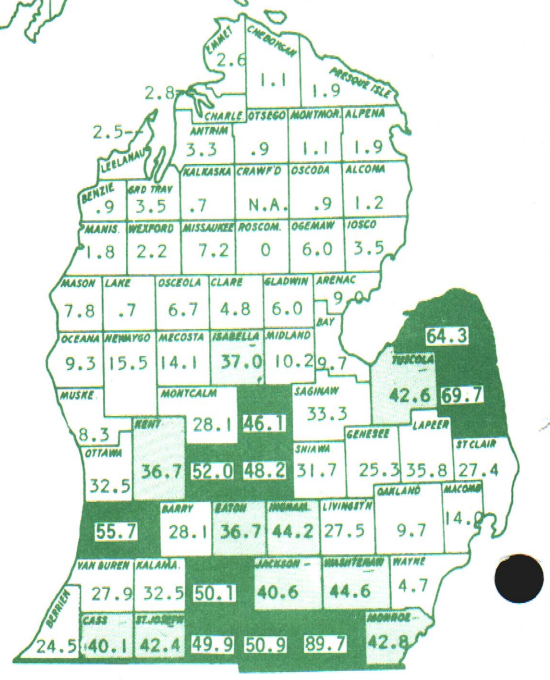
B. Changes, 1964 to 1969.



10 Most Decrease Cos.	
1. Hillsdale	-21.8
2. Lenawee	-18.3
3. Washtenaw	-17.4
4. Eaton	-16.6
5. Monroe	-15.5
6. Clinton	-15.1
7. St. Clair	-14.3
8. Branch	-14.1
9. Isabella	-13.7
10. Shiawassee	-12.9



STATE DECREASE - 357 Thous. A. (19.0%)



STATE 20-YEAR TREND (Thous. A.)

1949 - 1,599
1959 - 1,871
1959 - 1,956
1964 - 1,880
1969 - 1,523

District Data

Dist.	Acreage (thous.)			%
	1964	1969	Change	dec.
1	8.2	7.4	- .8	10
2	30.4	27.6	- 2.8	9
3	20.6	18.5	- 2.1	10
4	51.2	41.7	- 9.5	19
5	201.5	153.0	- 48.5	24
6	252.1	228.6	- 23.5	9
7	274.9	249.9	- 25.0	9
8	604.1	474.9	-129.2	21
9	437.2	321.4	-115.8	26
State	1880.2	1523.0	-357.2	19

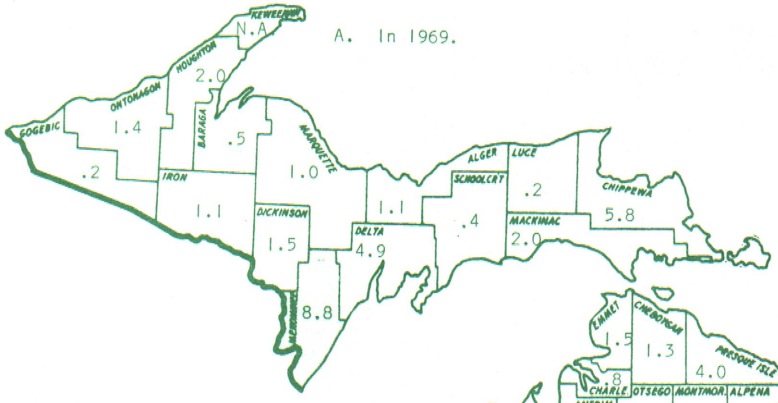
Corn is a major crop in Michigan, accounting for 28 percent, or over 1.5 million acres, of total harvested cropland in 1969. It is widely grown with the top 10 counties, which are widely scattered over the southern half of the state, having only 38 percent of the total acreage that year (Fig. 7A). From 1964 to 1969, state acreage decreased 357,000 acres, or 19 percent. Districts 5, 8 and 9 showed decreases of 21 to 26 percent, but only 9 percent in #2, 6 and 7. Large decrease counties were mainly in central and southern Michigan (where there were marked increases in soybeans), while Allegan, Kent, and Ottawa counties became relatively more important (Fig. 7B). Since 1969, corn acreage has increased, with 1973 being about 500,000 acres above 1969, or to approximately 2 million.

Fig. 8 - OATS (Thous. A)
(Class I-V Farms)

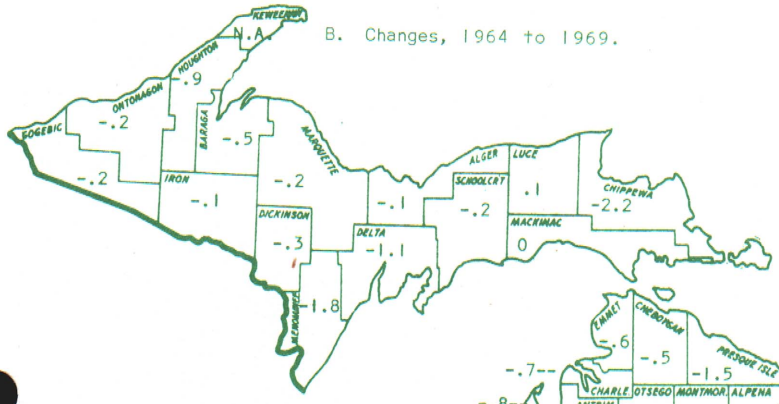
Top 10 Counties

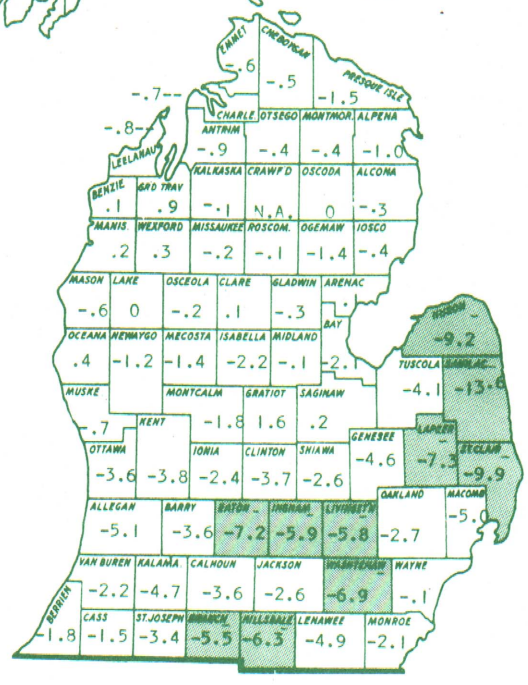
		Next 10 Counties	
1. Sanilac	29.7	11. Clinton	9.2
2. Huron	19.2	12. Menominee	8.8
3. Tuscola	15.9	13. Hillsdale	8.7
4. Lenawee	13.2	14. Isabella	8.5
5. Washtenaw	12.3	15. Gratiot	8.4
6. Ionia	11.6	16. Lapeer	8.4
7. Calhoun	11.3	17. Jackson	8.1
8. Shiawassee	11.3	18. Kalamazoo	7.8
9. Saginaw	10.8	19. Monroe	7.7
10. Montcalm	9.3	20. Kent	7.1

A. In 1969.



B. Changes, 1964 to 1969.

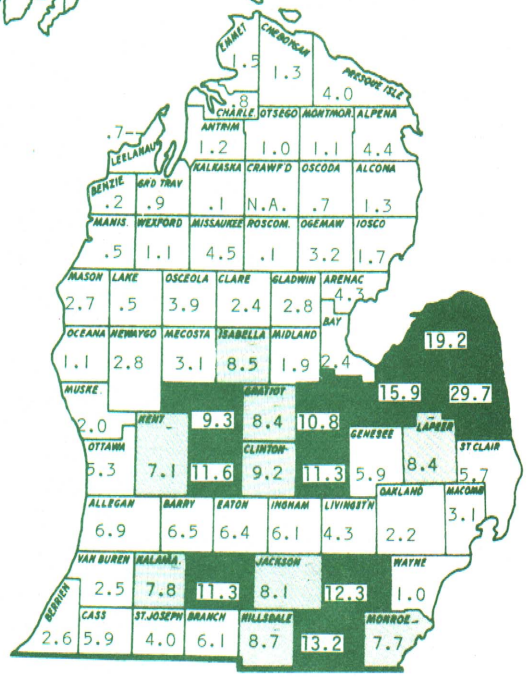




STATE DECREASE - 172 Thous. A. (31%)

10 Most Decrease Cos.

1. Sanilac	-13.6
2. St. Clair	- 9.9
3. Huron	- 9.2
4. Lapeer	- 7.3
5. Eaton	- 7.2
6. Washtenaw	- 6.9
7. Hillsdale	- 6.3
8. Ingham	- 5.9
9. Livingston	- 5.8
10. Branch	- 5.5



STATE 20-YEAR TREND (Thous. A.)

1949 - 1,180	1964 - 556
1954 - 1,142	1969 - 384
1959 - 726	

District Data

Dist.	Acreage (thous.)			% dec.
	1964	1969	Change	
1	38.4	30.8	- 7.6	19
2	15.1	11.5	- 3.6	24
3	24.7	18.8	- 5.9	24
4	12.1	9.1	- 3.0	25
5	44.7	40.3	- 4.4	10
6	111.0	82.3	-28.7	26
7	60.6	38.0	-22.6	38
8	136.1	89.4	-46.7	34
9	113.8	63.8	-50.0	44
State	556.5	384.0	-172.5	31

Data were available from the 1969 census on the acreage of oats on only economic class I-V farms, which excludes farms with sales of less than $2500--some 33,753 of Michigan's 77,946 farms, although these farms may not have grown many oats. Oats occupied 8 percent of the harvested cropland of these farms in 1969. The top 10 counties having oat acreages ranging from about 9 to 30 thousand were widely scattered over southern Michigan. Their total acreage made up only 38 percent of the state total.

Oat acreage has been decreasing rapidly (See data below Fig. 8A), declining 31 percent from 1964 to 1969. Decreases by districts ranged from 10 percent in district 5 and 19 percent for the U.P. to 44 percent in district 9. The 10 most acreage decrease counties were in the Thumb, and southeast and south central Michigan (Fig. 8B). From 1969 to 1973, the harvested state acreage of oats declined another 28 percent.

FIG. 9 - WHEAT (THOUS. A.)

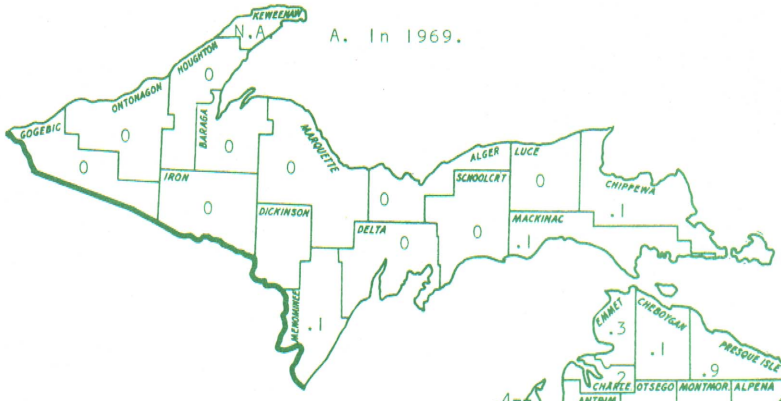
Top 10 Counties

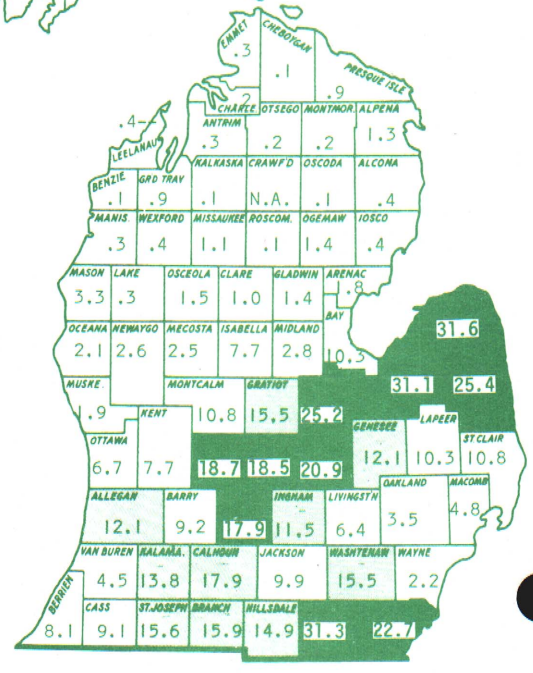
1.	Huron	31.6
2.	Lenawee	31.3
3.	Tuscola	31.1
4.	Sanilac	25.4
5.	Saginaw	25.2
6.	Monroe	22.7
7.	Shiawassee	20.9
8.	Ionia	18.7
9.	Clinton	18.5
10.	Eaton	17.9

Next 10 Counties

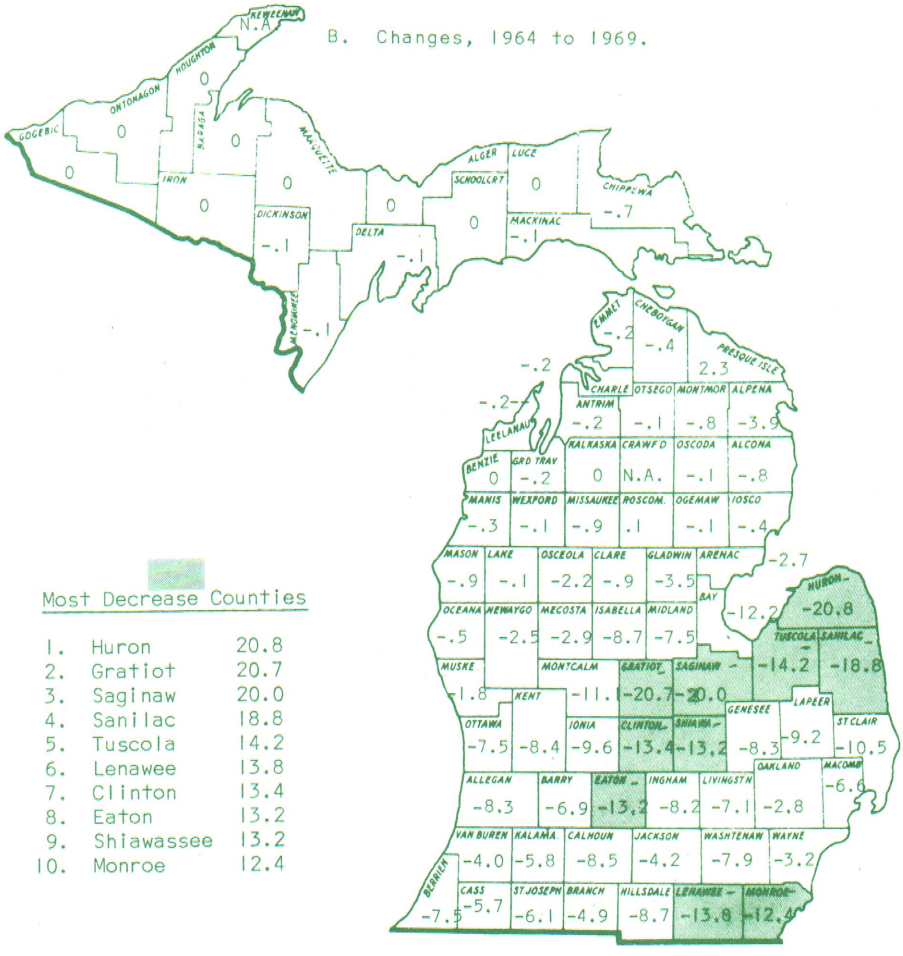
11.	Calhoun	17.9
12.	Branch	15.9
13.	St. Joseph	15.6
14.	Washtenaw	15.5
15.	Gratiot	15.5
16.	Hillsdale	14.9
17.	Kalamazoo	13.8
18.	Allegan	12.1
19.	Genesee	12.1
20.	Ingham	11.5

A. In 1969.





B. Changes, 1964 to 1969.



STATE DECREASE - 389 THOUS. A (42%)

Most Decrease Counties

1.	Huron	20.8
2.	Gratiot	20.7
3.	Saginaw	20.0
4.	Sanilac	18.8
5.	Tuscola	14.2
6.	Lenawee	13.8
7.	Clinton	13.4
8.	Eaton	13.2
9.	Shiawassee	13.2
10.	Monroe	12.4

STATE 20-YEAR TREND (Thous. A)

1949 - 1,250	1964 - 930
1954 - 998	1969 - 541
1959 - 1,076	

District Data

Dist.	Acreage (thous.)			% dec.
	1964	1969	Change	
1	1.4	.4	- 1.0	71
2	6.2	3.8	- 2.4	38
3	14.0	5.1	- 8.9	64
4	16.2	10.3	- 5.9	36
5	99.4	43.3	-56.1	56
6	214.1	125.2	-88.9	42
7	109.1	62.0	-47.1	43
8	268.0	171.0	-97.0	36
9	201.5	119.7	-81.8	41
State	929.9	540.8	-389.1	42

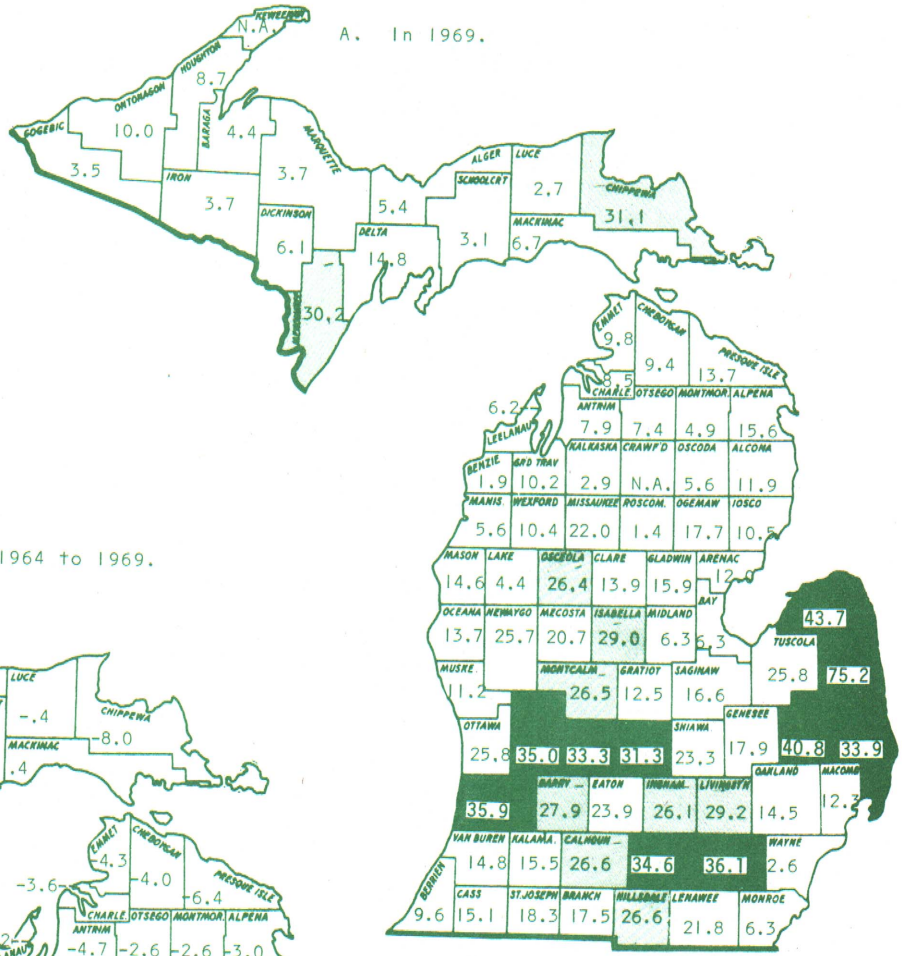
Wheat was grown on 10 percent of the state's harvested cropland in 1969. The top 10 counties were scattered over the southern half of the state with a concentration in the Thumb, Saginaw Valley, central and southern Michigan. Acreage of wheat in these counties ranged from 18 to 32 thousand, with the total amounting to 45 percent of the state's 541,000 (Fig. 9A).

Wheat acreage declined some from 1959 to 1964, but decreased 42 percent, or 389,000 acres, from 1964 to 196 Acreage losses for that period were particularly large in districts 8, 6, and 9, amounting to over 80,000 in each (see "district data" above). Fig. 9B shows that Huron, Gratiot, and Saginaw counties each lost 20,000 acres or more. Other high loss counties were in that general part of the state, plus Lenawee and Monroe counties. The 1973 state acreage of wheat was about the same as in 1969, but fall plantings in 1973 were about 300,000 acres above a year earlier.

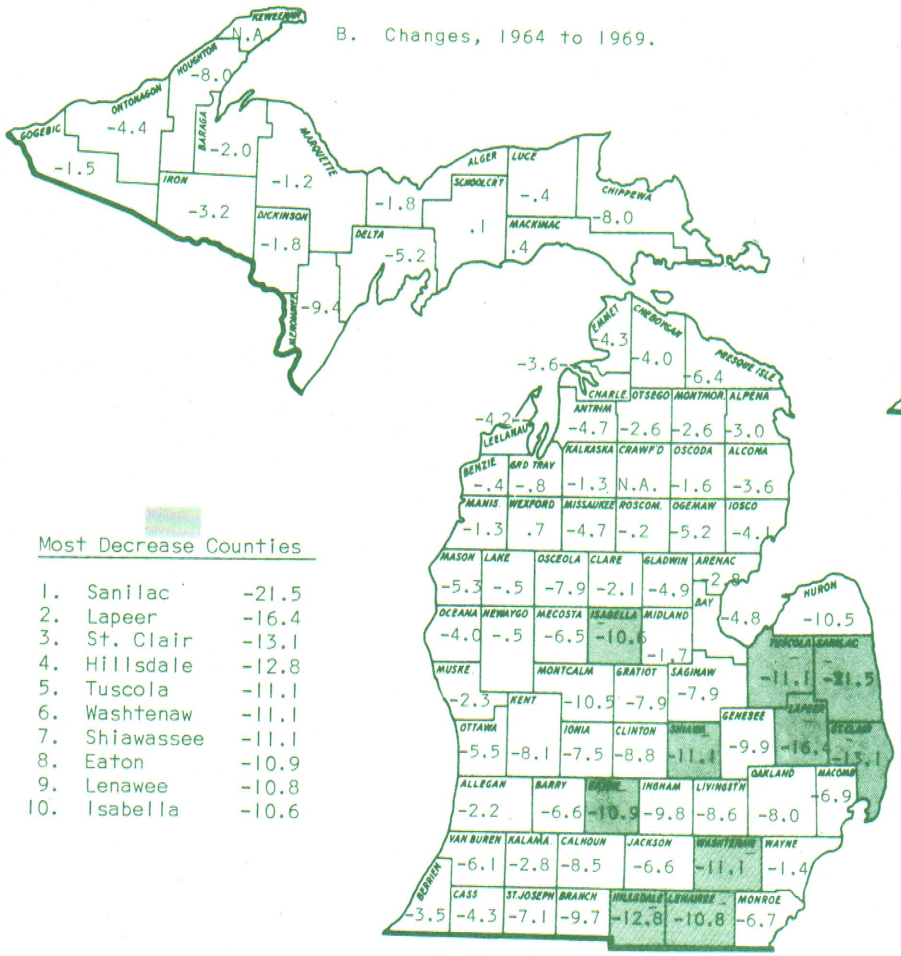
FIG. 10 - HAY (THOUS. A.)

Top 10 Counties			Next 10 Counties		
1.	Sanilac	75.2	11.	Chippewa	31.1
2.	Huron	43.7	12.	Menominee	30.2
3.	Lapeer	40.8	13.	Livingston	29.2
4.	Washtenaw	36.1	14.	Isabella	29.0
5.	Allegan	35.9	15.	Barry	27.9
6.	Kent	35.0	16.	Hillsdale	26.6
7.	Jackson	34.6	17.	Calhoun	26.6
8.	St. Clair	33.9	18.	Montcalm	26.5
9.	Ionia	33.3	19.	Osceola	26.4
10.	Clinton	31.3	20.	Ingham	26.1

A. In 1969.



B. Changes, 1964 to 1969.



STATE DECREASE - 452 THOUS. A (25%)

Most Decrease Counties		
1.	Sanilac	-21.5
2.	Lapeer	-16.4
3.	St. Clair	-13.1
4.	Hillsdale	-12.8
5.	Tuscola	-11.1
6.	Washtenaw	-11.1
7.	Shiawassee	-11.1
8.	Eaton	-10.9
9.	Lenawee	-10.8
10.	Isabella	-10.6

STATE 20-YEAR TREND (THOUS. A):

1949 - 2,213	1964 - 1,828
1954 - 2,259	1969 - 1,376
1959 - 1,883	

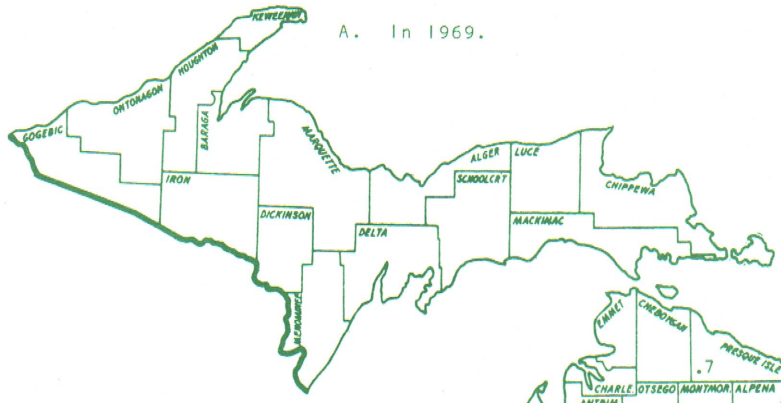
District Data

Dist.	Acreage (thous.)			%
	1964	1969	Change	dec.
1	180.3	134.0	-46.3	26
2	110.2	85.7	-24.5	22
3	131.6	98.2	-33.4	25
4	82.1	69.7	-12.4	15
5	203.4	151.3	-52.1	26
6	238.2	179.6	-58.6	25
7	184.2	151.8	-32.4	18
8	388.9	289.5	-99.4	26
9	308.4	215.5	-92.9	30
State	1827.3	1375.3	-452.0	25

Hay was produced on one-fourth of Michigan's harvested cropland, the acreage being exceeded in 1969 only by that in corn. Its production was the most widespread of any crop, being produced in all counties--with the total acreage in the top 10 constituting only 29 percent of the state's total hay acreage, the lowest percentage of any crop. Sanilac county easily led in acreage, with the balance of the top 10 counties in the Thumb, west central and southern Michigan. In general, the top 20 counties were high also in milk cows (Fig. 10A).

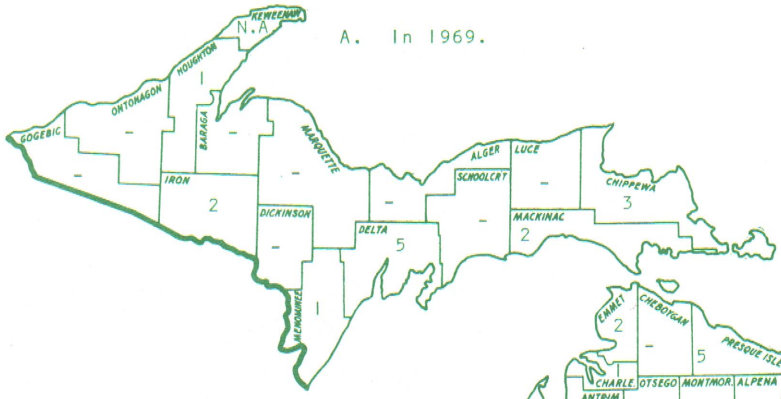
From 1964 to 1969, the total acreage of hay declined 25 percent, probably due to the decrease in the number of milk cows. Percentage decreases ranged from 15 percent in district 4 to 30 percent in no. 9 and 26 percent in district 8, with nearly one-half the total acreage decrease in these last two districts. The total acreage of hay in 1973 was practically the same as in 1969, discontinuing the rapid decrease of the previous 5 years.

FIG. 11 - FIELD BEANS (THOUS. A) (CLASS I-V FARMS)

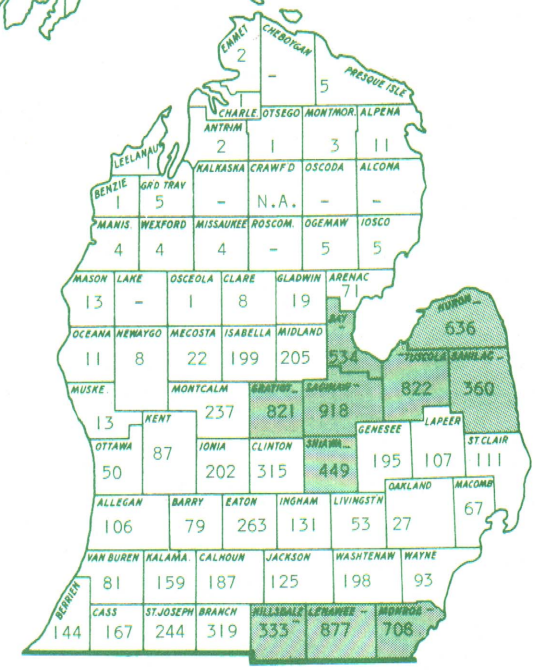


A. In 1969.

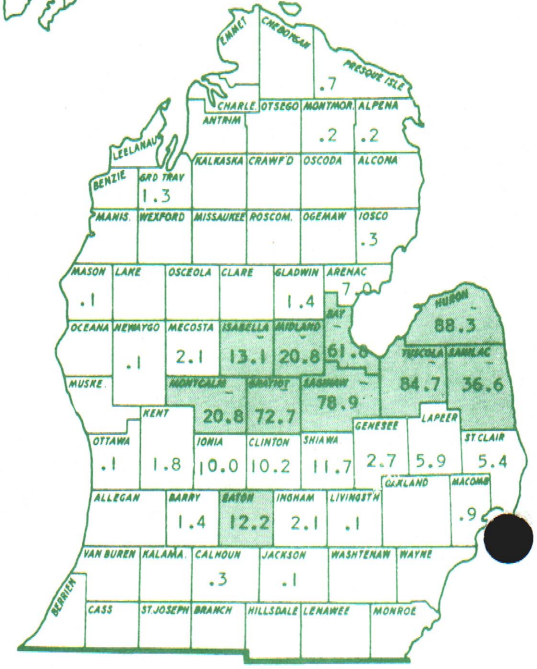
FIG. 12 - CASH-GRAIN FARMS* (CLASS I-V FARMS)



A. In 1969.



STATE TOTAL - 10, 843



STATE 20-YEAR TRENDS (THOUS. A.)

1949 - N.A.	1964 - 570
1954 - N. A.	1969 - 556
1959 - 467	

Top Ten Cash-Grain Counties

1.	Saginaw	918
2.	Lenawee	877
3.	Tuscola	822
4.	Gratiot	821
5.	Monroe	708
6.	Huron	636
7.	Bay	534
8.	Shiawassee	449
9.	Sanilac	360
10.	Hillsdale	333

Top 10 Counties

1.	Huron	88.3
2.	Tuscola	84.7
3.	Saginaw	78.9
4.	Gratiot	72.7
5.	Bay	61.8
6.	Sanilac	36.6
7.	Midland	20.8
8.	Montcalm	20.8
9.	Isabella	13.1
10.	Eaton	12.2

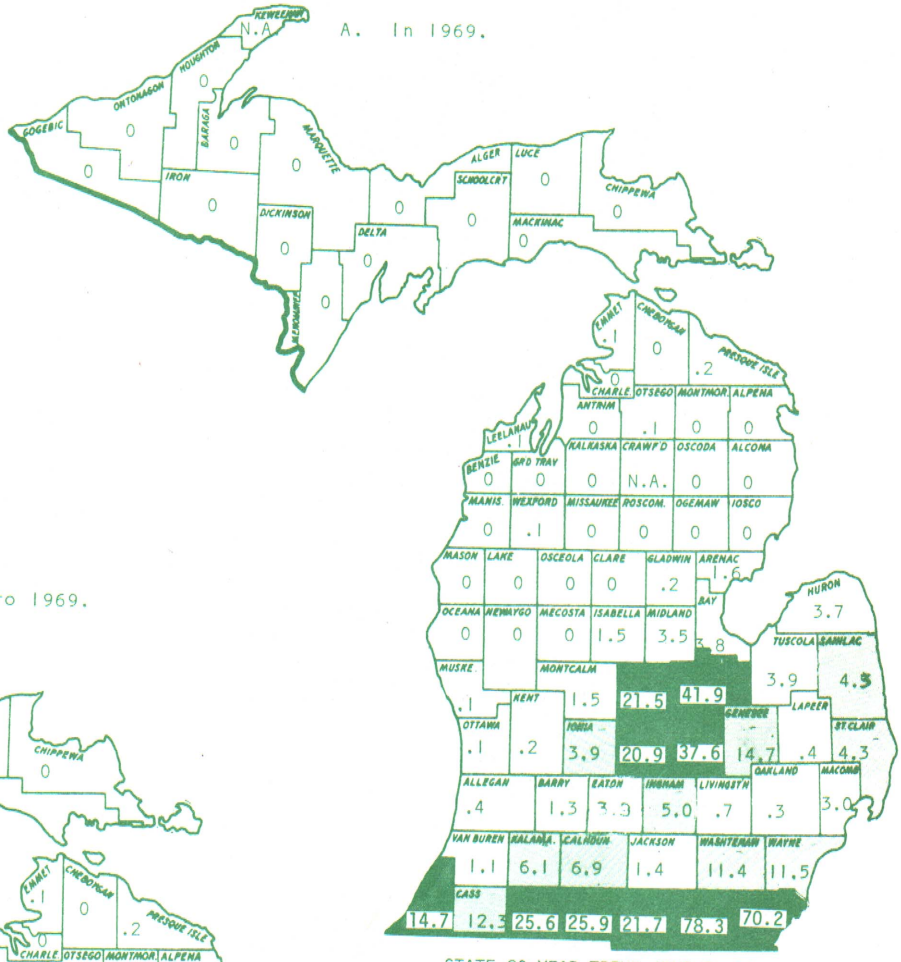
*Cash-grains include sales of corn, small grains, soybeans, and field beans. Such sales had to exceed 50% of the total.

Field beans occupied over 11 percent of the total cropland on Class I-V farms in 1969, exceeding the acreage of either wheat or oats. Michigan produces about 90 percent of the U. S. navy bean crop. The top 10 counties were largely in the Thumb, Saginaw Valley, and to the west. They had 88 percent of the total acreage in the state (Fig. 11A). The percentage of the cropland in field beans in selected counties was Gratiot 38 percent, Tuscola 36 percent, Saginaw 33 percent, and Huron 32 percent. The state acreage of field beans in 1969 was practically the same as in 1964. The state's 1973 acreage was about 10 percent less than in 1969, accordi to the Crop Reporting Service.

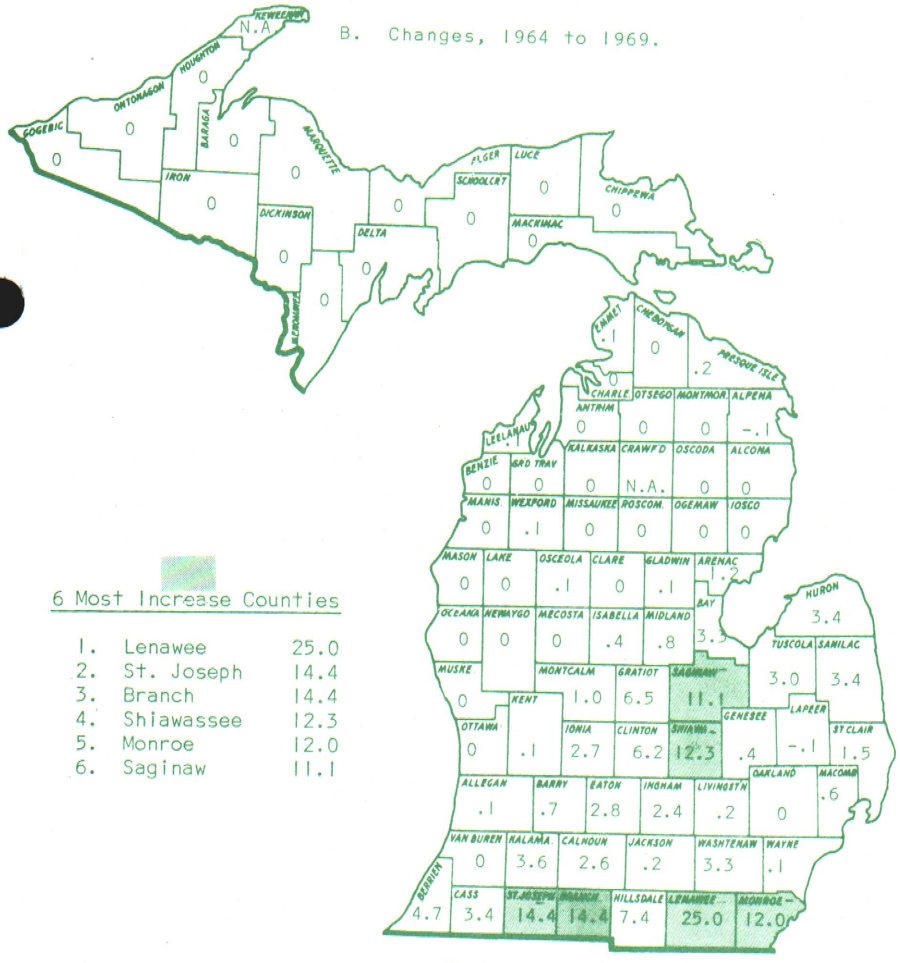
The cash-grain farms, as defined above, numbering 10,843, were second only to dairy farms. The top 10 counties in number of such farms contained 60 percent of the total (Fig. 12). These farms averaged 210 acres in size (ranking third), but their average sales in 1969 were the smallest of the 9 types at about $10,000. However, 65 percent of these men worked off the farm versus 52 percent of all I-V class farms, and 40 percent worked 200+ days (31 percent av.).

FIG. 13 - SOYBEANS (THOUS. A.)

A. In 1969.



B. Changes, 1964 to 1969.



STATE INCREASE - 156 THOUS. A.(50%)

Top 10 Counties

1. Lenawee	78.3	11. Genesee	14.7
2. Monroe	70.2	12. Cass	12.3
3. Saginaw	41.9	13. Wayne	11.5
4. Shiawassee	37.6	14. Washtenaw	11.4
5. Branch	25.9	15. Calhoun	6.9
6. St. Joseph	25.6	16. Kalamazoo	6.1
7. Hillsdale	21.7	17. Ingham	5.0
8. Gratiot	21.5	18. St. Clair	4.3
9. Clinton	20.9	19. Sanilac	4.3
10. Berrien	14.7	20. Ionia	3.9

6 Most Increase Counties

1.	Lenawee	25.0
2.	St. Joseph	14.4
3.	Branch	14.4
4.	Shiawassee	12.3
5.	Monroe	12.0
6.	Saginaw	11.1

STATE 20-YEAR TREND (THOUS. A):

1949 - 69	1964 - 316
1954 - 146	1969 - 472
1959 - 224	

District Data

Dist.	Acreage (thous.)			% inc.
	1964	1969	Change	
1	0	0	0	0
2	.1	.3	+ .2	-
3	.2	.4	+ .2	-
4	.1	.1	0	0
5	19.3	28.4	+ 9.1	47
6	33.6	59.1	+25.5	76
7	22.7	34.9	+12.2	53
8	87.7	153.9	+66.2	76
9	152.2	195.1	+42.9	28
State	315.9	472.2	+156.3	50

Soybeans have become one of Michigan's important cash crops, occupying 472,000 acres, or nearly 9 percent of the harvested crop acreage in 1969. As can be seen from Fig. 12A, there are two general areas of concentration--the southernmost tier of counties and the counties of Saginaw, Shiawassee, Gratiot, and Clinton. The top two counties in the southeast corner of the state had over 70,000 acres, and the top ten had three-quarters of the state total.

Soybean acreage in 1969 was 156,000 acres, or 50 percent greater than five years earlier, and 1964 was about that percentage larger than 1959. Acreage increase by districts was fairly comparable on a percentage basis, except that district 9 was low because of small increases in counties other than Lenawee and Monroe. In fact, Lenawee county showed a greater soybean acreage increase than any other (Fig. 12B). Since 1969, soybean acreage has continued to increase, and in 1973 was about 180,000 greater than 1969.

Michigan ranked seventh among the states in the production of sugar beets in 1969, even though we had only 89,000 acres, occupying less than 2 percent of our cropland. (This was on Class I-V farms only as county data were available only on this basis.) The acreage of sugar beets has varied within relatively narrow limits for the past 20 years, and was practically the same in 1973 as in 1969. The production of sugar beets is concentrated largely in the Saginaw Valley and the Thumb area, and there was little change in the 1969 acreages by counties from 1964. The top 10 counties had 96 percent of the total acreage in the state in 1969.

A. In 1969.

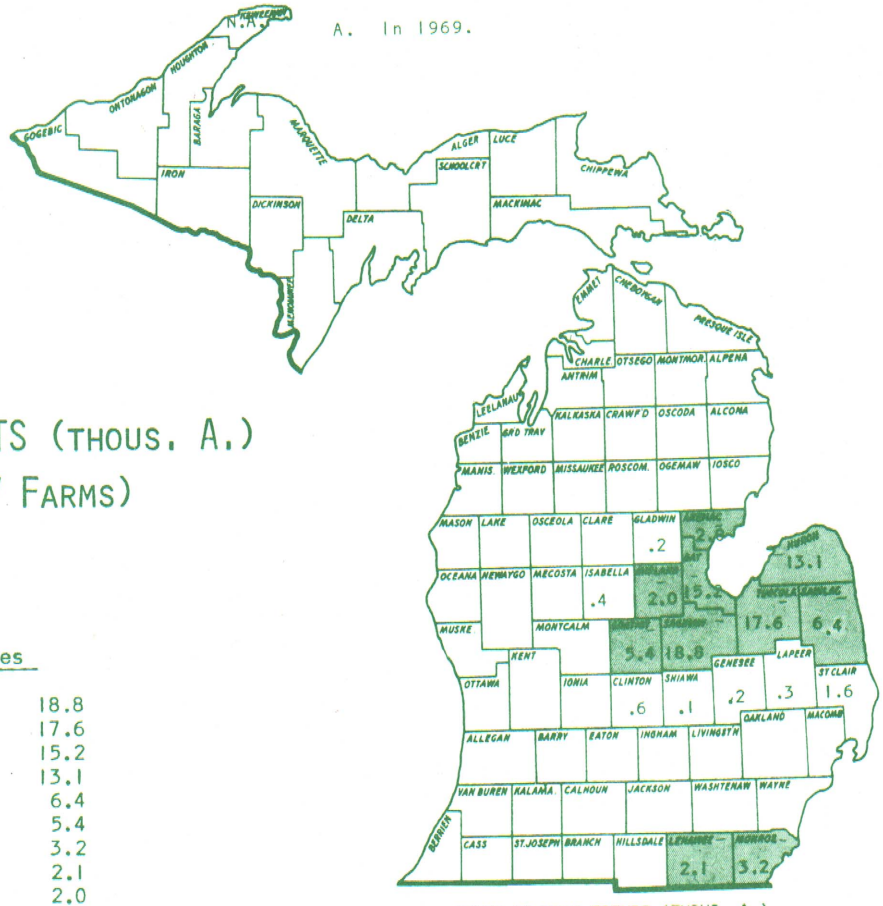


FIG. 14 - SUGAR BEETS (THOUS. A.) (CLASS I-V FARMS)

Top 10 Counties

1.	Saginaw	18.8
2.	Tuscola	17.6
3.	Bay	15.2
4.	Huron	13.1
5.	Sanilac	6.4
6.	Gratiot	5.4
7.	Monroe	3.2
8.	Lenawee	2.1
9.	Midland	2.0
10.	Arenac	2.0

STATE 20-YEAR TRENDS (THOUS. A.)

1949 - N.A.	1964 - 80.2
1954 - N. A.	1969 - 89.2
1959 - 76.7	

Receipts from Crop Marketings - Cash receipts from crop marketings from all farms for 1969 totaled $350 million, according to the census. This total for all farms is not reported by counties -- only the total for Class I-V farms, which was $330 million (Table 2). Also, only in this case is the major component parts of the crop marketings reported (see Pages 20 and 21).

According to these data, cash receipts from marketings of grains (corn, wheat, barley, oats, soybeans, and field beans) accounted for 40 percent of the crop total in 1969. Fruits were next with 21 percent, then vegetables with 12 percent, nursery and greenhouse products 11 percent, other field crops (potatoes, sugar beets, mint, and popcorn) 11 percent, and field seeds and hay 5 percent.

Prices received for rather similar groups of crops, as indicated by price indexes, were quite close to 1967 relationships. The index for cash field crops was 95, feed crops 94, fruit crops 95, and vegetables 92 (1967=100).

The relative importance of crop marketings in total marketings in the different districts also varied. In the three districts where fruit was relatively important, numbers 2, 4, and 7, crop sales were around 50 percent of total marketings, according to census data. District 6, with its cash field crops was equally high. On the other hand, crops only accounted for 17 percent of the total in the U. P. and 20 percent in district 3 (Table 2).

There also was a wide variation in the relative importance of crops in various counties. For instance, in Wayne County crops accounted for 84 percent of total cash marketings, and in most of the fruit counties, the percentage ranged from 60 to 82, and Bay County was high with 84 percent. There were other counties, however, where crops were not very important in cash marketings, such as some U. P. and northern Michigan counties.

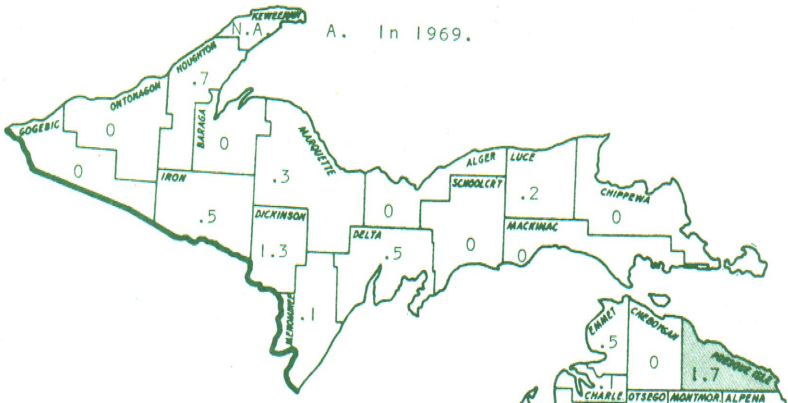
Average crop sales per farm and per acre cropland were $7471 and $48, respectively for the state in 1969. There were wide variations among the districts, ranging from $2076 and $13 for the U. P. to a high of $10,863 per farm, and $90 per acre for the Southwest district (#7) where there is a heavy concentration of fruit and vegetables. The West Central district (#4) also with much fruit was a close runner-up. High counties in average crop sales per farm were Manistee (at $19,386), followed by Wayne ($16,577), then Berrien ($16,283). Bear in mind that these figures are averages for all farms in the county.

FIG. 15 - POTATOES (THOUS. A.)

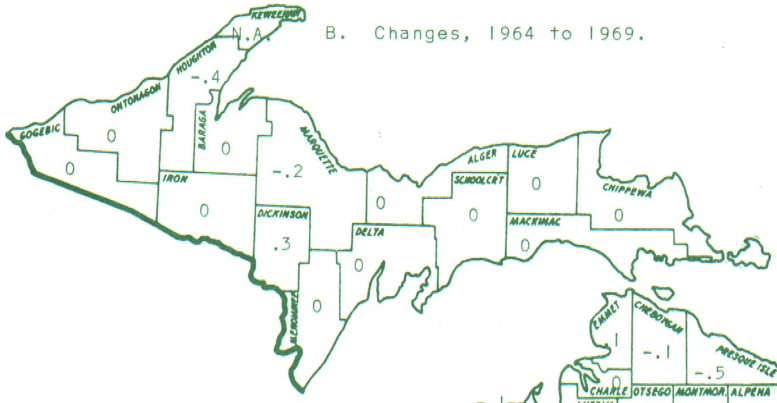
Top 5 Counties

1.	Montcalm	9.1
2.	Bay	7.8
3.	Monroe	2.7
4.	Mecosta	2.6
5.	Presque Isle	1.7

A. In 1969.



B. Changes, 1964 to 1969.

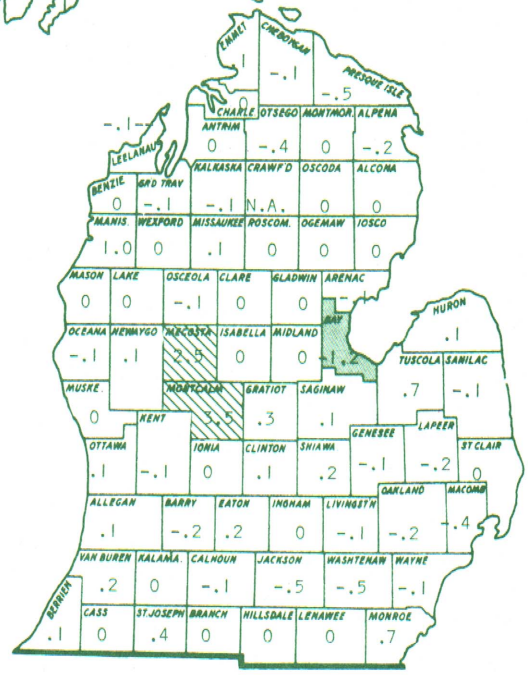


2 Most Increase Counties

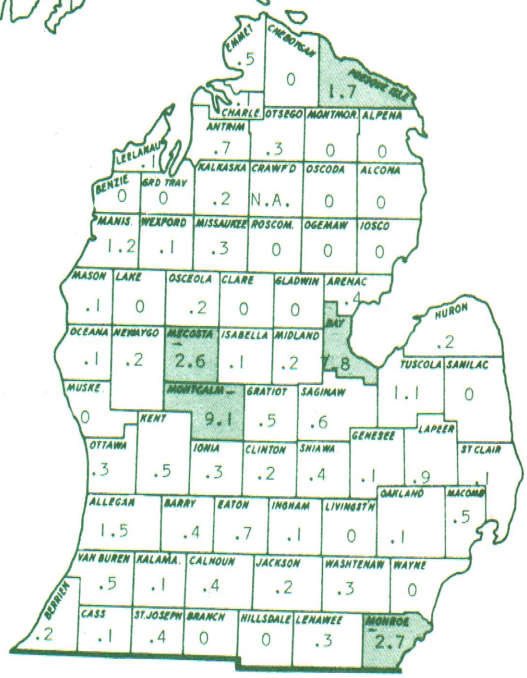
1.	Montcalm	3.7
2.	Mecosta	2.5

1 Most Decrease County

1.	Bay	1.2



STATE INCREASE - 5 THOUS. A (11%)



STATE 20-YEAR TREND (THOUS. A):

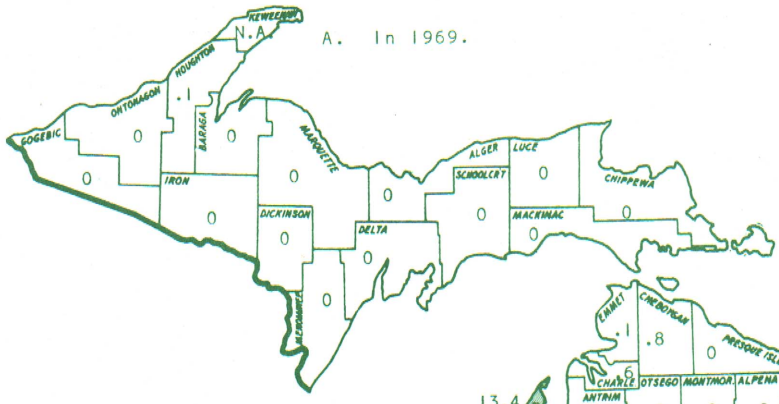
1949 - 84	1964 - 39
1954 - 53	1969 - 44
1959 - 46	

While a few potatoes are produced in many counties, the total acreage in 1969 amounted to only 44,000, or less than 1 percent of the total cropland, although Michigan ranked 11th in production. However, the income in that year from potatoes amounted to about $12 million for the 1700 growers. Montcalm county topped the list of 5 high counties, with 9,100 acres. The other top counties were widely scattered over the state, with the acreage of the top 5 being 54 percent of the state total.

Potato acreage in Michigan declined rapidly in the 40's and 50's, but during the 60's has remained relatively stable at 40 to 50 thousand. However, the acreage in Montcalm and Mecosta increased sharply due to location of a processing plant there. The average acreage per grower has increased sharply in the past 5-10 years, with much more efficient production. Acreage in potatoes in 1973 was about the same as in 1969.

FIG. 16 - FRUIT ORCHARDS (THOUS. A.)

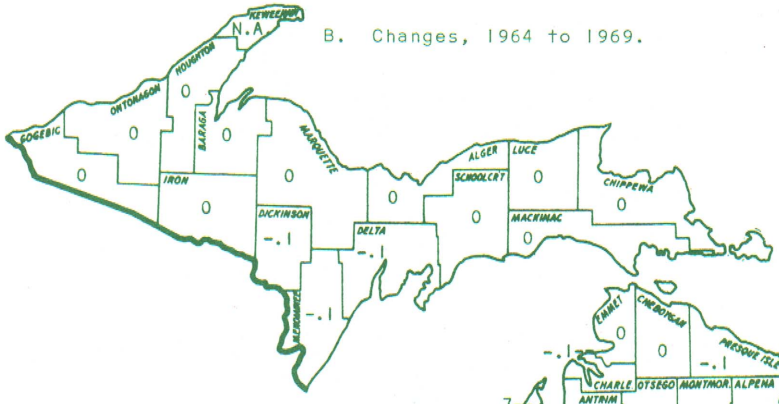
A. In 1969.

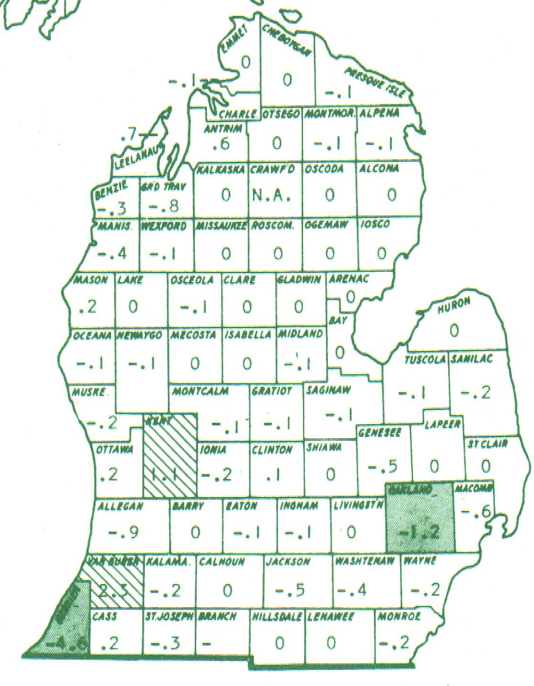


Top 10 Counties

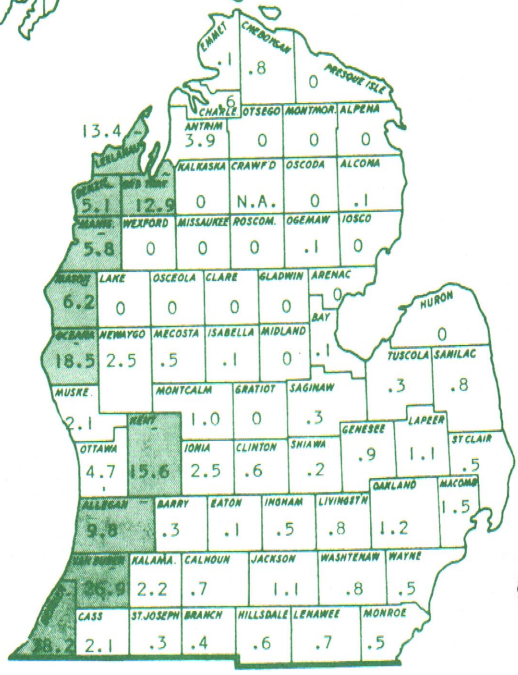
1.	Berrien	38.2
2.	Van Buren	26.9
3.	Oceana	18.5
4.	Kent	15.6
5.	Leelanau	13.4
6.	Grand Traverse	12.9
7.	Allegan	9.8
8.	Mason	6.2
9.	Manistee	5.8
10.	Benzie	5.1

B. Changes, 1964 to 1969.





STATE DECREASE - 7.9 THOUS. A (4.0%)



STATE 20-YEAR TRENDS (THOUS. A.)

1949 - 226
1954 - 193
1959 - 201
1964 -199
1964 - 191

Most Increase Counties

1.	Van Buren	2.3
2.	Kent	1.1

Most Decrease Counties

1.	Berrien	4.6
2.	Oakland	1.2

District Data

Dist.	Acreage (thous.)			% dec.
	1964	1969	Change	
1	.4	.2	- .2	-
2	42.3	41.8	- .5	1
3	1.2	1.0	- .2	-
4	29.6	29.3	- .3	1
5	2.0	1.8	- .2	-
6	2.1	1.6	- .5	-
7	101.4	99.6	-1.8	2
8	8.5	7.3	-1.2	14
9	11.5	8.4	-3.1	27
State	199.0	191.0	-8.0	4

Fruit orchards occupy only 3.5 percent of Michigan's cropland, but they usually provide around 9 percent of the state's total agricultural income, or $75 to $85 million. The state ranks relatively high in several fruits, as for instance--first in tart cherry production in 1969; fourth in grape and pear production; fifth in prunes; sixth in peaches; and the leading producer of apples among central states. The top 10 counties are along Lake Michigan (Fig. 15A), with Berrien topping the list with 38,200 acres and Benzie 10th with 5,100 acres. Some 80 percent of the state's fruit acreage was in these 10 counties.

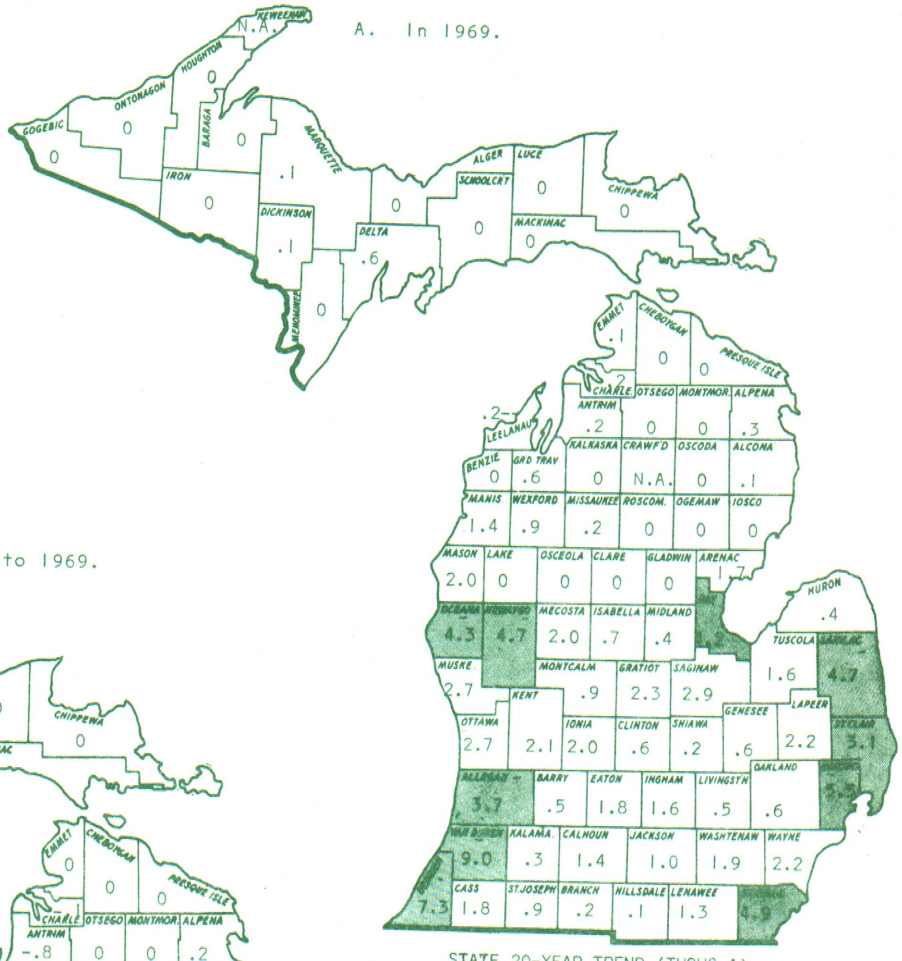
Fruit acreage has remained relatively constant in the state for the past 15 years, with 1969 being 4 percent less than 1964, although there was a 35 percent decline in the number of growers. Two counties showed over 1000 A. increase and two similar decreases (Fig. 15B). While total fruit acreage has varied little over the years, production has varied widely--for instance, in 1973 total production was down 38 percent from the previous year.

FIG. 17 - VEGETABLES (THOUS. A)

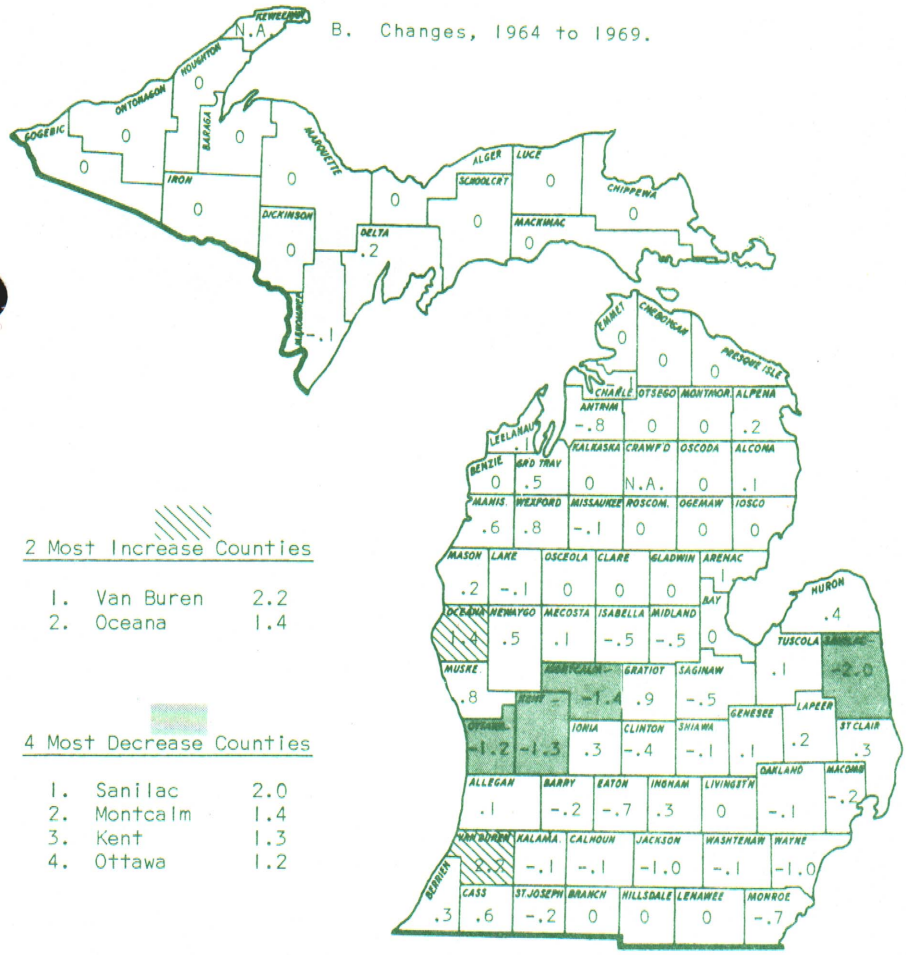
Top 10 Counties

1.	Van Buren	9.0
2.	Berrien	7.3
3.	Macomb	5.5
4.	Monroe	4.9
5.	Newaygo	4.7
6.	Sanilac	4.7
7.	Oceana	4.3
8.	Bay	4.2
9.	Allegan	3.7
10.	St. Clair	3.1

A. In 1969.



B. Changes, 1964 to 1969.



2 Most Increase Counties

1.	Van Buren	2.2
2.	Oceana	1.4

4 Most Decrease Counties

1.	Sanilac	2.0
2.	Montcalm	1.4
3.	Kent	1.3
4.	Ottawa	1.2

STATE DECREASE - 1.4 THOUS.A.(1.4%)

STATE 20-YEAR TREND (THOUS.A):

1949 - 109
1954 - 105
1959 - 109
1964 - 102
1969 - 101

District Data

Dist.	Acreage (thous.) 1964	1969	Change	% dec.
1	.9	.9	0	0
2	2.7	3.8	+1.1	-
3	.1	.4	+ .3	-
4	10.8	13.8	+3.0	+27
5	7.8	6.4	-1.4	-18
6	16.7	15.6	-1.4	- 6
7	26.4	26.8	+ .4	+ 2
8	12.3	10.2	-2.1	-17
9	24.4	22.8	-1.6	- 7
State	102.1	100.7	-1.4	- 1

Vegetables were grown on only 1.8 percent of Michigan's cropland in 1969, but according to census data, provided about $70 million of sales, or nearly 5 percent of our total agricultural sales of about $800 million that year (Table 2). The leading vegetables making up the approximately 100,000 acres are generally cucumbers, asparagus, sweet corn, snap beans and onions. These five usually account for about two-thirds of the vegetable acreage.

The top 10 counties are widely scattered, with five being on the west side of the state and five on the east (Fig. 16A). Van Buren County led with 9,000 acres. The top 10 contained 51 percent of the state's total acreage in 1969. Vegetable acreage has remained relatively constant in recent years, and was almost exactly the same in 1969 as 1964, although a few counties showed some change (Fig. 16B). Vegetable acreage in the state since 1969 has varied little from that year.

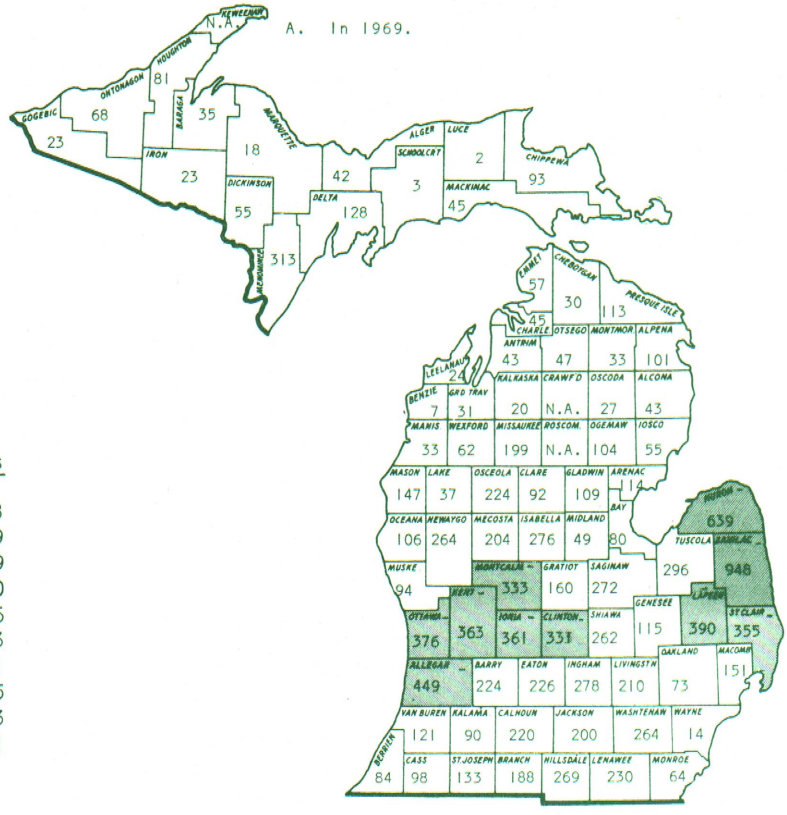
TABLE 2. FARM PRODUCT SALES BY COUNTIES WITHIN DISTRICTS OF MICHIGAN: TOTAL FOR 1964 AND 1969, AND BY CROP GROUPS FOR 1969 (AMOUNT AND PERCENT OF TOTAL) FOR CLASS I - V FARMS.

District & County	Total Sales		Crop Total		Crop Groups														Av.Crop Sales/	
					Grains		Field Seeds		Other Field Crops		Vegetables		Fruits		Nursery, etc.		Forest Products		Farm Reporting	Acre Cropland
	1964	1969	1969																	
	(000 $)		(000 $)	%	(000 $)	%	(000 $)	%	(000 $)	%	(000 $)	%	(000 $)	%	(000 $)	%	(000 $)	%	$	$
1. Upper Peninsula																				
Alger	660	844	63	7.5	16	1.9	30	3.5	1	.1	0	0	12	.5	4	.5	6	.8	1,007	6
Baraga	494	424	23	5.5	2	.4	12	2.8	2	.5	4	1.0	3	.8	0	0	3	.7	496	4
Chippewa	1,880	1,767	242	13.7	42	2.4	193	10.9	3	.2	0	0	2	.1	2	.1	4	.2	1,168	5
Delta	3,068	3,278	540	16.5	76	2.3	121	3.7	217	6.6	107	3.3	11	.3	7	.2	54	1.6	2,159	14
Dickinson	1,749	1,858	913	49.1	13	.7	23	1.2	843	45.4	28	1.5	7	.4	0	0	11	.6	10,146	67
Gogebic	428	345	20	5.9	1	.2	5	1.4	n.a.	-	0	0	0	0	n.a.	-	2	.5	660	5
Houghton	1,781	1,289	321	24.9	18	1.4	30	2.4	146	11.4	n.a.	-	77	6.0	n.a.	-	4	.3	2,380	20
Iron	695	670	300	44.8	15	2.2	18	2.7	267	39.8	0	0	0	0	0	0	9	1.3	5,355	40
Keweenaw	-	-	-	-	-	-	-	-	N. A.	-	-	-	-	-	-	-	-	-	-	-
Luce	295	395	163	41.3	3	.7	39	10.0	n.a.	-	10	2.5	1	.1	n.a.	-	4	1.0	7,409	30
Mackinac	506	855	41	4.8	11	1.3	25	2.9	3	.4	0	0	1	.2	0	0	3	.3	565	3
Marquette	675	559	120	21.4	2	.3	47	8.4	68	12.1	1	.2	3	.5	0	0	56	10.0	2,608	16
Menominee	5,034	5,726	356	6.2	40	.7	198	3.5	38	.7	n.a.	-	0	0	n.a.	-	95	1.7	902	6
Ontonagon	691	893	94	10.5	11	1.2	75	8.4	3	.4	0	0	5	.5	0	0	16	1.8	833	6
Schoolcraft	158	233	28	12.2	1	.3	24	10.2	3	1.2	0	0	1	.4	0	0	6	2.4	1,091	5
Total or Av.	18,044	19,137	3,227	16.9	250	1.3	841	4.4	n.a.	-	n.a.	-	123	.6	n.a.	-	272	1.4	2,076	13
2. Northwest																				
Antrim	3,030	3,669	1,698	46.3	62	1.7	83	2.3	295	8.0	90	2.7	1,105	30.1	54	1.5	28	.8	8,622	57
Benzie	1,928	1,634	1,144	70.0	14	.9	28	1.7	0	0	11	.7	1,020	62.4	72	4.4	50	3.1	9,011	84
Charlevoix	1,408	1,633	309	18.9	61	3.8	72	4.4	29	1.8	30	1.8	116	7.1	0	0	79	4.8	2,552	16
Emmet	1,854	2,210	436	19.7	50	2.3	79	3.6	172	7.8	72	3.3	n.a.	-	n.a.	-	32	1.4	3,632	22
Gr.Traverse	6,336	6,481	4,323	66.7	90	1.4	86	1.3	11	.2	58	.9	4,074	62.9	4	.1	54	.8	11,845	113
Kalkaska	957	1,396	224	16.1	6	.5	27	1.9	n.a.	-	0	0	0	0	n.a.		27	1.9	4,672	28
Leelanau	4,453	5,538	4,034	72.8	52	.9	59	1.1	n.a.	-	59	1.1	3,820	69.0	n.a.		71	1.3	12,300	115
Manistee	3,462	4,704	3,800	80.8	32	.7	34	.7	525	11.2	241	5.1	2,797	59.5	171	3.6	70	1.5	19,386	131
Missaukee	4,018	5,899	541	9.2	101	1.7	189	3.2	104	1.8	10	.2	n.a.	-	n.a.	-	47	.8	1,761	10
Wexford	1,043	1,821	343	18.8	44	2.5	101	5.5	25	1.3	72	4.0	8	.4	92	5.1	139	7.6	2,333	17
Total or Av.	28,490	34,986	16,853	48.2	513	1.5	757	2.2	n.a.	-	654	1.9	n.a.	-	n.a.	-	596	1.7	8,616	64
3. Northeast																				
Alcona	1,179	1,728	169	9.8	26	1.5	104	6.0	n.a.	-	n.a.	-	8	.5	5	.3	20	1.2	1,184	7
Alpena	2,706	3,144	776	24.7	118	3.7	134	4.3	8	.3	152	4.8	365	11.6	0	0	17	.5	2,877	22
Cheboygan	1,130	1,057	224	21.2	15	1.4	87	8.3	4	.4	7	.6	110	10.5	0	0	10	.9	2,179	11
Crawford	-	-	-	-	-	-	-	-	N. A.	-	-	-	-	-	-	-	-	-	-	-
Iosco	1,677	2,611	674	25.8	83	3.2	142	5.4	6	.2	4	.1	n.a.	-	n.a.	-	6	.2	4,345	24
Montmorency	803	986	117	11.9	35	3.5	43	4.4	n.a.	-	0	0	n.a.	-	0	0	13	1.3	1,542	9
Ogemaw	2,893	3,284	294	8.9	77	2.3	191	5.8	n.a.	-	0	0	n.a.	-	0	0	33	1.0	1,434	8
Oscoda	938	834	64	7.7	6	.7	57	6.8	0	0	0	0	0	0	2	.2	14	1.6	908	5
Otsego	1,048	1,136	280	24.6	25	2.2	107	9.4	144	12.7	4	.3	0	0	0	0	25	2.2	2,543	18
Presque Isle	2,632	2,916	888	30.5	177	6.1	119	4.1	581	19.9	4	.1	7	.2	0	0	34	1.2	3,671	24
Roscommon	110	115	37	31.8	1	.9	12	10.6	0	0	0	0	n.a.	-	n.a.	-	1	.9	1,828	18
Total or Av.	15,116	17,812	3,524	19.8	562	3.2	998	5.6	n.a.	-	281	1.6	n.a.	-	n.a.	-	173	1.0	2,526	16
4. West Central																				
Lake	488	619	66	10.7	19	3.1	40	6.5	6	1.0	0	0	0	0	0	0	3	.5	846	6
Mason	4,693	5,253	2,181	41.5	260	4.9	127	2.4	26	.5	195	3.7	1,484	28.3	89	1.7	66	1.3	6,250	44
Muskegon	5,961	7,525	4,189	55.7	210	2.8	113	1.5	100	1.3	1,640	21.8	1,658	22.0	467	6.2	60	.8	14,011	120
Newaygo	7,405	11,832	5,473	46.3	262	2.2	271	2.3	230	1.9	3,824	32.3	819	6.9	66	.6	102	.9	10,587	77
Oceana	8,074	9,231	5,919	64.1	197	2.1	128	1.4	58	.6	1,105	12.0	4,252	46.1	180	2.0	289	3.1	10,821	87
Total or Av.	26,621	34,460	17,829	51.7	949	2.8	679	2.0	42	.2	6,765	19.6	8,212	23.8	803	2.3	520	1.5	9,960	75

5. Central																				
Clare	2,685	2,972	331	11.1	142	4.8	159	5.3		.1	0	0	0	0	28	.9	21	.7	1,512	10
Gladwin	2,805	2,808	513	18.3	291	10.4	127	4.5	64	2.3	n.a.	-	0	0	n.a.	-	8	.3	2,028	13
Gratiot	23,617	21,928	12,353	56.3	10,126	46.2	179	.8	1,321	6.0	528	2.4	25	.1	175	.8	23	.1	9,561	56
Isabella	14,193	13,647	2,755	20.2	2,004	14.7	348	2.5	83	.6	250	1.8	66	.5	5	.0	29	.2	3,673	22
Mecosta	5,016	6,693	2,568	38.4	568	8.5	203	3.0	1,389	20.8	312	4.7	95	1.4	0	0	26	.4	6,308	36
Midland	5,901	5,320	2,637	49.6	1,996	37.5	47	.9	465	8.7	125	2.4	2	0	1	0	9	.2	6,994	45
Montcalm	16,344	15,129	8,287	54.8	2,921	19.3	302	2.0	4,304	28.5	347	2.3	n.a.	-	n.a.	-	57	.4	9,681	57
Osceola	4,035	5,117	462	9.0	95	1.9	198	3.9	129	2.5	0	0	24	.5	16	.3	137	2.7	1,284	8
Total or Av.	74,596	73,614	29,906	40.6	18,142	24.6	1,563	2.1	7,759	10.5	n.a.	-	n.a.	-	n.a.	-	314	.4	6,625	39
6. E.Central																				
Arenac	4,670	5,092	2,149	42.2	967	19.0	119	2.3	593	11.7	439	8.6	n.a.	-	n.a.	-	4	.1	6,802	41
Bay	18,253	17,267	12,889	84.4	5,719	37.5	95	.6	5,567	36.5	1,264	8.3	19	.1	225	1.5	8	.1	12,761	94
Huron	35,104	34,187	11,747	34.4	9,003	26.3	520	1.5	2,142	6.3	58	.2	1	0	23	.1	15	0	6,405	36
Saginaw	25,877	23,630	15,922	67.4	10,921	46.2	188	.8	3,395	14.4	690	2.9	184	.8	554	2.3	51	.2	10,090	63
Sanilac	30,122	32,014	8,358	26.1	4,702	14.7	949	3.0	1,027	3.2	851	2.7	114	.4	716	2.2	15	0	4,518	25
Tuscola	24,902	25,535	15,505	60.7	11,134	43.6	311	1.2	3,663	14.3	327	1.3	70	.3	0	0	26	.1	10,519	59
Total or Av.	139,129	135,724	66,570	49.0	42,446	31.3	2,182	1.6	16,387	12.1	3,630	2.7	n.a.	-	n.a.	-	118	.1	8,257	49
7. Southwest																				
Allegan	22,654	29,741	9,158	30.8	1,825	6.1	373	1.3	683	2.3	1,897	6.4	3,317	11.2	1,063	3.6	243	.8	6,477	57
Berrien	28,136	27,482	22,503	81.9	1,924	7.0	163	.6	88	.3	3,459	12.6	14,450	52.6	2,419	8.8	28	.1	16,283	164
Cass	9,854	13,755	3,927	28.5	2,145	15.6	243	1.8	72	.5	570	4.1	861	6.3	36	.3	43	.3	5,809	32
Kalamazoo	10,451	12,850	5,101	39.7	1,783	13.9	182	1.4	47	.4	170	1.3	648	5.0	2,272	17.7	16	.1	8,215	47
Kent	19,448	24.216	12,147	50.2	1,357	5.6	369	1.5	270	1.1	1,476	6.1	6,363	26.3	2,311	9.5	92	.4	11,247	88
Ottawa	20,877	31,168	11,235	36.0	915	2.9	233	.7	164	.5	2,479	8.0	3,992	12.8	3,453	11.1	641	2.1	9,628	108
Van Buren	20,375	23,074	17,020	73.8	1,147	5.0	253	1.1	354	1.5	2,387	10.3	11,757	51.0	1,122	4.9	71	.3	15,129	133
Total or Av.	131,794	162,286	81,091	50.0	11,095	6.8	1,816	1.1	1,679	1.0	12,437	7.7	41,388	25.5	12,677	7.8	1,133	.7	10,863	90
8. Southern																				
Barry	9,626	11,221	1,931	17.2	1,162	10.4	280	2.5	241	2.1	141	1.3	60	.5	46	.4	120	1.1	2,908	18
Branch,	10,923	13,083	4,367	33.4	3,444	26.3	271	2.1	80	.6	28	.2	133	1.0	411	3.1	56	.4	5,049	28
Calhoun	13,983	16,438	4,318	26.3	2,572	15.6	308	1.9	134	.8	483	2.9	163	1.0	658	4.0	95	.6	5,068	27
Clinton	18,462	19,753	5,327	27.0	3,525	17.8	332	1.7	686	3.5	251	1.3	234	1.2	299	1.5	89	.4	4,723	29
Eaton	15,696	13,268	4,408	33.2	2,741	20.7	319	2.4	271	2.0	639	4.8	35	.3	403	3.0	81	.6	4,964	30
Hillsdale	15,083	14.992	3,910	26.1	3.172	21.2	365	2.4	9	.1	14	.1	301	2.0	48	.3	75	.5	3,807	25
Ingham	14,695	16,197	4,243	26.2	2,135	13.2	336	2.1	200	1.2	1,022	6.3	142	.9	408	2.5	36	.2	5,893	33
Ionia	16,710	19,101	5,078	26.6	2,978	15.6	394	2.1	88	.5	501	2.6	874	4.6	243	1.3	101	.5	4,791	28
Jackson	11,821	15,840	3,086	19.5	1,561	9.9	394	2.5	143	.9	418	2.6	370	2.3	201	1.3	51	.3	4,193	24
St. Joseph	9,792	12,617	4,135	32.8	2,786	22.1	233	1.8	357	2.8	144	1.1	163	1.3	454	3.6	33	.3	5,364	27
Shiawassee	14,969	14,175	4,883	34.4	4,154	29.3	306	2.2	303	2.1	27	.2	27	.2	65	.5	24	.2	5,156	29
Total or Av.	151,759	166,686	45,686	27.4	30,230	18.1	3,538	2.1	2,513	1.5	3,667	2.2	2,501	1.5	3,237	1.9	761	.5	4,730	28
9. Southeast																				
Genesee	9,955	10,188	2,975	29.2	1,782	17.5	231	2.3	64	.6	123	1.2	433	4.2	343	3.4	8	.1	4,926	30
Lapeer	15,652	20,212	7,544	37.3	1,648	8.2	411	2.0	504	2.5	2,095	10.4	409	2.0	2,474	12.2	28	.1	8,981	55
Lenawee	28,410	30,996	12,706	41.0	10,692	34.5	432	1.4	531	1.7	608	2.0	301	1.0	141	.5	32	.1	7,762	43
Livingston	9,869	10,799	2,621	24.3	853	7.9	470	4.4	19	.2	185	1.7	171	1.6	923	8.5	51	.5	4,890	28
Macomb	12,547	13,073	8,917	68.2	800	6.1	217	1.7	216	1.6	2,502	19.1	800	6.1	4,381	33.5	21	.2	15,453	148
Monroe	18,655	18,992	12,919	68.0	7,310	38.5	150	.8	1,833	9.7	1,963	10.3	150	.8	1,512	8.0	38	.2	11,333	68
Oakland	7,961	8,532	4,212	49.4	416	4.9	218	2.6	32	.4	183	2.1	616	7.2	2,747	32.2	39	.5	11,142	82
St. Clair	13,845	15,597	3,864	24.8	1,396	9.0	340	2.2	251	1.6	1,116	7.2	118	.8	643	4.1	32	.2	4,753	31
Washtenaw	17,068	17,817	4,911	27.6	2,657	14.9	432	2.4	171	1.0	466	2.6	381	2.1	804	4.5	42	.2	5,058	30
Wayne	5,198	5,563	4,658	83.7	726	13.1	49	.9	13	.2	604	10.9	154	2.8	3,112	55.9	6	.1	16,577	155
Total or Av.	139,161	151,769	65,327	43.0	28,280	18.6	2,950	1.9	3,635	2.4	9,846	6.5	3,533	2.3	17,081	11.3	298	.2	8,400	52
State	724,796	796,496	330,016	41.4	132,468	16.6	15,324	1.9	36,096	4.5	38,917	4.9	70,191	8.8	37,017	4.7	4	.5	7,471	48

n.a. - Data not available as too few farms to publish.

FIG. 18 - DAIRY FARMS (CLASS I-V)



A. In 1969.

Top 10 Counties

1.	Sanilac	948
2.	Huron	639
3.	Allegan	449
4.	Lapeer	390
5.	Ottawa	376
6.	Kent	363
7.	Ionia	361
8.	St. Clair	355
9.	Montcalm	333
10.	Clinton	331

State Total - 12,233

Dairy farming is the leading type of farming in Michigan from more than one point of view; thus discussion of dairying starts the livestock section of this publication. For instance, cash receipts from the sale of dairy products in recent years usually ran from 27 to 29 % of the total from all products, and if income from the sale of cull cows and veal calves is added, dairy's share of the total would be around one-third. As a share of the livestock income, dairying provides over 60%. On the basis of grain- and roughage-consuming units of livestock, dairy cattle accounted for 42% of the state total in 1969 (39% in 1973). No definitive data are available on the share of the total labor input to operate Michigan's agriculture that is spent on the dairy enterprises, but it is estimated by the author that it must be around 25-28%. Finally, on the basis of number of farms classified as dairy farms (having at least 50% of the income from dairy products and dairy cattle) the 12,586 commercial dairy farms (with over $2500 receipts) in Michigan in 1969 were more than in any other type, and made up 28% of the 44,175 farms in the state classified as commercial (i.e., economic classes I-V).

In regard to changes from 1964 to 1969, the number of farms in the state having milk cows declined nearly 50% (33,176 to 17,082), although the number of cows decreased only 28%, and total milk production about 20%. The decrease in number of farms classified as dairy farms was about 38% and was concentrated mainly in the small herds (see table below). About two-thirds of the decrease was in herds of less than 20 cows. The average size of herd on these farms increased from 25 to 31 cows, and milk production per farm from about 232,000 pounds to an estimated 318,000 pounds.

Number of Dairy Farms, Michigan, 1964 and 1969

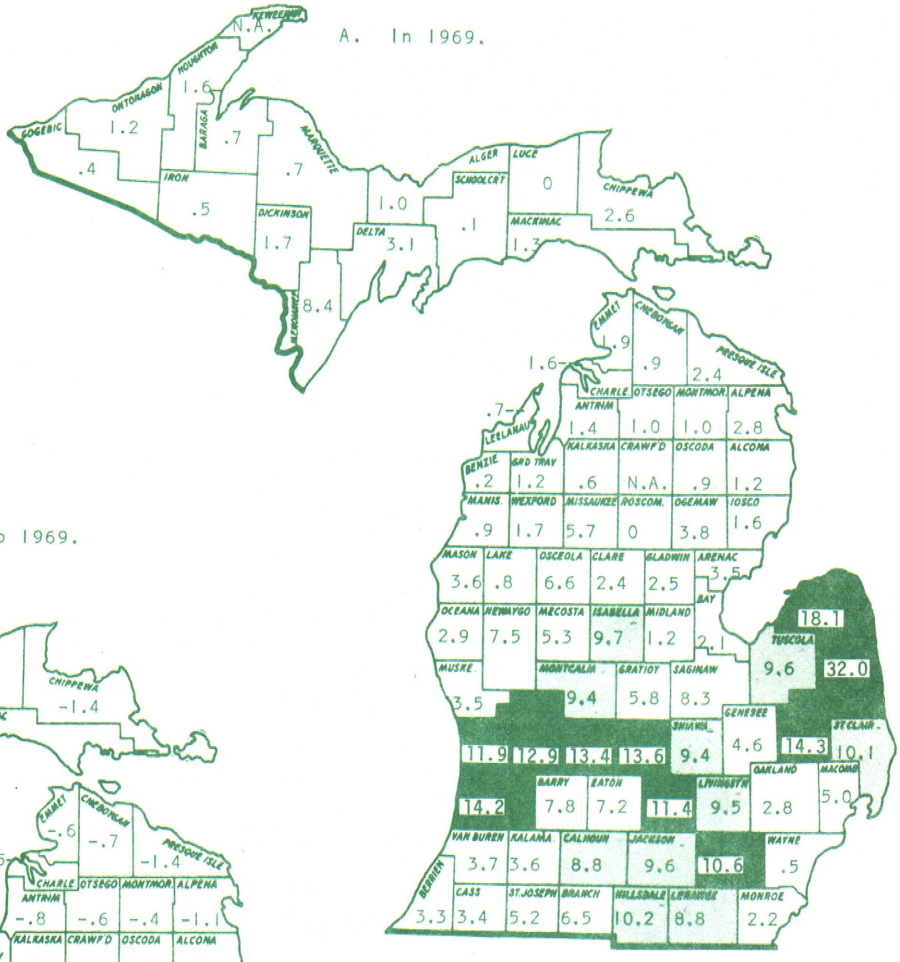
Size of herd	1964	1969	Change '64 to '69 No. of herds	Change '64 to '69 %
<10 cows	2,535	877	-1658	-65
10-19 cows	6,397	3,018	-3379	-53
20-29 cows	5,115	3,063	-2052	-40
30-49 cows	4,445	3,488	- 957	-22
50-99 cows	1,319	1,532	+ 213	+16
100+ cows	135	255	+ 120	+89
Total	19,946	12,233	-7713	-39

As to location of these herds, Sanilac county had the most, with Huron, Lapeer, and St. Clair in that area being in the top 10 counties, with the balance in the area west and south from Montcalm and Clinton counties (Fig. 18). These 10 counties had 36% of all dairy farms in the state. The top 10 counties in 1969 were almost the same as in 1964. Although there were some changes in rank, the only changes in counties included were Clinton came in and Hillsdale went out.

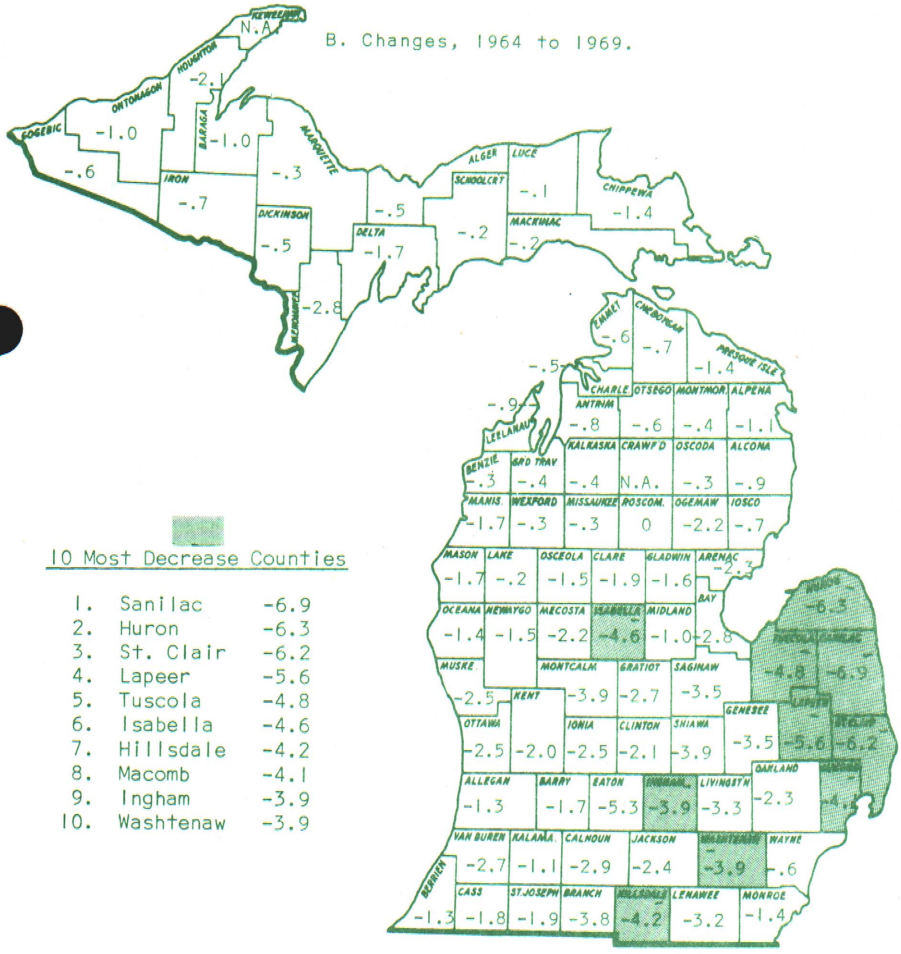
FIG. 19 - MILK COWS (THOUS.)

Top 10 Counties		Next 10 Counties	
1. Sanilac	32.0	11. Hillsdale	10.2
2. Huron	18.1	12. St. Clair	10.1
3. Lapeer	14.3	13. Isabella	9.7
4. Allegan	14.2	14. Tuscola	9.6
5. Clinton	13.6	15. Jackson	9.6
6. Ionia	13.4	16. Livingston	9.5
7. Kent	12.9	17. Shiawassee	9.4
8. Ottawa	11.9	18. Montcalm	9.4
9. Ingham	11.4	19. Calhoun	8.8
10. Washtenaw	10.6	20. Lenawee	8.8

A. In 1969.



B. Changes, 1964 to 1969.



STATE DECREASE - 160 Thous. (28%)

10 Most Decrease Counties	
1. Sanilac	-6.9
2. Huron	-6.3
3. St. Clair	-6.2
4. Lapeer	-5.6
5. Tuscola	-4.8
6. Isabella	-4.6
7. Hillsdale	-4.2
8. Macomb	-4.1
9. Ingham	-3.9
10. Washtenaw	-3.9

STATE 20-YEAR TREND (Thous. Head)

1949 - 794
1954 - 778
1959 - 612
1964 - 574
1969 - 414

District Data

Dist.	No. Head (thous.)			%
	1964	1969	Change	dec.
1	36.2	23.3	-12.9	36
2	20.4	15.7	- 4.7	23
3	24.1	15.6	- 8.5	35
4	24.5	18.4	- 6.1	25
5	62.4	42.9	-19.5	31
6	100.2	73.6	-26.6	27
7	65.8	53.0	-12.8	20
8	137.6	103.1	-34.5	25
9	102.2	68.3	-33.9	33
State	573.4	413.9	-159.5	28

About every county in the state has some milk cows, although the number varies widely (Fig. 19A). Sanilac County was an easy first with 32,000 milk cows in 1969. The top 10 counties were rather widely scattered over the lower one-half of the state. These 10 counties had 37 percent of the state's total milk cows, and the top 20 had 60 percent of the total.

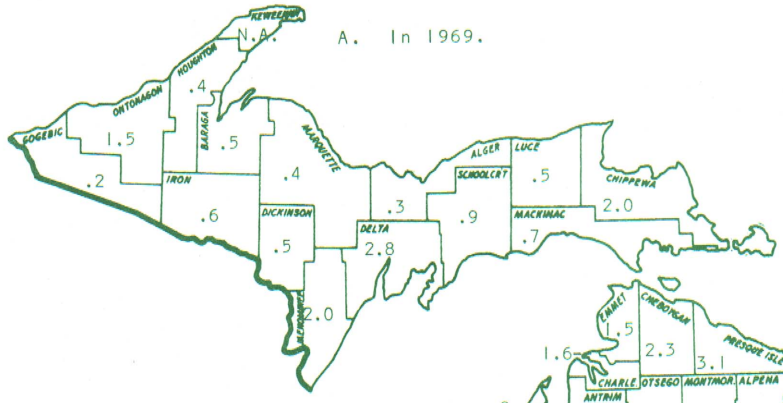
The number of milk cows in the state in 1969 was about one-half that 20 years ago. From 1969 to date, however, the decline has been only about 5 percent. From 1964 to 1969 the number dropped 28 percent. Fig. 19B, showing the decrease by counties indicates a rapid decline in the Thumb and in Washtenaw, Hillsdale, and Ingham. Only small decreases took place in Allegan, Kent, and some other counties in southwest Michigan. Milk production in the state peaked in 1964 at 5,758 million pounds, declined to 4,592 million in 1969, increased to 4,966 in 1972 and back to 4,686 in 1973. Production per cow increased none from 1964 to 1967, but has increased through 1972.

FIG. 20 - BEEF COWS (THOUS.)

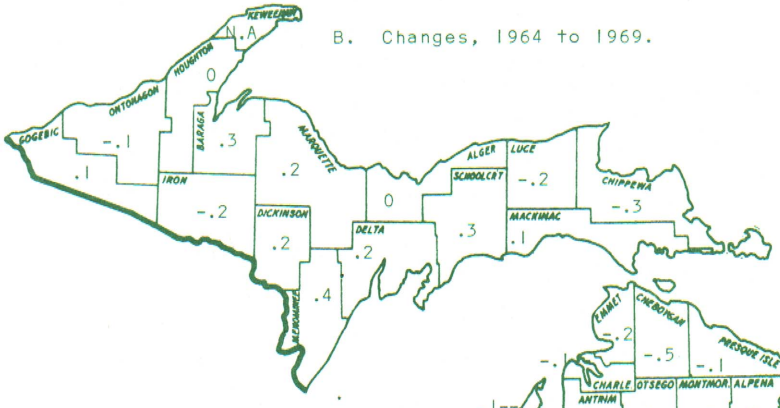
Top 10 Counties

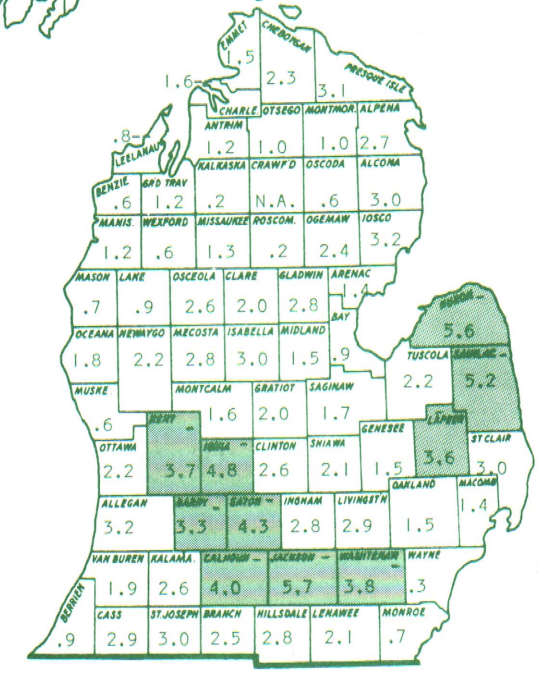
1.	Jackson	5.7
2.	Huron	5.6
3.	Sanilac	5.2
4.	Ionia	4.8
5.	Eaton	4.3
6.	Calhoun	4.0
7.	Washtenaw	3.8
8.	Kent	3.7
9.	Lapeer	3.6
10.	Barry	3.3

A. In 1969.



B. Changes, 1964 to 1969.



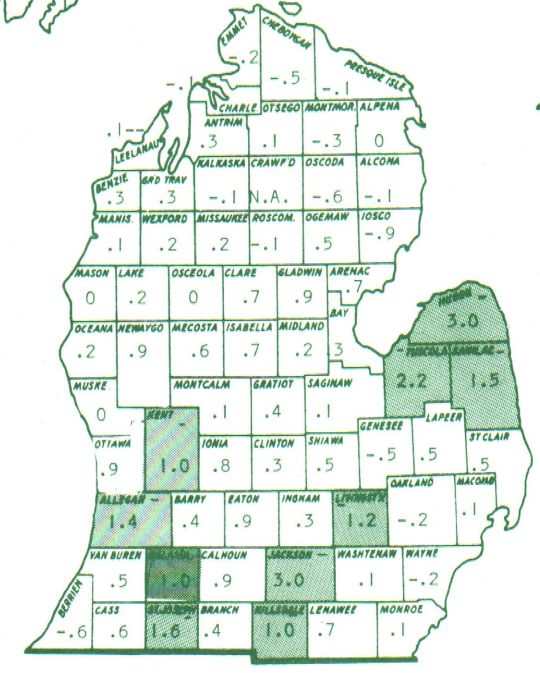


STATE 20-YEAR TREND (Thous. Head)

1949 - 44	1964 - 132
1954 - 78	1969 - 160
1959 - 90	

10 Most Increase Counties

1.	Huron	3.0
2.	Jackson	3.0
3.	Tuscola	2.2
4.	St. Joseph	1.6
5.	Sanilac	1.5
6.	Allegan	1.4
7.	Livingston	1.2
8.	Hillsdale	1.0
9.	Kent	1.0
10.	Kalamazoo	1.0



STATE INCREASE - 28 Thous. (21%)

District Data

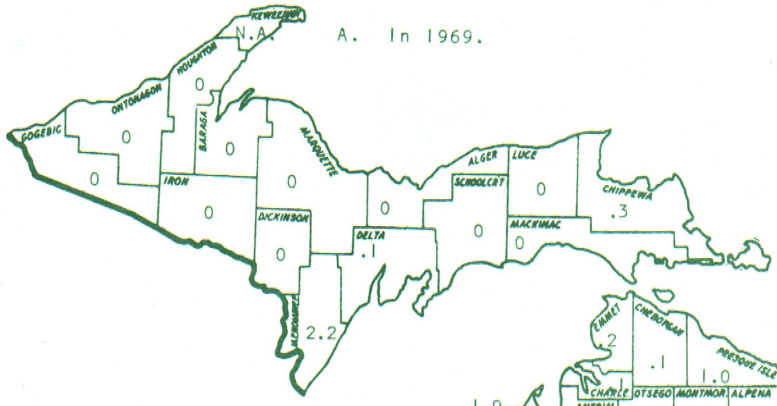
Dist.	No. Head (thous.) 1964	1969	Change	% Change
1	12.4	13.3	+ .9	+ 8
2	9.3	10.3	+ 1.0	+11
3	21.3	19.3	- 2.0	- 9
4	4.9	6.3	+ 1.4	+26
5	13.8	17.5	+ 3.7	+27
6	11.3	16.9	+ 5.6	+49
7	12.6	17.5	+ 4.9	+39
8	27.7	37.8	+10.1	+37
9	18.6	20.9	+ 2.3	+12
State	131.9	159.8	+27.9	+21

There were 160,000 beef cows in the state at the end of 1969, making up about 23 percent of the total animal units. Like dairy, every county had some beef cows. The leading 10 counties were all in the southern half of the lower peninsula (Fig. 20A). These 10 counties had 28 percent of the total, indicating wider distribution over the state than dairy cows.

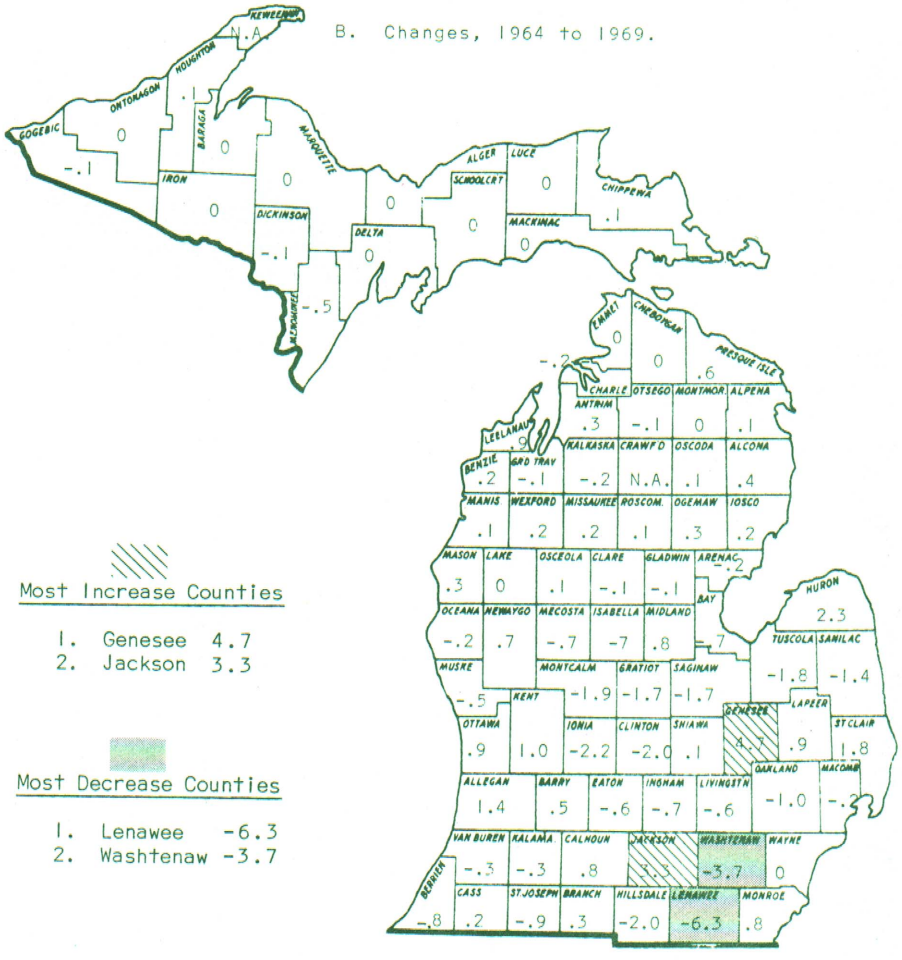
The number of beef cows increased 21 percent from 1964 to 1969, with a further increase of about 35,000 from then to 1973. Huron County showed the most increase from 1964 to 1969, followed by Jackson and Tuscola (Fig. 20B). District 6 showed the highest percentage increase and 8 the largest in number increase in this period. According to "Michigan County Statistics--Livestock, Poultry and Dairy, 1965-73," the following counties have had increases of 700-900 in beef cow numbers from 1970 to 1973: Huron, Jackson, Sanilac, Eaton, Ionia, and Calhoun.

FIG. 21 - FED CATTLE SOLD (THOUS.)
(CLASS I-V FARMS)

A. In 1969.



B. Changes, 1964 to 1969.



Top 10 Counties

		Next 10 Counties	
1. Lenawee	28.2	11. Kalamazoo	8.1
2. Huron	20.8	12. Ionia	8.0
3. Genesee	10.9	13. Jackson	7.9
4. Isabella	10.6	14. Clinton	7.6
5. Gratiot	10.5	15. Ingham	7.0
6. Calhoun	10.2	16. Eaton	6.4
7. Monroe	9.5	17. Sanilac	6.2
8. St. Clair	9.4	18. St. Joseph	5.7
9. Washtenaw	9.4	19. Lapeer	5.7
10. Allegan	9.0	20. Branch	5.3

Most Increase Counties

1. Genesee 4.7
2. Jackson 3.3

Most Decrease Counties

1. Lenawee -6.3
2. Washtenaw -3.7

STATE 20-YEAR TREND (Thous. head)

1949 - N. A.	1964 - 285
1954 - N. A.	1969 - 275
1959 - N. A.	

District Data

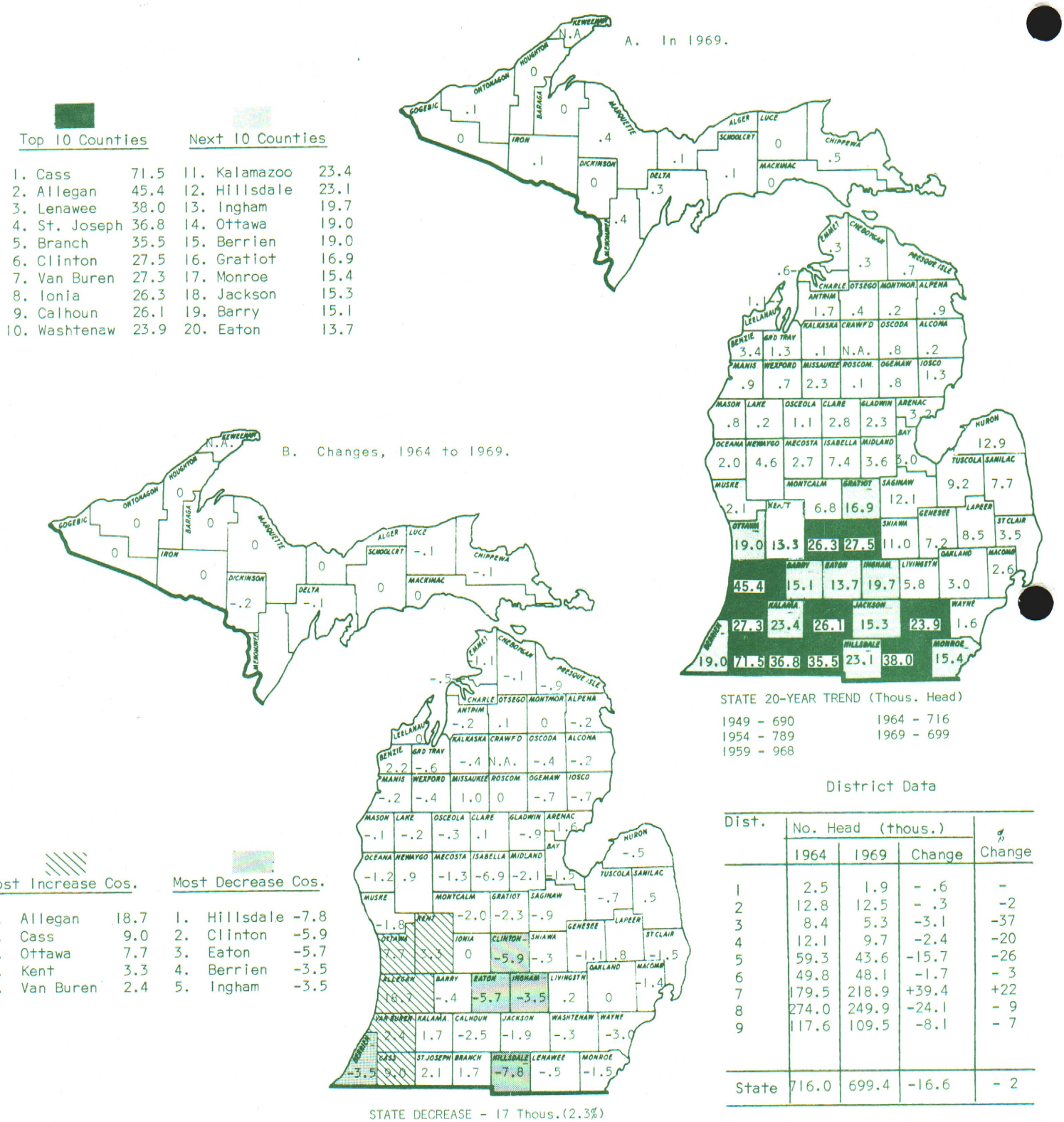
Dist.	No. Head (thous.)			%
	1964	1969	Change	Change
1	1.6	.8	- .8	-
2	4.3	5.7	+1.4	+32
3	3.9	5.6	+1.7	+44
4	5.9	6.2	+ .3	+ 5
5	35.6	32.6	-3.0	- 8
6	41.5	38.1	-3.4	+ 8
7	34.0	36.1	+2.1	+ 6
8	73.3	68.8	-4.5	- 6
9	84.6	81.0	-3.6	- 4
State	284.7	274.9	-9.8	- 3

STATE DECREASE - 9.8 thous. head (3.4%)

Some 275,000 head of cattle were fattened on grain and concentrates by 6,832 Class I-V farmers in the state in 1969, making up 7 percent of the total animal units. Lenawee County topped the list with about 28,000, followed by Huron with 21,000 (Fig. 21A). The top 10 counties were widely scattered over the southern half of the lower peninsula. Nearly one-half the fed cattle were fattened in these 10 counties, or more concentration than either beef or dairy cows. If one includes the next 10 counties, 72 percent of the total fed were from the 20 counties.

The census showed slightly fewer cattle fed in 1969 than in 1964 with Lenawee and Washtenaw Counties having the most decrease and Genesee and Jackson the most increase. A U.S.D.A. publication, showing livestock numbers January 1 shows the number January 1, 1974, being nearly 20 percent above that of 1969.

FIG. 22 - HOGS AND PIGS (THOUS.)



District Data

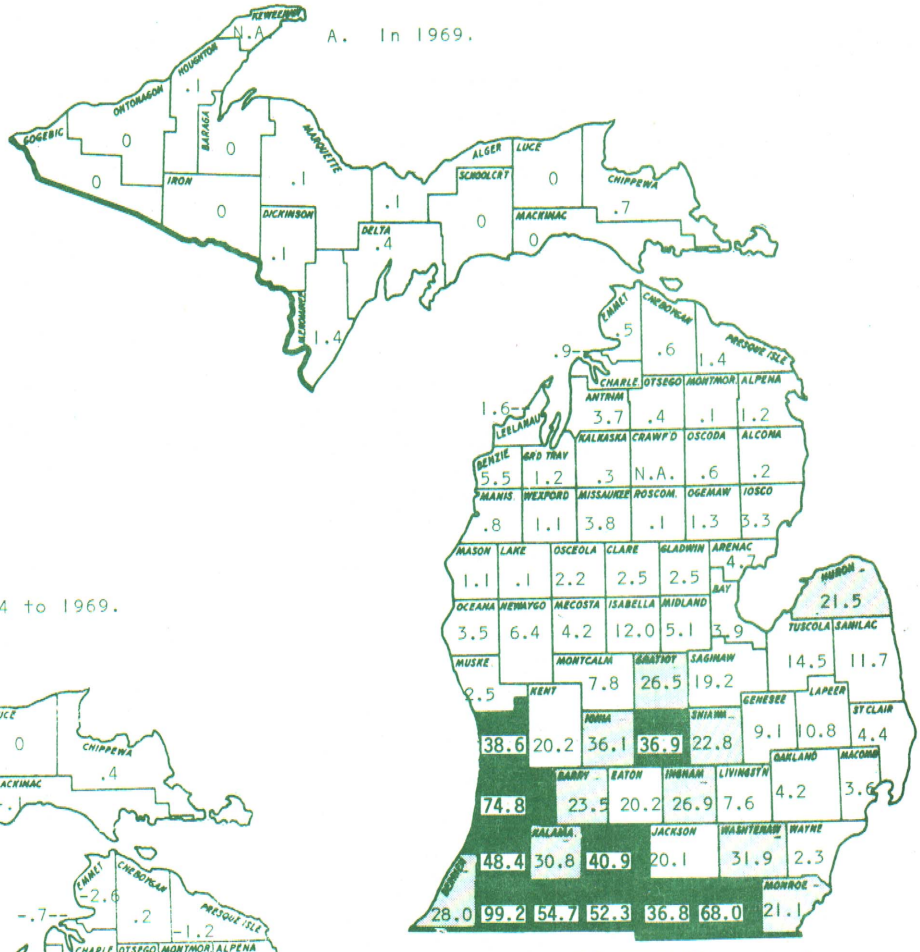
Dist.	No. Head (thous.)			% Change
	1964	1969	Change	
1	2.5	1.9	- .6	-
2	12.8	12.5	- .3	-2
3	8.4	5.3	-3.1	-37
4	12.1	9.7	-2.4	-20
5	59.3	43.6	-15.7	-26
6	49.8	48.1	-1.7	- 3
7	179.5	218.9	+39.4	+22
8	274.0	249.9	-24.1	- 9
9	117.6	109.5	-8.1	- 7
State	716.0	699.4	-16.6	- 2

There were nearly 700,000 hogs and pigs on 10,965 farms in Michigan on December 31, 1969. This was slightly less than 5 years earlier, but the number of farmers reporting was 40% less, so the average number per farm was 64 head vs. 39. Cass county was an easy leader with 10% of the state total (Fig. 22A). Most of the top 10 counties were in southwest and central-southern Michigan. Slightly over one-half the state's hogs were in these counties, and if the next 10 are included, then 77% of the total. In 1969, hogs made up about 15% of the state's animal units.

While there was relatively little change in the state total from 1964 to 1969, there were rather important changes among counties. Allegan and other counties in that area showed sharp increases, while some central counties showed decreases (Fig. 22B). This county variation is further illustrated by the wide differences in districts (see "district data").

FIG. 23 - HOGS AND PIGS SOLD (THOUS.)
(CLASS I-V FARMS)

A. In 1969.



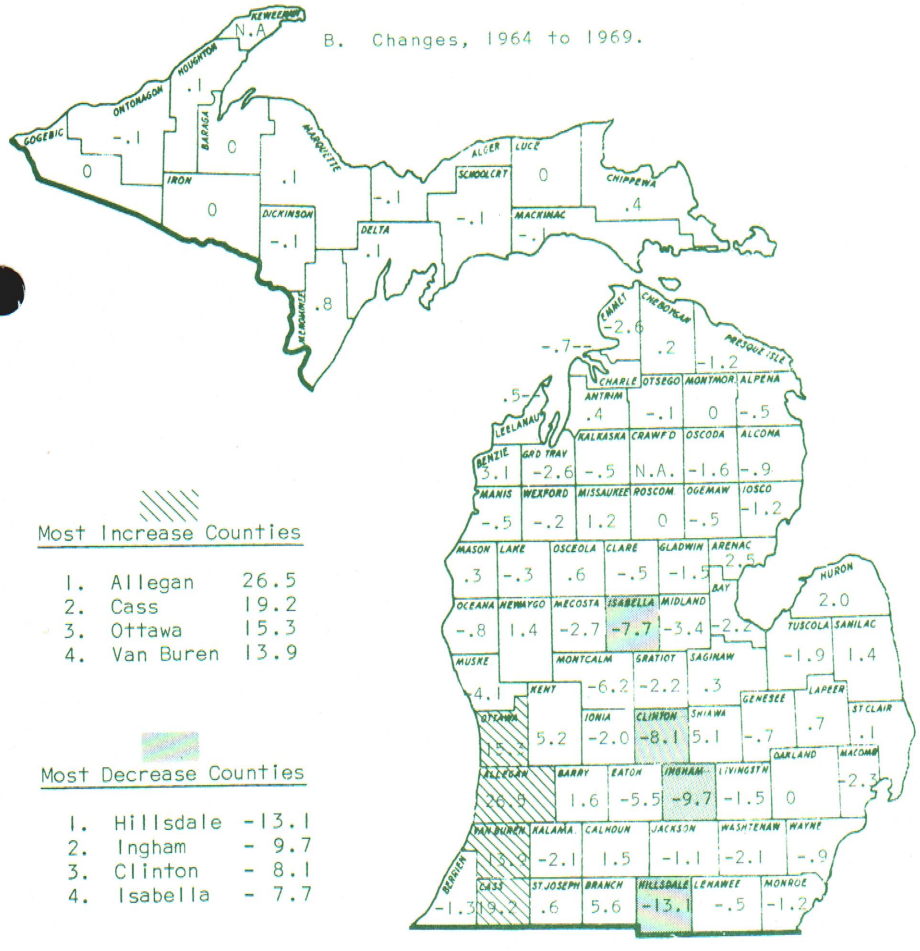
Top 10 Counties

1.	Cass	99.2
2.	Allegan	74.8
3.	Lenawee	68.0
4.	St. Joseph	54.7
5.	Branch	52.3
6.	Van Buren	48.4
7.	Calhoun	40.9
8.	Ottawa	38.6
9.	Clinton	36.9
10.	Hillsdale	36.8

Next 10 Counties

11.	Ionia	36.1
12.	Washtenaw	31.9
13.	Kalamazoo	30.8
14.	Berrien	28.0
15.	Ingham	26.9
16.	Gratiot	26.5
17.	Barry	23.5
18.	Shiawassee	22.8
19.	Huron	21.5
20.	Monroe	21.1

B. Changes, 1964 to 1969.



Most Increase Counties

1.	Allegan	26.5
2.	Cass	19.2
3.	Ottawa	15.3
4.	Van Buren	13.9

Most Decrease Counties

1.	Hillsdale	-13.1
2.	Ingham	- 9.7
3.	Clinton	- 8.1
4.	Isabella	- 7.7

STATE INCREASE - 11.7 thous. head (1.1%)

STATE 20-YEAR TREND (Thous. head)

1949 - 833	1964 - 1,046
1954 - 797	1969 - 1,058
1959 - 919	

District Data

Dist.	No. Head (thous.)			% Change
	1964	1969	Change	
1	1.9	2.8	+ .9	-
2	21.4	19.5	-1.9	- 9
3	15.1	9.2	-5.9	-39
4	17.1	13.7	-3.4	-22
5	86.3	62.8	-23.5	-28
6	73.4	75.5	+2.1	+ 3
7	263.2	340.0	+76.8	+29
8	396.2	371.1	-25.1	- 6
9	171.2	163.0	- 8.2	- 5
State	1045.8	1057.6	+11.8	+ 1

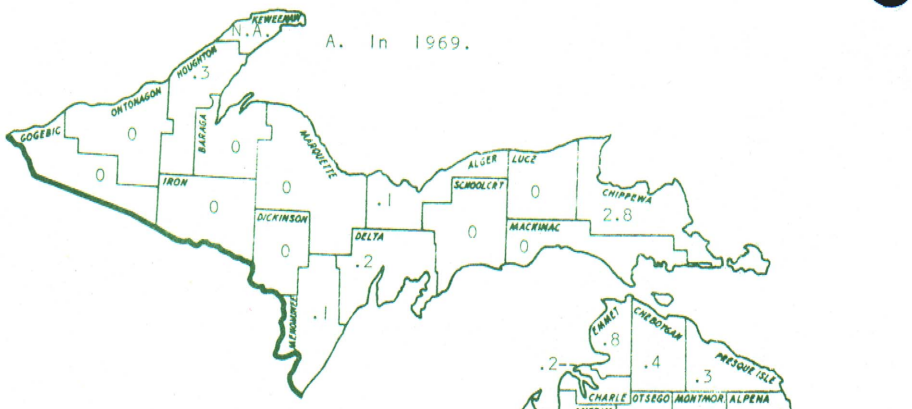
It was thought that the number of hogs and pigs sold in the year might give a better picture than the number on hand at a particular time, so this set of maps is included (Fig. 23). In 1969, over a million head of hogs and pigs were sold for nearly $50 million, some 6.3% of total farm sales and about 11% of total livestock income. From the standpoint of the top 10 counties, the top 5 were the same as with hogs on hand, but in the remaining 5, Washtenaw and Ionia did not appear, and Ottawa and Hillsdale came into the top "sales" group.

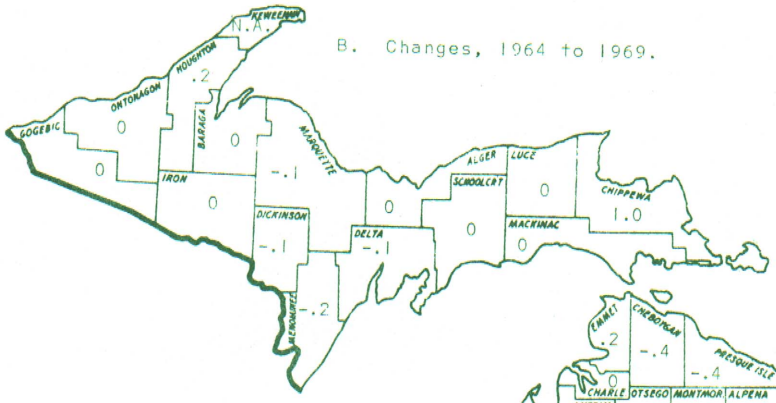
The number sold in 1969 was essentially the same as in 1964, but the number sold in four southwestern counties was much greater than 1969 (Fig. 23B). On the other hand, four scattered counties in central Michigan had sharp decreases from 5 years earlier. Total sales of hogs and pigs over time, while showing some cyclical variations, has not shown any definite long-term trend. But total sales since 1969 have been relatively high, according to the Crop Reporting Service, with little county variation from 1969.

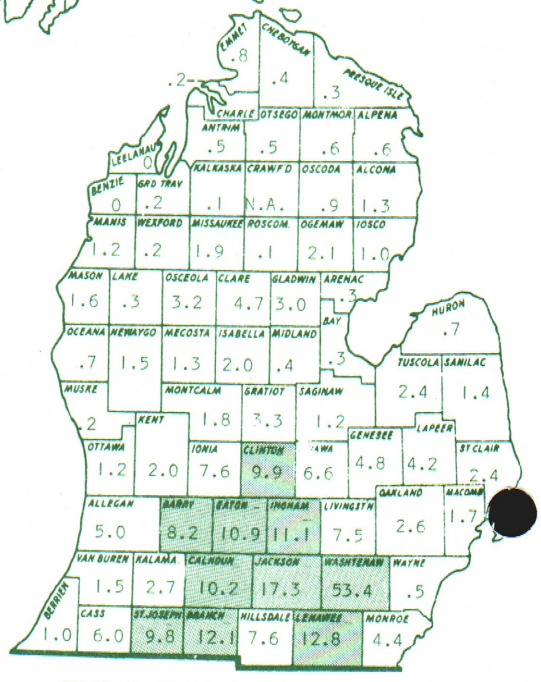
FIG. 24 - SHEEP AND LAMBS (THOUS.)

Top 10 Counties

1.	Washtenaw	53.4
2.	Jackson	17.3
3.	Lenawee	12.8
4.	Branch	12.1
5.	Ingham	11.1
6.	Eaton	10.9
7.	Calhoun	10.2
8.	Clinton	9.9
9.	St. Joseph	9.8
10.	Barry	8.2

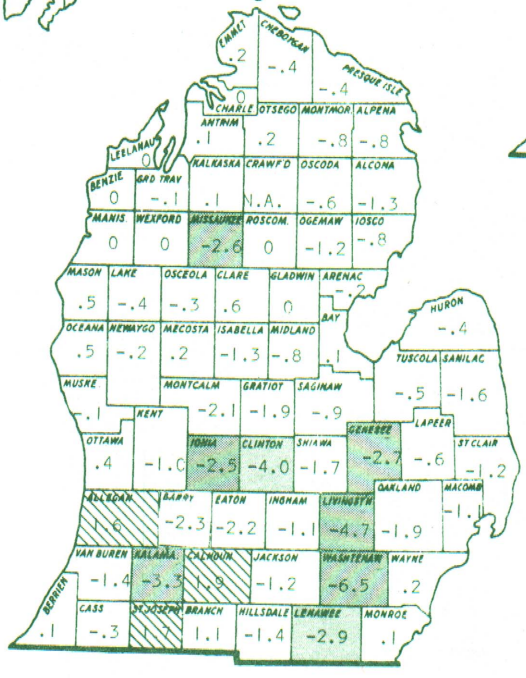






STATE 20-YEAR TREND (Thous. Head)

1949 - 388	1964 - 323
1954 - 465	1969 - 272
1959 - 459	



Most Increase Cos.

1.	Calhoun	1.9
2.	St. Joseph	1.7
3.	Allegan	1.6

Most Decrease Cos.

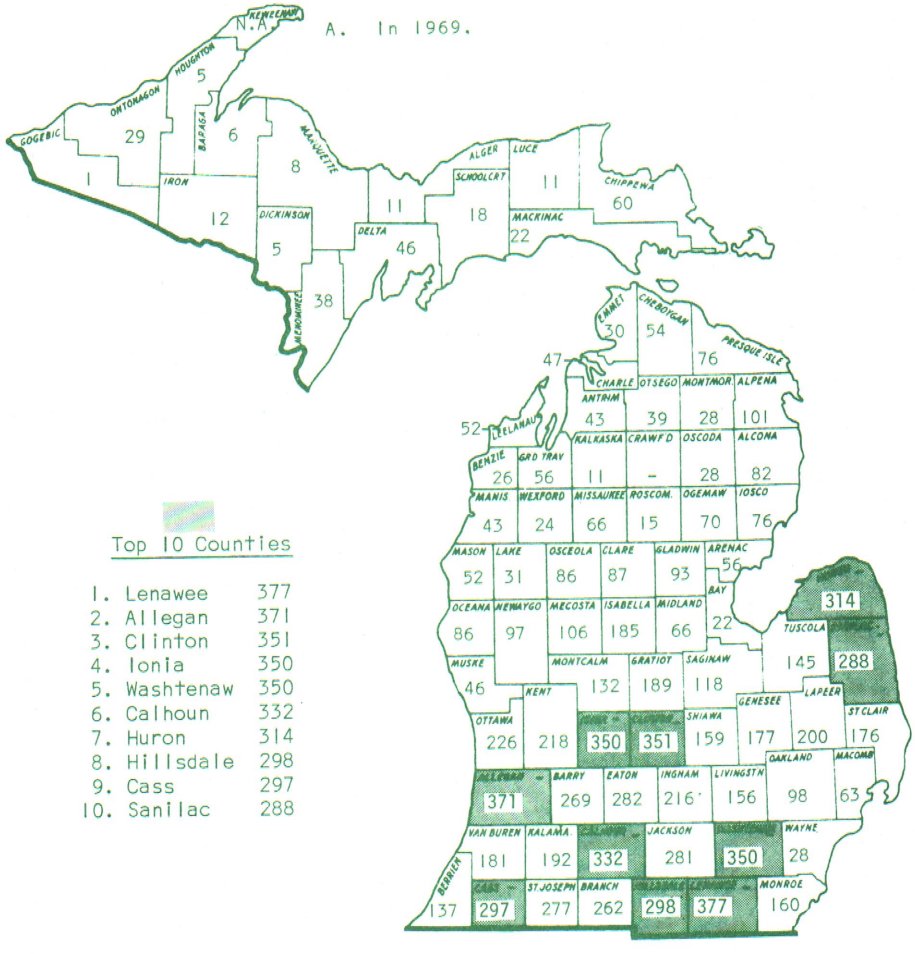
1.	Washtenaw	-6.5
2.	Livingston	-4.7
3.	Clinton	-4.0
4.	Kalamazoo	-3.3
5.	Lenawee	-2.9
6.	Genesee	-2.7
7.	Missaukee	-2.6

STATE DECREASE - 51 Thous. (15.8%)

About 4,150 farmers reported having 272,000 sheep and lambs on hand at the end of 1969. This was a decrease of 21% in farmers having (the smallest decrease of any livestock) and 16% in number of sheep. Washtenaw county had three times as many sheep and lambs as second ranking Jackson county. All top 10 counties were in South-central Michigan, and this group had 57% of all in the state (Fig. 24A). This was the highest percentage in the top 10 of any kind of livestock and was twice the beef cow figure.

The number of sheep and lambs have been decreasing since 1954, according to census reports, being about 40% less by 1969. The decrease for the 5 years 1964-69 was about 16% (Fig. 24B). The high decrease counties were widely scattered. A few counties showed a small increase. According to the Crop Reporting Service livestock report referred to previously, the number of sheep and lambs has continued to decrease, being about 18% less Jan. 1, 1974, than 4 years earlier.

FIG. 25 - LIVESTOCK FARMS (THOUS.)
(CLASS I-V FARMS)



Top 10 Counties

1.	Lenawee	377
2.	Allegan	371
3.	Clinton	351
4.	Ionia	350
5.	Washtenaw	350
6.	Calhoun	332
7.	Huron	314
8.	Hillsdale	298
9.	Cass	297
10.	Sanilac	288

STATE TOTAL - 9,922

Receipts from Marketing of Livestock and Livestock Products - Prices received index for livestock and livestock products during 1969 averaged 113 (1967=100), or about 40 percent higher than the index of 81 for 1964, based upon Michigan Crop Reporting Service data. The price index for the various livestock products in 1969 ranged from 106 for dairy products to 124 for poultry and eggs. (By December 1973 the overall livestock index had risen to 175).

Cash marketings of livestock and livestock products from all farms totaled $475 million for 1969, or 19 percent higher than for 1964. (They were $705 million for 1973.) Livestock marketings for economic class I-V farms for 1969 totaled $462 million (Table 3). Marketings of six groups of livestock products, by counties, state districts and for the entire state are shown in this table. (The percentages shown are of total crop and livestock sales.) Of the state livestock total for 1969, about 47 percent came from the sale of dairy products, 7 percent from dairy cattle and 54 percent from the dairy enterprise. Sales of beef cattle and calves accounted for about 23 percent, hogs and sheep 11 percent, poultry and poultry products 10 percent, and about 2 percent from other livestock products.

District shares of the state total varied widely--from a high of $120 million from district #8, $86 million from #9, and $80 million from #7 (or 62 percent of the total in these three southern districts, see Fig. 4, page 7), to $14 to $17 million in districts #1, #2, and #3. The livestock marketings by districts varied because of differences in soils and climate, crops that can be grown, whether feed crops or cash crops, markets available and marketing costs, as well as the size of the district.

The relative importance of livestock marketings of the total marketings ranged from 82 percent of the total in the U.P., 79 percent in the Northeast district, and 72 percent in #8 to a low of 47 percent in district 4 (West Central) and 49 percent in #7 (Southwest).

The importance of the different kinds of livestock also varied from district to district. Income from dairy products and cattle made up 59 percent of total marketings in the U.P. and 47 percent in district 3, but only 18 percent in #7. Beef cattle accounted for 26 percent in district 3, 18 percent in #5 and #9, but only 8 percent in #7. Hogs and sheep showed the highest percentage (11 percent) in district 8 (Southern), but less than 1 percent in the U.P. Poultry were responsible for 11 percent in #7. Individual counties, of course, showed much wider variations than these district averages.

Another interesting aspect is the livestock income per farm and per acre cropland, with the state average for 1969 being $10,466 per farm (crops $7471) and $67 per acre cropland (crops $48). Livestock income averages per farm ranged from $12,450 for district 8 to around $9,000 for districts 2, 4, and 6. This range of about $3,500 compares with over $8,000 range in crop sales per farm. Livestock income per acre cropland among the various counties ranged from $185 in Ottawa to $17 in Bay.

Livestock farms, as grouped in the census, include those producing or fattening beef cattle and calves, hogs and pigs, and sheep and lambs (dairy cattle and poultry are not included) and over 50% of their income must come from one or more of these kinds of livestock. Thus, this group of farms is quite diverse, with many farms having beef cows or fattening operations, quite a few with hogs, some with sheep, or combinations of such. This discussion is intended to summarize, at least to a certain extent, the presentation on these three kinds of livestock.

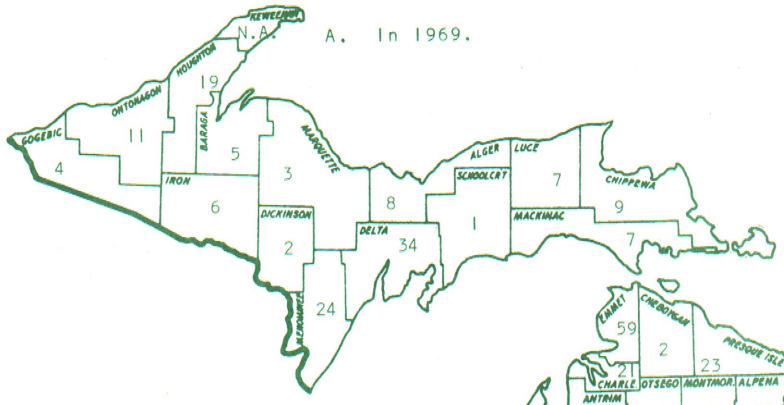
Commercial livestock farms, with livestock as defined above and having sales of at least $2,500, produced 20 percent of total farm receipts in the state in 1969 ($158 million). Of this total, 57 percent came from sales of beef cattle, 25 percent from hogs and sheep, 9 percent from grains and about 5 percent dairy. Total sales per farm in 1969 for these farms averaged $15,900 (compared with $21,800 for dairy farms). This was 47 percent more than in 1964, while the dairy income per farm was 67 percent greater in 1969. Since the index of dairy product prices and livestock and livestock product prices in 1969 were both 40 percent higher than in 1964, the physical volume sold per farm increased faster for dairy farms than livestock farms, although there were quite a few large livestock farms.

There were 9,922 commercial livestock farms in Michigan in 1969, making this type rank third in the state, following dairy (12,586) and cash-grain (10,843). Livestock farms made up 22 percent of all commercial farms that year. The number of livestock farms in 1969 was about 2,600 greater than in 1964. This is in contrast to the sharp drop in number of dairy farms, where drastic declines occurred in the number in economic classes III, IV, and V, which was not true with the livestock farms.

The top 10 counties in number of livestock farms were scattered over the southern half of the lower peninsula, from Huron to Lenawee to Allegan (Fig. 25). Lenawee had the most livestock farms. The top 10 counties had 34 percent of the state's total livestock farms (37 percent for dairy). Sales of livestock from these counties in 1969 accounted for 38 percent of the state total. Direct comparisons of top livestock counties in 1969 cannot be made from the data available, but it appears that 8 of the top 10 in 1969 also were in the top 10 in 1964. With the high livestock prices of 1973 (at least 40 percent above 1969) the income of livestock farms should show a sizeable increase and the number classified as such farms probably has increased.

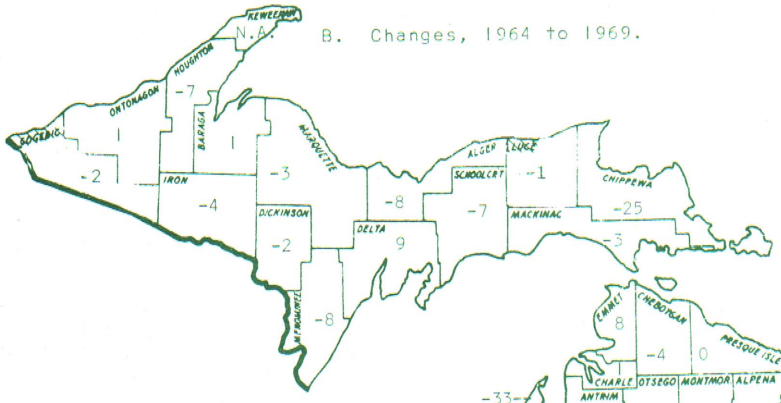
FIG. 26 - CHICKENS (THOUS.)

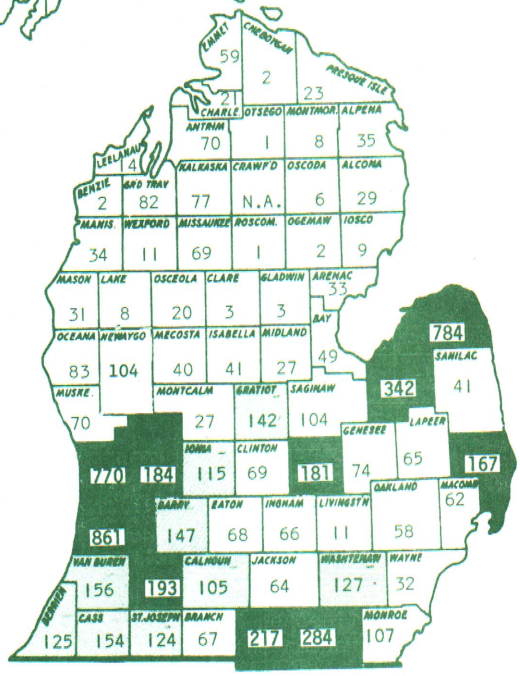
A. In 1969.

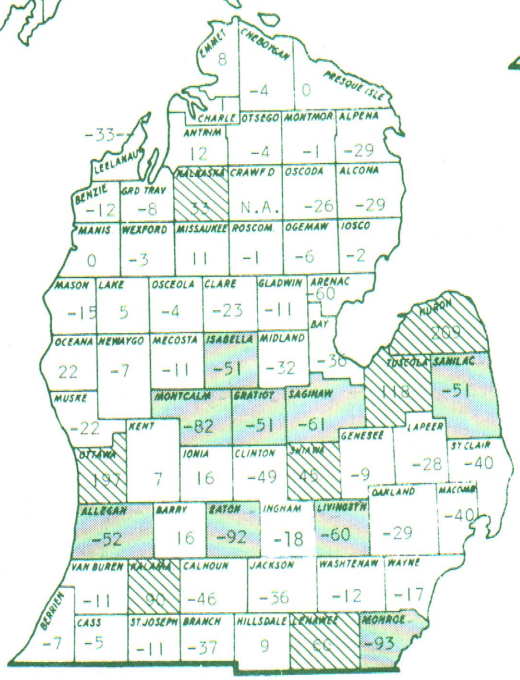


Top 10 Counties		Next 10 Counties	
1. Allegan	861	11. Van Buren	156
2. Huron	784	12. Cass	154
3. Ottawa	770	13. Barry	147
4. Tuscola	342	14. Gratiot	142
5. Lenawee	284	15. Washtenaw	127
6. Hillsdale	217	16. Berrien	125
7. Kalamazoo	193	17. St. Joseph	124
8. Kent	184	18. Ionia	115
9. Shiawassee	181	19. Monroe	107
10. St. Clair	167	20. Calhoun	105

B. Changes, 1964 to 1969.







STATE DECREASE - 462 Thousand (6.0%)

STATE 20-YEAR TREND (Thous. Head)

1949 - 8,456	1964 - 7,773
1954 - 10,773	1969 - 7,311
1959 - 8,375	

Most Increase Cos.		Most Decrease Cos.	
1. Huron	209	1. Monroe	-93
2. Ottawa	197	2. Eaton	-92
3. Tuscola	118	3. Montcalm	-82
4. Kalamazoo	90	4. Saginaw	-61
5. Lenawee	66	5. Livingston	-60
6. Shiawassee	45	6. Allegan	-52
7. Kalkaska	33	7. Gratiot	-51
		8. Sanilac	-51
		9. Isabella	-51

District Data

Dist.	No. Head (thous.)			% Change
	1964	1969	Change	
1	196	148	- 48	-29
2	429	439	+ 10	+ 2
3	171	116	- 55	-32
4	270	297	+ 27	+10
5	569	304	-265	-46
6	1236	1354	+118	+10
7	2224	2444	+220	+10
8	1427	1222	-205	-14
9	1249	988	-261	-21
State	7773	7311	-462	- 6

There were approximately 7.3 million chickens 3 months old or older on 9,477 farms in Michigan at the end of 1969. Poultry made up 10 percent of the total animal units, and poultry income in 1969 amounted to about $48 million, about 6 percent of all farm product sales, and around 10 percent of total livestock income. The top 10 counties in number of chickens not only were scattered widely over the southern half of the lower peninsula, but varied greatly in actual number (Fig. 26A). Some 54 percent of the state's chickens were in these 10 counties.

While the change in number of chickens from 1964 to 1969 for the state was not great (-6 percent), there were significant changes among certain counties (Fig. 26B). Of greater importance has been the reduction by 60 percent in the number of farmers keeping chickens, with a doubling of the average number per farm.

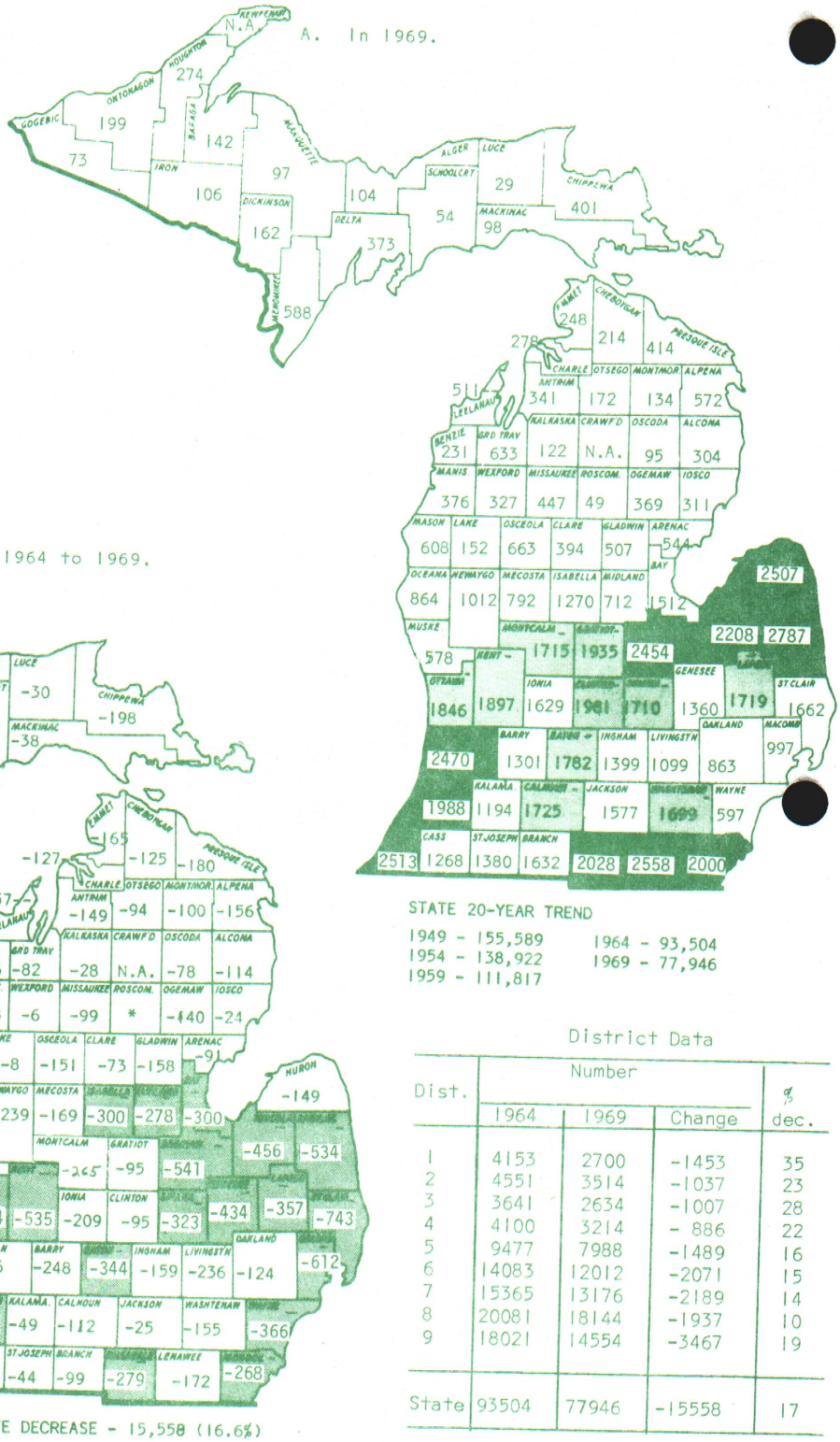
TABLE 3. FARM PRODUCT SALES BY COUNTIES WITHIN DISTRICTS OF MICHIGAN: TOTAL FOR 1964 AND 1969, AND BY LIVESTOCK GROUPS FOR 1969 (AMOUNT AND PERCENT OF TOTAL) FOR CLASS I - V FARMS.

District and County	Livestock Total 1969		Kind of Livestock or Livestock Product														Av. Livestock Income per	
			Dairy Products		Dairy Cattle and Calves		Total Dairy		Beef Cattle and Calves		Hogs, Sheep and Goats		Poultry and Poul. Products		Other Livestock and products		Farms Reporting	Acre Cropland
	(000 $)	%	(000 $)	%	(000 $)	%	(000 $)	%	(000 $)	%	(000 $)	%	(000 $)	%	(000 $)	%	$	$
1. Upper Peninsula																		
Alger	774	91.7	520	61.6	64	7.5	583	69.1	121	14.4	2	.2	68	8.0	0	.0	12,293	78.17
Baraga	398	93.8	292	68.8	35	8.3	327	77.2	46	10.9	0	.0	24	5.8	0	0	8,468	63.66
Chippewa	1,520	86.1	972	55.0	148	8.4	1,120	63.4	294	16.7	58	3.3	39	2.2	9	.5	7,310	30.46
Delta	2,684	81.9	1,180	36.0	182	5.5	1,362	41.5	419	12.8	13	.4	175	5.3	716	21.8	10,737	68.38
Dickinson	934	50.2	704	37.9	93	5.0	797	42.9	18	1.0	1	.1	7	.4	110	5.9	10,373	68.33
Gogebic	322	93.6	171	49.6	28	8.2	199	57.8	10	3.1	0	.0	24	7.0	89	25.7	10,401	85.91
Houghton	964	74.7	697	54.1	108	8.4	805	62.4	32	2.5	3	.2	123	9.5	1	.1	7,138	61.41
Iron	362	54.0	198	26.5	51	7.7	250	37.3	67	9.9	0	.0	32	4.8	13	1.9	6,457	48.72
Keewenaw	-	-	-	-	-	-	-	N. A.	-	-	-	-	-	-	-	-	-	-
Luce	227	57.7	27	12.3	12	3.0	39	15.3	138	35.0	1	.4	48	12.3	0	.1	10,338	41.75
Mackinac	812	95.0	536	62.7	80	9.4	616	72.0	154	18.0	2	.2	39	4.6	1	.1	11,280	59.22
Marquette	383	68.5	294	52.6	33	6.0	328	58.6	48	8.6	0	.1	6	1.0	2	.3	8,332	49.55
Menominee	5,274	92.1	3,660	63.9	596	10.4	4,257	74.3	223	3.9	22	.4	120	2.1	653	11.4	13,353	91.77
Ontonagon	783	87.7	434	48.6	84	9.4	518	58.0	197	22.1	1	.1	66	7.4	0	.0	6,929	48.31
Schoolcraft	199	85.5	57	24.3	14	5.9	71	30.2	123	52.7	1	.5	4	1.7	1	.3	7,669	37.46
Total or Av.	15,614	81.6	9,742	50.9	1,528	8.0	11,270	58.9	1,892	9.9	105	.6	777	5.0	1,593	8.3	10,063	62.12
2. Northwest																		
Antrim	1,942	52.9	669	18.2	123	3.4	792	21.6	378	10.3	141	3.9	605	16.5	26	.7	9,858	65.70
Benzie	440	26.9	70	4.3	12	.7	81	5.0	181	11.1	166	10.2	7	.4	5	.3	3,465	32.29
Charlevoix	1,245	76.2	668	40.9	97	5.9	765	46.8	276	16.9	38	2.3	147	9.0	20	1.2	10,292	63.52
Emmet	1,742	78.8	952	43.1	110	5.0	1,063	48.1	273	12.3	33	1.5	372	16.9	1	.1	14,517	86.45
Gr. Traverse	2,104	32.5	579	8.9	135	2.1	714	11.0	567	8.8	41	.6	563	8.7	219	3.4	5,765	55.16
Kalkaska	1,145	82.0	276	19.8	93	6.6	369	26.4	122	8.7	9	.6	638	45.7	8	.6	23,861	144.25
Leelanau	1,433	25.9	324	5.9	69	1.2	393	7.1	738	13.3	70	1.3	92	1.7	140	2.5	4,368	40.98
Manistee	834	17.7	359	7.6	69	1.5	428	9.1	204	4.3	58	1.2	139	3.0	6	.1	4,255	28.86
Missaukee	5,311	90.0	3,380	57.3	615	10.4	3,995	67.7	772	13.1	121	2.0	416	7.1	8	.1	17,301	101.66
Wexford	1,340	73.6	887	48.7	115	6.3	1,001	55.0	188	10.3	43	2.3	45	2.5	63	3.4	9,114	68.12
Total or Av.	17,537	50.1	8,163	23.3	1,437	4.1	9,600	27.4	3,698	10.6	719	2.1	3,025	8.6	495	1.4	8,966	66.23
3. Northeast																		
Alcona	1,538	89.0	518	30.0	88	5.1	606	35.1	667	38.6	29	1.7	236	13.7	0	0	10,757	65.65
Alpena	2,351	74.8	1,210	38.5	163	5.2	1,372	43.6	708	22.5	34	1.1	231	7.3	6	.2	8,707	67.47
Cheboygan	823	77.8	444	42.0	53	5.0	497	47.0	288	27.2	13	1.3	2	.2	23	2.2	7,988	40.67
Crawford	-	-	-	-	-	-	-	N. A.	-	-	-	-	-	-	-	-	-	-
Iosco	1,931	74.0	724	27.7	108	4.1	832	31.8	952	36.5	80	3.1	48	1.9	19	.7	12,459	68.10
Montmorency	856	86.8	511	51.8	86	8.8	597	60.6	210	21.3	14	1.5	33	3.3	2	.2	11,265	66.83
Ogemaw	2,957	90.0	2,062	62.8	224	6.8	2,286	69.6	567	17.3	77	2.3	3	.1	25	.8	14,425	77.37
Oscoda	756	90.6	439	52.6	62	7.4	501	60.0	171	20.5	44	5.3	23	2.8	17	2.0	10,651	60.90
Otsego	831	73.1	449	39.6	67	5.9	516	45.5	282	24.8	27	2.4	3	.3	2	.2	7,552	52.34
Presque Isle	1,994	68.4	940	32.2	175	6.0	1,115	38.2	749	25.7	42	1.4	88	3.0	0	.0	8,240	53.50
Roscommon	77	67.4	1	.5	0	0	1	.5	64	55.6	7	6.2	2	1.9	4	3.2	3,873	37.33
Total or Av.	14,115	79.2	7,297	41.0	1,026	5.8	8,323	46.7	4,657	26.1	370	2.1	669	3.8	98	.5	10,118	62.59
4. West Central																		
Lake	550	88.8	306	49.4	54	8.7	360	58.1	139	22.5	7	1.1	44	7.1	0	0	7,045	45.94
Mason	3,006	57.2	1,846	35.1	285	5.4	2,131	40.6	620	11.8	48	.9	186	3.5	22	.4	8,614	60.19
Muskegon	3,276	43.5	2,006	26.7	266	3.5	2,272	30.2	464	6.2	108	1.4	246	3.3	187	2.5	10,957	93.69
Newaygo	6,256	52.9	4,084	34.5	486	4.1	4,569	38.6	742	6.3	301	2.5	628	5.3	17	.1	12,101	87.76
Oceana	3,023	32.7	1,417	15.4	240	2.6	1,657	17.9	726	7.9	142	1.5	488	5.3	9	.1	5,527	44.31
Total or Av.	16,111	46.8	9,658	28.0	1,330	3.9	10,988	31.9	2,691	7.8	606	1.8	1,591	4.6	234	.7	9,001	68.16

5. Central																		
Clare	2,620	88.2	1,129	38.0	173	5.8	1,302	43.8	1,126	37.9	176	5.9	6	.2	10	.3	11,962	77.27
Gladwin	2,286	81.4	1,156	41.2	336	12.0	1,492	53.2	651	23.2	131	4.7	5	.2	6	.2	9,036	56.94
Gratiot	9,552	43.6	3,081	14.0	463	2.1	3,543	16.2	3,633	16.6	1,235	5.6	1,133	5.2	7	.0	7,393	43.15
Isabella	10,863	79.6	5,373	39.4	806	5.9	6,179	45.3	3,789	27.8	517	3.8	364	2.7	13	.1	14,484	84.94
Mecosta	4,099	61.2	2,581	38.6	364	5.4	2,945	44.0	785	11.7	151	2.3	210	3.1	8	.1	10,071	56.84
Midland	2,674	50.3	573	10.8	100	1.9	673	12.7	1,604	30.2	230	4.3	142	2.7	24	.5	7,092	46.11
Montcalm	6,783	44.8	4,561	30.1	646	4.3	5,206	34.4	808	5.3	374	2.5	375	2.5	20	.1	7,924	46.55
Osceola	4,518	88.3	3,186	62.3	391	7.6	3,577	69.9	677	13.2	142	2.8	120	2.3	3	.0	12,549	75.65
Total or Av.	43,394	58.9	21,639	29.4	3,278	4.5	24,917	33.8	13,073	17.8	2,956	4.0	2,355	3.2	93	.1	9,613	57.18
6. East Central																		
Arenac	2,939	57.7	1,708	33.5	236	4.6	1,944	38.2	566	11.1	157	3.1	271	5.3	1	.0	9,300	55.67
Bay	2,371	15.5	1,071	7.0	196	1.3	1,267	8.3	650	4.3	129	.8	268	1.8	56	.4	2,347	17.30
Huron	22,434	65.6	9,360	27.4	1,377	4.0	10,737	31.4	7,040	20.6	908	2.7	3,650	10.7	89	.3	12,227	68.86
Saginaw	7,657	32.4	4,408	18.7	586	2.5	4,995	21.1	1,281	5.4	783	3.3	513	2.2	86	.4	4,853	30.22
Sanilac	23,641	73.8	17,842	55.7	2,332	7.3	20,174	63.0	2,608	8.1	514	1.6	199	.6	147	.5	12,779	71.67
Tuscola	10,004	39.2	5,279	20.7	801	3.1	6,080	23.8	1,280	5.0	670	2.6	1,917	7.5	56	.2	6,787	38.09
Total or Av.	69,036	50.9	39,669	29.2	5,528	4.1	45,197	33.3	13,425	9.9	3,161	2.3	6,819	5.0	434	.3	8,563	50.71
7. Southwest																		
Allegan	20,340	68.4	8,031	27.0	1,182	4.0	9,213	31.0	2,887	9.7	3,368	11.3	4,787	16.1	84	.3	14,385	126.20
Berrien	4,950	18.0	1,771	6.4	244	.9	2,015	7.3	853	3.1	1,266	4.6	767	2.8	49	.2	3,582	36.04
Cass	9,786	71.1	1,674	12.2	281	2.0	1,955	14.2	1,383	10.1	5,071	36.9	1,108	8.1	269	2.0	14,476	79.58
Kalamazoo	7,733	60.2	1,924	15.0	230	1.8	2,154	16.8	2,899	22.6	1,486	11.6	1,073	8.3	122	.9	12,453	71.15
Kent	11,977	49.5	7,016	29.0	944	3.9	7,960	32.9	2,305	9.5	865	3.6	797	3.3	50	.2	11,090	86.42
Ottawa	19,291	61.9	6,588	21.1	831	2.7	7,419	23.8	1,585	5.1	1,354	4.3	8,879	28.5	54	.2	16,531	184.78
Van Buren	5,984	25.9	1,851	8.0	238	1.0	2,089	9.1	978	4.2	1,867	8.1	935	4.1	115	.5	5,319	46.81
Total or Av.	80,062	49.3	28,855	17.8	3,950	2.4	32,805	20.2	12,889	7.9	15,278	9.4	18,347	11.3	743	.5	10,725	88.86
8. Southern																		
Barry	9,170	81.7	4,092	36.5	760	6.8	4,852	43.2	1,644	14.7	1,172	10.4	1,472	13.1	29	.3	13,810	86.32
Branch	8,660	66.2	3,119	23.8	599	4.6	3,718	28.4	1,780	13.6	2,755	21.1	362	2.8	45	.3	10,012	56.26
Calhoun	12,025	73.2	4,680	28.5	791	4.8	5,471	33.3	3,803	23.1	2,020	12.3	616	3.7	116	.7	14,114	74.87
Clinton	14,337	72.6	7,865	39.8	1,278	6.5	9,143	46.3	2,993	15.2	1,848	9.4	309	1.6	45	.2	12,710	79.17
Eaton	8,779	66.2	4,054	30.6	720	5.4	4,773	36.0	2,550	19.2	1,006	7.6	401	3.0	49	.4	9,886	59.28
Hillsdale	11,008	73.4	5,594	37.3	897	6.0	6,491	43.3	1,713	11.4	1,490	9.9	1,275	8.5	39	.3	10,718	71.28
Ingham	11,918	73.6	6,551	40.4	1,023	6.3	7,574	46.8	2,530	15.6	1,385	8.6	387	2.4	42	.3	16,553	93.54
Ionia	13,922	72.9	7,279	38.1	996	5.2	8,275	43.3	3,131	16.4	1,815	9.5	637	3.3	64	.3	13,134	77.39
Jackson	12,703	80.2	5,151	32.5	772	4.9	5,924	37.4	5,236	33.1	1,175	7.4	286	1.8	82	.5	17,260	98.70
St. Joseph	8,449	67.0	2,581	20.5	539	4.3	3,120	24.7	1,989	15.8	2,561	20.3	766	6.1	14	.1	10.958	56.00
Shiawassee	9,268	65.4	5,210	36.8	644	4.5	5,854	41.3	1,168	8.2	1,154	8.1	1,055	7.4	38	.3	9,787	55.07
Total or Av.	120,239	72.1	56,176	33.7	9,018	5.4	65,194	39.1	28,536	17.1	18,381	11.0	7,565	4.5	562	.3	12,450	72.45
9. Southeast																		
Genesee	7,205	70.7	2,567	25.2	355	3.5	2,922	28.7	3,263	32.0	443	4.4	473	4.6	103	1.0	11,928	72.90
Lapeer	12,640	62.5	8,253	40.8	1,216	6.0	9,469	46.8	2,150	10.6	551	2.7	440	2.2	29	.1	15,047	91.36
Lenawee	18,258	58.9	4,566	14.7	826	2.7	5,392	17.4	8,480	27.4	2,921	9.4	1,386	4.5	78	.3	11,153	61.44
Livingston	8,127	75.3	5,343	49.5	828	7.7	6,171	57.1	1,462	13.5	411	3.8	21	.2	61	.6	15,162	87.51
Macomb	4,135	31.6	2,718	20.8	474	3.6	3,192	24.4	411	3.1	156	1.2	347	2.7	29	.2	7,167	68.69
Monroe	6,035	31.8	1,108	5.8	153	.8	1,261	6.6	3,131	16.5	1,015	5.3	575	3.0	53	.3	5,293	31.92
Oakland	4,281	50.2	1,668	19.5	325	3.8	1,993	23.4	1,240	14.5	225	2.6	444	5.2	380	4.5	11,326	83.73
St. Clair	11,701	75.0	5,244	33.6	996	6.4	6,240	40.0	3,386	21.7	227	1.5	1,723	11.0	124	.8	14,392	94.09
Washtenaw	12,863	72.2	5,785	32.5	808	4.5	6,593	37.0	3,014	16.9	2,269	12.7	819	4.6	168	.9	13,248	78.58
Wayne	899	16.2	246	4.4	41	.7	287	5.2	235	4.2	107	1.9	200	3.6	70	1.3	3,200	29.85
Total or Av.	86,144	56.8	37,498	24.7	6,022	4.0	43,520	28.7	26,774	17.6	8,325	5.5	6,429	4.2	1,095	.7	11,077	69.15
State	462,296	58.1	218,698	27.5	33,117	4.1	251,815	31.6	107,640	13.5	49,899	6.3	47,578	6.0	5,364	.7	10,466	66.95

n.a. - Data not available as too few farms to publish.

FIG. 27 - TOTAL NUMBER OF FARMS



Top 10 Counties		Next 10 Counties	
1. Sanilac	2787	11. Clinton	1981
2. Lenawee	2558	12. Gratiot	1935
3. Berrien	2513	13. Kent	1897
4. Huron	2507	14. Ottawa	1846
5. Allegan	2470	15. Eaton	1782
6. Saginaw	2454	16. Calhoun	1725
7. Tuscola	2208	17. Lapeer	1719
8. Hillsdale	2028	18. Montcalm	1715
9. Monroe	2000	19. Shiawassee	1710
10. Van Burean	1988	20. Washtenaw	1699

Most Decrease Counties			
1. St. Clair	-743	11. Lapeer	-357
2. Macomb	-612	12. Eaton	-344
3. Saginaw	-541	13. Van Buren	-342
4. Kent	-535	14. Shiawassee	-323
5. Sanilac	-534	15. Isabella	-300
6. Berrien	-499	16. Bay	-300
7. Tuscola	-456	17. Hillsdale	-279
8. Genesee	-434	18. Midland	-278
9. Ottawa	-414	19. Mason	-273
10. Wayne	-366	20. Monroe	-268

District Data

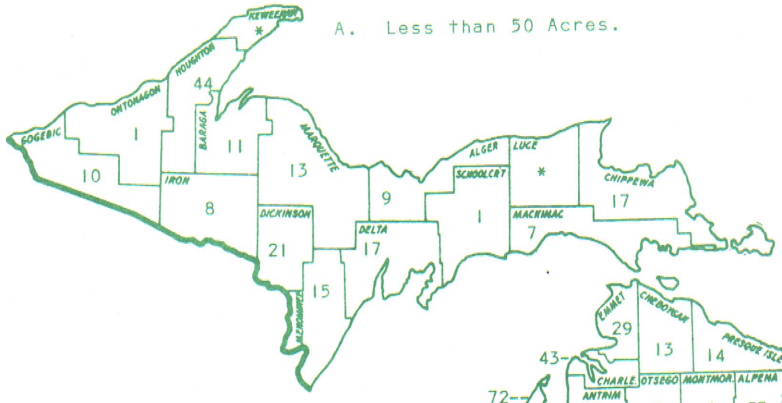
Dist.	Number			% dec.
	1964	1969	Change	
1	4153	2700	-1453	35
2	4551	3514	-1037	23
3	3641	2634	-1007	28
4	4100	3214	- 886	22
5	9477	7988	-1489	16
6	14083	12012	-2071	15
7	15365	13176	-2189	14
8	20081	18144	-1937	10
9	18021	14554	-3467	19
State	93504	77946	-15558	17

The total number of farms[1/] in the state was 77,946 in 1969. The top 10 counties were located in three general areas of the state (Fig. 27A), and had 30 percent of the state total. The state total has been decreasing steadily: 1949-54--11 percent, 1954-59--20 percent, 1959-64--16 percent, and 1964-69--17 percent. Counties with the largest decrease in actual numbers from 1964 to 1969 generally had the most farms, or were in a metropolitan area (Fig. 27B). The 10 with the most decrease lost 5,134 farms, and the next 10 3,064, accounting for approximately half the total decrease. Percentage decreases were generally lowest in southern districts. Low individual counties were Jackson, Clinton, and Gratiot.

[1/] Definition of a farm--"Places of less than 10 acres were counted as farms if the estimated sales of agricultural products for the year amounted, or normally would amount, to at least $250. Places of 10 or more acres were counted as farms if the estimated sales of agricultural products for the year amounted to, or normally would amount to, at least $50."

FIG. 28 - NUMBER FARMS BY SIZE, 1969

A. Less than 50 Acres.



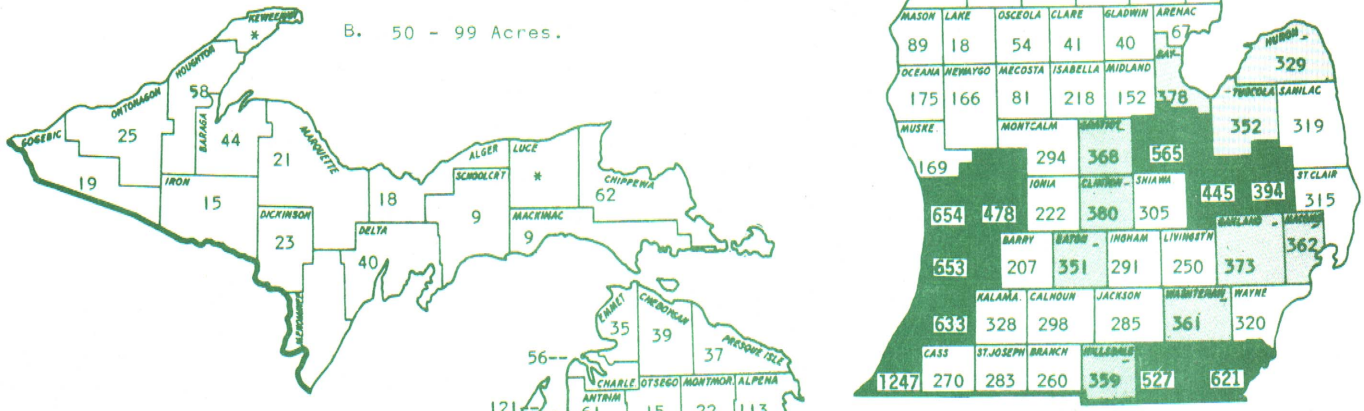
Top 10 Counties

1.	Berrien	1247
2.	Ottawa	654
3.	Allegan	653
4.	Van Buren	633
5.	Monroe	621
6.	Saginaw	565
7.	Lenawee	527
8.	Kent	478
9.	Genesee	447
10.	Lapeer	394

Next 10 Counties

11.	Clinton	380
12.	Bay	378
13.	Oakland	373
14.	Gratiot	368
15.	Macomb	362
16.	Washtenaw	361
17.	Hillsdale	359
18.	Tuscola	352
19.	Eaton	351
20.	Huron	329

*Less than 50 farms



STATE 20-YEAR TREND

1949 -	44,584	1964 -	20,412
1954 -	39,077	1969 -	16,285
1959 -	26,768		

B. 50 - 99 Acres.

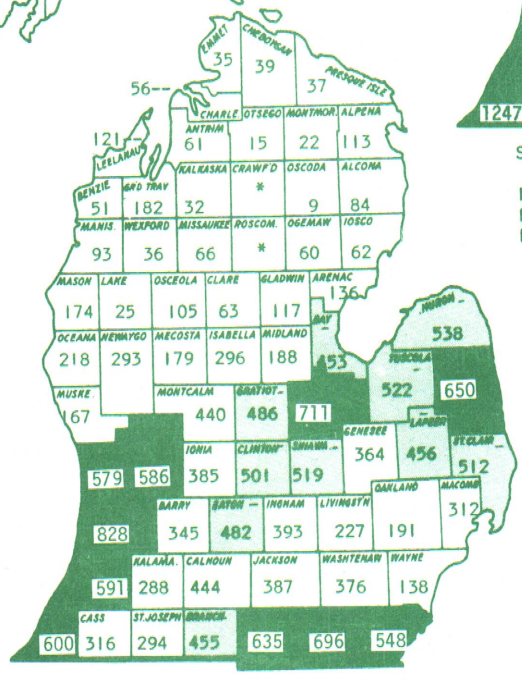
Top 10 Counties

1.	Allegan	828
2.	Saginaw	711
3.	Lenawee	696
4.	Sanilac	650
5.	Hillsdale	635
6.	Berrien	600
7.	Van Buren	591
8.	Kent	586
9.	Ottawa	579
10.	Monroe	548

Next 10 Counties

11.	Huron	538
12.	Tuscola	522
13.	Shiawassee	519
14.	St. Clair	512
15.	Clinton	501
16.	Gratiot	486
17.	Eaton	482
18.	Lapeer	456
19.	Branch	455
20.	Bay	453

*Less than 50 farms



STATE 20-YEAR TREND

1949 -	42,896	1964 -	23,486
1954 -	36,236	1969 -	19,811
1959 -	29,007		

% of All Farms by Districts

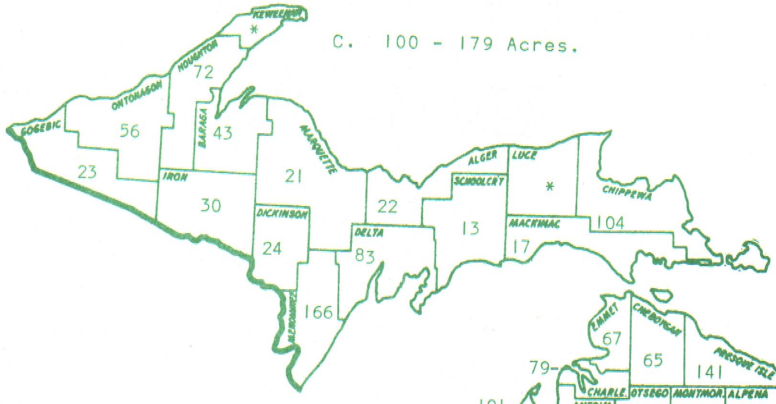
Dist.	Farms <50 A.	Farms 50-99 A.
1	6.5	14.2
2	15.3	21.7
3	8.6	17.1
4	19.2	27.3
5	15.6	23.5
6	16.7	25.1
7	32.7	28.8
8	17.9	26.7
9	27.3	26.3
State	20.9	25.4

A. Number Farms Under 50 A.--Nearly 21 percent of all farms in Michigan were under 50 acres in size in 1969, ranging from 6 to 32 percent by districts. Some were intensive crop or livestock operations. The 10 counties with the most farms under 50 A. were generally those with or near sizable cities, or with an intensive type of farming (Fig. 28A). These 10 had 38 percent of all farms of this size. While the number of farms under 50 A. decreased 20 percent during 1964-69 and 24 percent during 1959-64, there were 10 counties in 1969 with more than in 1964, although in 7 the increase was under 10 farms, but Huron had 43 more, Clinton 35, and Gratiot 18.

B. Number Farms 50-99 A.--Slightly over 25 percent of all farms were of this size in 1969, so 46 percent were <100 A. The counties with the highest number were generally those having many of <50 A. (Fig. 28B). Allegan county topped the list and the high 10 had 32 percent of all in the state. The number of this size decreased at an average of 18 percent every 5 years for the past 20 years, decreasing 16 percent from 1964 to 1969.

FIG. 28 - NUMBER FARMS BY SIZE, 1969 (CON'T)

C. 100 - 179 Acres.



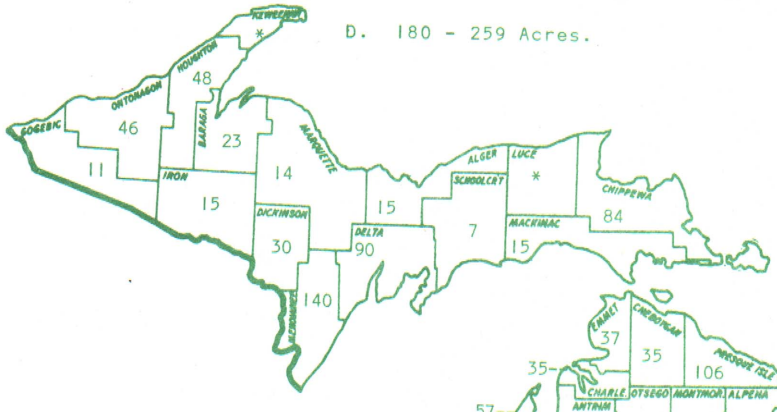
Top 10 Counties

1. Sanilac	879	
2. Tuscola	607	
3. Allegan	593	
4. Lenawee	586	
5. Clinton	547	
6. Hillsdale	537	
7. Montcalm	489	
8. Gratiot	484	
9. Eaton	484	
10. Washtenaw	463	

Next 10 Counties

11. Ionia	461
12. St. Clair	461
13. Jackson	453
14. Calhoun	451
15. Kent	439
16. Branch	435
17. Van Buren	430
18. Lapeer	429
19. Monroe	409
20. Huron	408

D. 180 - 259 Acres.



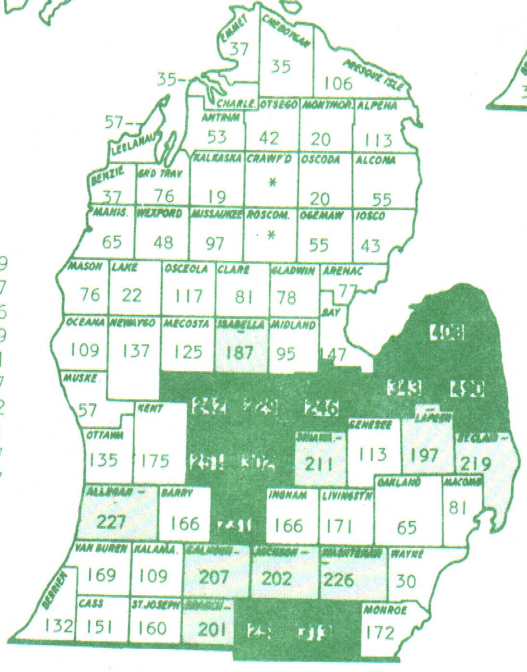
Top 10 Counties

1. Sanilac	490	
2. Huron	408	
3. Tuscola	343	
4. Lenawee	313	
5. Clinton	302	
6. Hillsdale	258	
7. Saginaw	246	
8. Ionia	251	
9. Montcalm	242	
10. Eaton	231	

Next 10 Counties

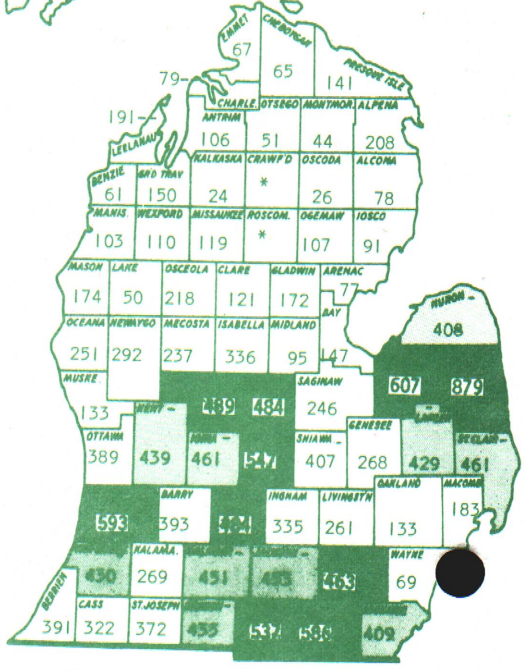
11. Gratiot	229
12. Allegan	227
13. Washtenaw	226
14. St. Clair	219
15. Shiawassee	211
16. Calhoun	207
17. Jackson	202
18. Branch	201
19. Lapeer	197
20. Isabella	187

*Less than 50 farms



STATE 20-YEAR TREND

1949 - 15,564 1964-12,391
1954 - 15,393 1969- 9,873
1959 - 13,856



STATE 20-YEAR TREND

1949 - 42,227 1964 - 24,298
1954 - 36,529 1969 - 20,065
1959 - 29,948

% of All Farms by Districts

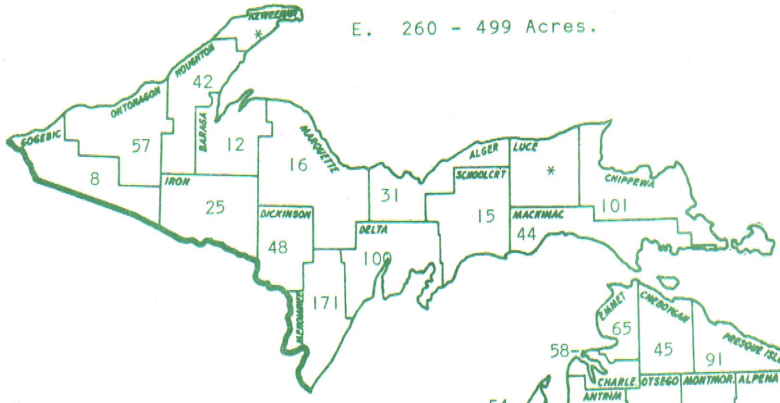
Dist.	Farms 100-179 Acres	Farms 180-259 Acres
1	25.2	20.1
2	28.7	14.9
3	31.0	18.9
4	28.0	12.5
5	28.3	14.4
6	28.5	14.2
7	21.5	8.3
8	26.9	13.0
9	22.4	10.9
State	25.7	12.7

C. Number Farms 100-179 A.--Farms of this size in 1969 made up 26 percent of the state's total. The percentage of this size in the various districts ranged only from 22 for #7 to 31 for #3, although the actual number varied widely among counties (Fig. 28C). The top 10 counties had 28 percent of all farms of this size. Farms of this size have been decreasing at an average of 17 percent every 5 years for the past 20 years, decreasing 17 percent from 1964 to 1969.

D. Number Farms 180-259 A.--About 13 percent of Michigan's farms in 1969 were of this size. The percentage by districts varied from 8 percent for #7 to 20 percent for the U. P. On an actual number basis, the top 10 counties were in the southern half of the lower peninsula (Fig. 28D). These counties had 31 percent of all farms of this size. The decrease in the number of farms of 180-259 A. by 5-year periods has varied from 1 percent for 1949-54 to 20 percent for 1964-69, with a 20-year average of 11 percent decrease per 5 years.

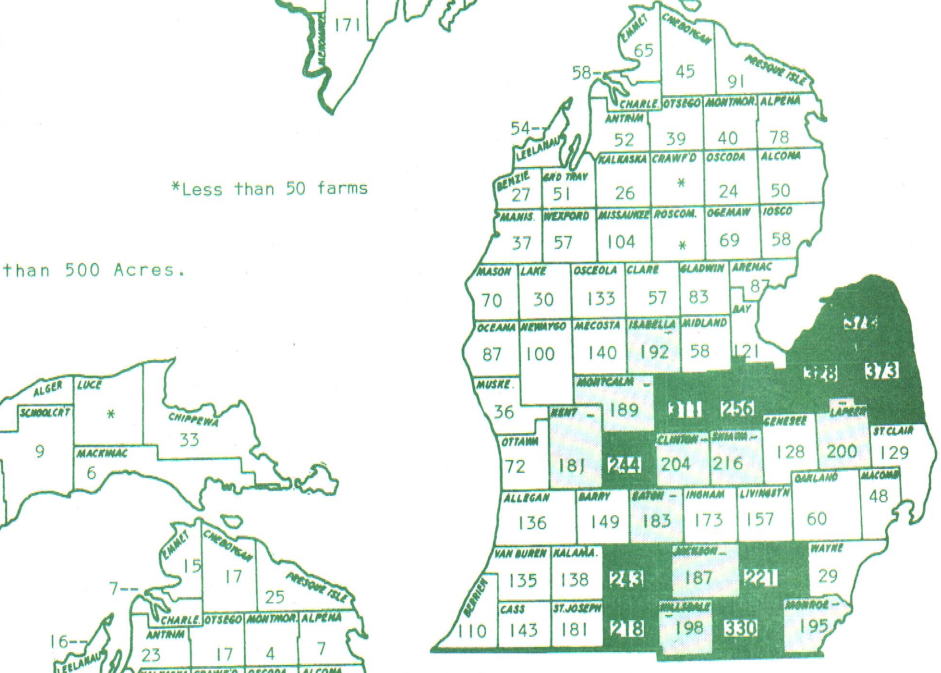
FIG. 28 - NUMBER FARMS BY SIZE, 1969 (CON'T)

E. 260 - 499 Acres.



Top 10 Counties		Next 10 Counties	
1. Sanilac	373	11. Shiawassee	216
2. Huron	372	12. Clinton	204
3. Lenawee	330	13. Lapeer	200
4. Tuscola	328	14. Hillsdale	198
5. Gratiot	311	15. Monroe	195
6. Saginaw	256	16. Isabella	192
7. Ionia	244	17. Montcalm	189
8. Calhoun	243	18. Jackson	187
9. Washtenaw	221	19. Eaton	183
10. Branch	218	20. Kent	181

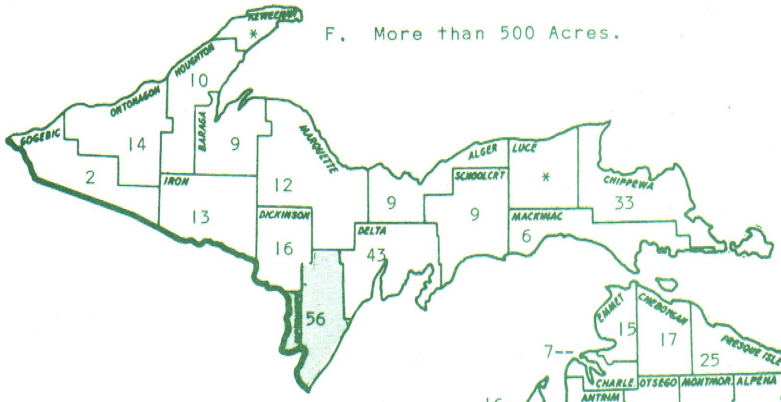
*Less than 50 farms



STATE 20-YEAR TREND

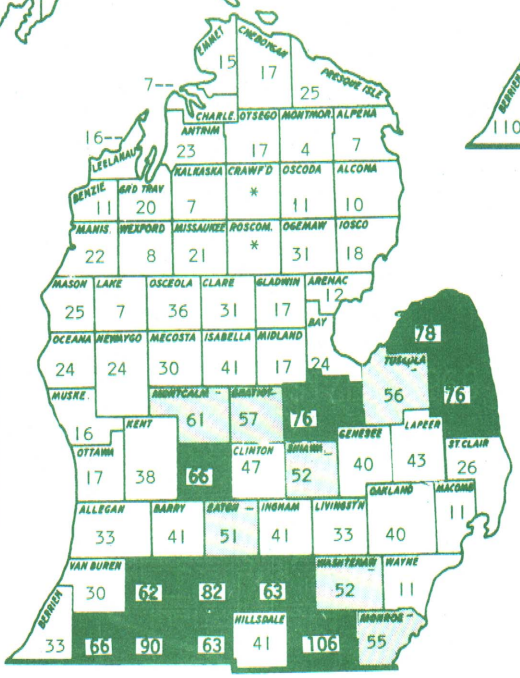
1949 - 8,795	1964 - 10,565
1954 - 10,031	1969 - 9,336
1959 - 10,338	

F. More than 500 Acres.



Top 10 Counties		Next 10 Counties	
1. Lenawee	106	11. Kalamazoo	62
2. St. Joseph	90	12. Montcalm	61
3. Calhoun	82	13. Gratiot	57
4. Huron	78	14. Menominee	56
5. Sanilac	76	15. Tuscola	56
6. Saginaw	76	16. Monroe	55
7. Ionia	66	17. Shiawassee	52
8. Cass	66	18. Washtenaw	52
9. Jackson	63	19. Eaton	51
10. Branch	63	20. Clinton	47

*Less than 50 farms



STATE 20-YEAR TREND

1949 - 1,453	1964-2,352
1954 - 1,656	1969-2,576
1959 - 1.898	

% of All Farms by Districts

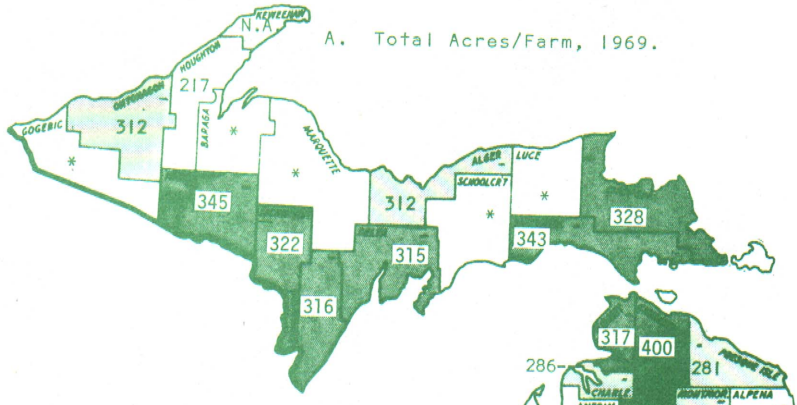
Dist.	Farms 260-499 Acres	Farms 500+ Acres
1	25.0	9.0
2	15.1	4.3
3	19.0	5.4
4	10.0	3.0
5	14.6	3.6
6	12.8	2.7
7	7.0	2.1
8	12.1	3.5
9	10.3	2.9
State	12.0	3.3

E. Number Farms 260-499 A.--Twelve percent of our farms were of this acreage in 1969. The percentage by districts ranged from 7 for #7 to 25 for the U.P. The actual number of farms of this size were again the highest in the southern part of the lower peninsula, with Sanilac again having the most (Fig. 28E). The top 10 counties had 31 percent of all farms of this size. The number of farms of this size increased 14 percent from 1949-54, 3 percent the next 5 years, 2 percent during 1959-64 and decreased 12 percent from 1964 to 1969.

F. Number Farms 500 A. or more--Farms of this size constituted 3.3 percent of all farms. The percentage by districts ranged from 2 in #7 to 9 in the U.P. Lenawee county had the most farms of this size (Fig. 28F). Again all of the top 10 were in the southern part of the state, with 30 percent of all farms of this size in those counties. The number of these large farms has increased each of the four past 5-year periods, with the following percentage increases 14, 15, 24, and 10, respectively.

FIG. 29 - AVERAGE SIZE OF FARMS (CLASS I-V)

A. Total Acres/Farm, 1969.



Top Ten Counties

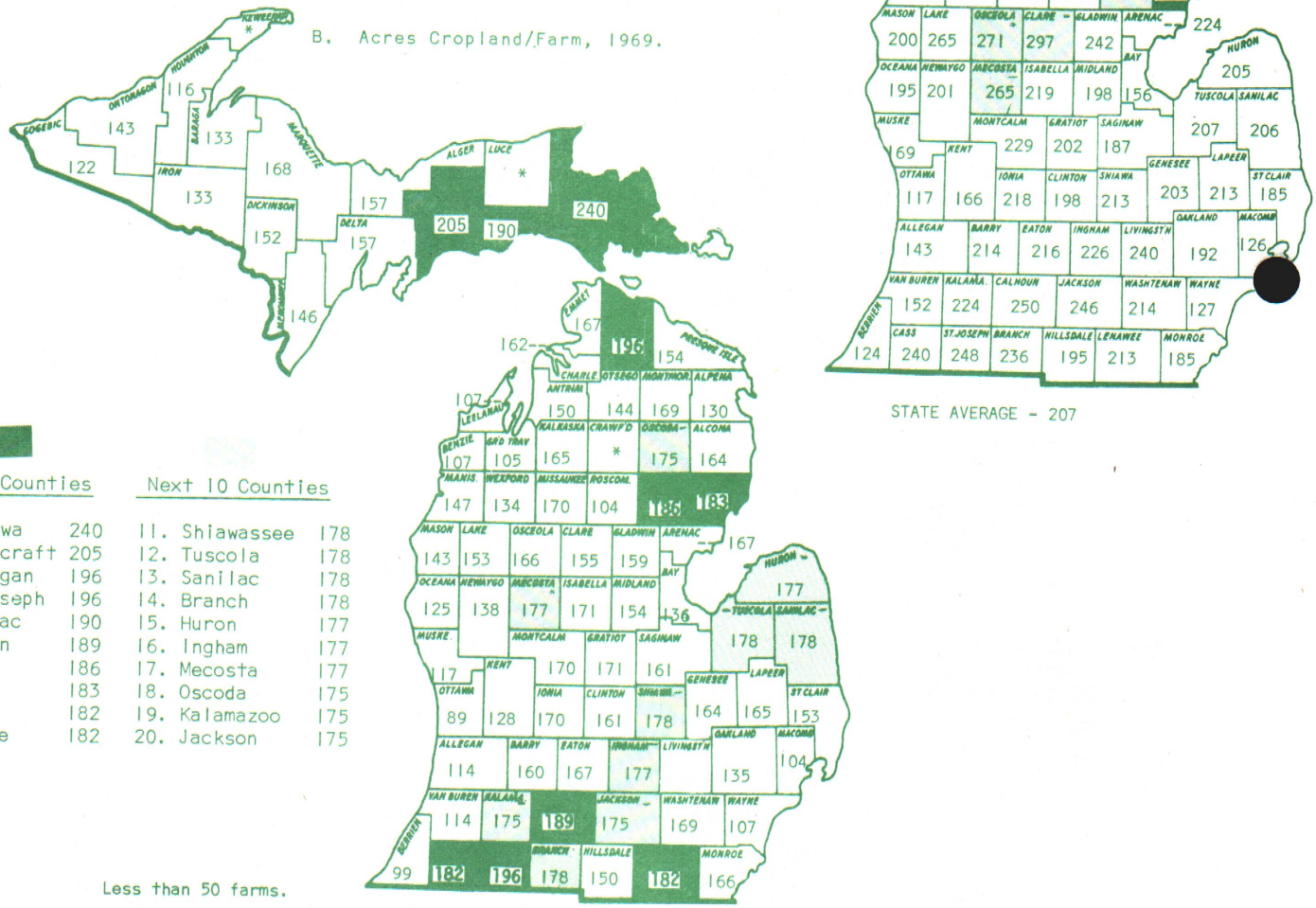
1. Cheboygan	400	
2. Iosco	354	
3. Iron	345	
4. Mackinac	343	
5. Chippewa	328	
6. Otsego	324	
7. Dickinson	322	
8. Emmet	317	
9. Menominee	316	
10. Delta	315	

Next Ten Counties

11. Ogemaw	314	
12. Alger	312	
13. Ontonagon	312	
14. Oscoda	305	
15. Clare	297	
16. Charlevoix	286	
17. Presque Isle	281	
18. Montmorency	272	
19. Osceola	271	
20. Mecosta	265	

*Less than 50 Class I-V farms.

B. Acres Cropland/Farm, 1969.



Top 10 Counties

1. Chippewa	240	
2. Schoolcraft	205	
3. Cheboygan	196	
4. St. Joseph	196	
5. Mackinac	190	
6. Calhoun	189	
7. Ogemaw	186	
8. Iosco	183	
9. Cass	182	
10. Lenawee	182	

Next 10 Counties

11. Shiawassee	178	
12. Tuscola	178	
13. Sanilac	178	
14. Branch	178	
15. Huron	177	
16. Ingham	177	
17. Mecosta	177	
18. Oscoda	175	
19. Kalamazoo	175	
20. Jackson	175	

Less than 50 farms.

STATE AVERAGE - 207

STATE AVERAGE - 156

Average Size of Class I-V Farms--In the census, farms were classified into two general groups--a) "all farms" (the number of which has been discussed) and b) "farms with sales of $2500 and over," which is economic classes I-V. This omits class VI, part-time farmers and part-retirement farms. All three groups have less than $2500 sales. There were 44,175 farms in classes I-V and the average total acreage per farm was 207. This compares with 153 A. for "all farms." Many of the counties of the top 10 in average size of class I-V farms were in the U.P., with the balance being in northern Michigan (Fig. 29A).

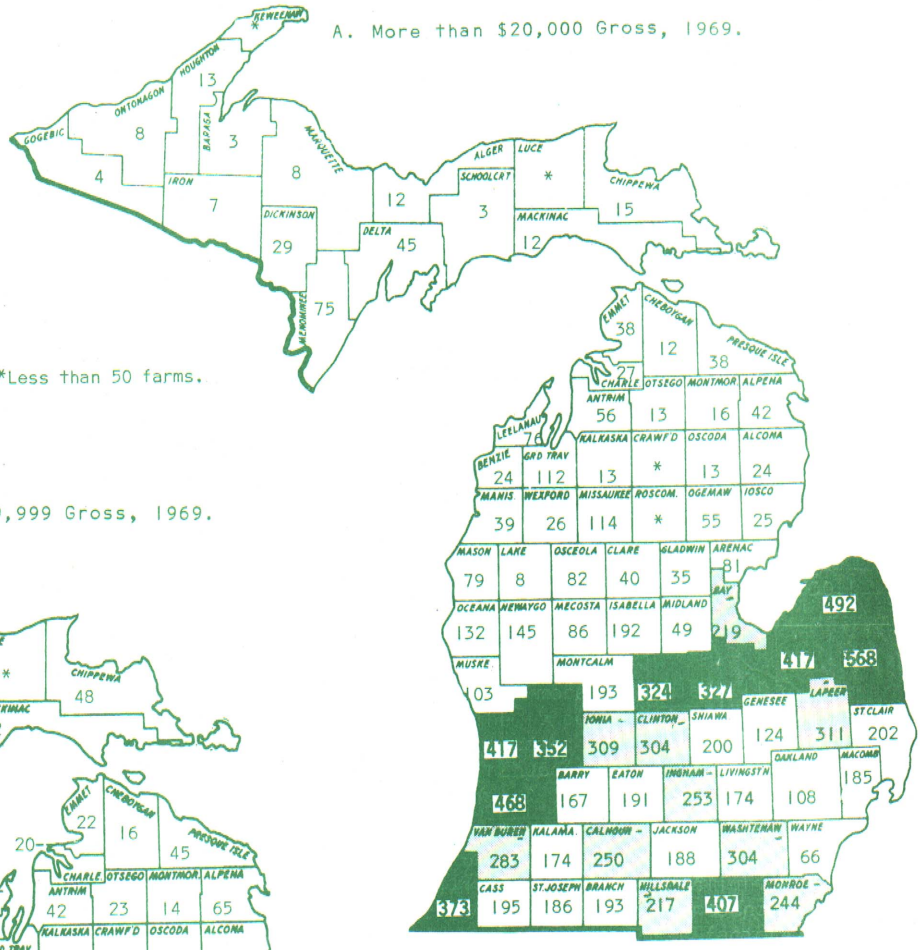
Average Acres Cropland Per Farm--Acres of cropland per farm is of more relevance to the potential area of productive land in the farm, although this obviously does not take into account the productiveness of the soil. On this basis, three of the top 10 counties were in the U.P., three in northern Michigan, and four near the southern boundary (Fig. 29B). The farms in these counties had an average of 195 acres of cropland per farm, compared with 156 acres for the state for class I-V farms.

FIG. 30 - NUMBER FARMS BY INCOME LEVEL

A. More than $20,000 Gross, 1969.

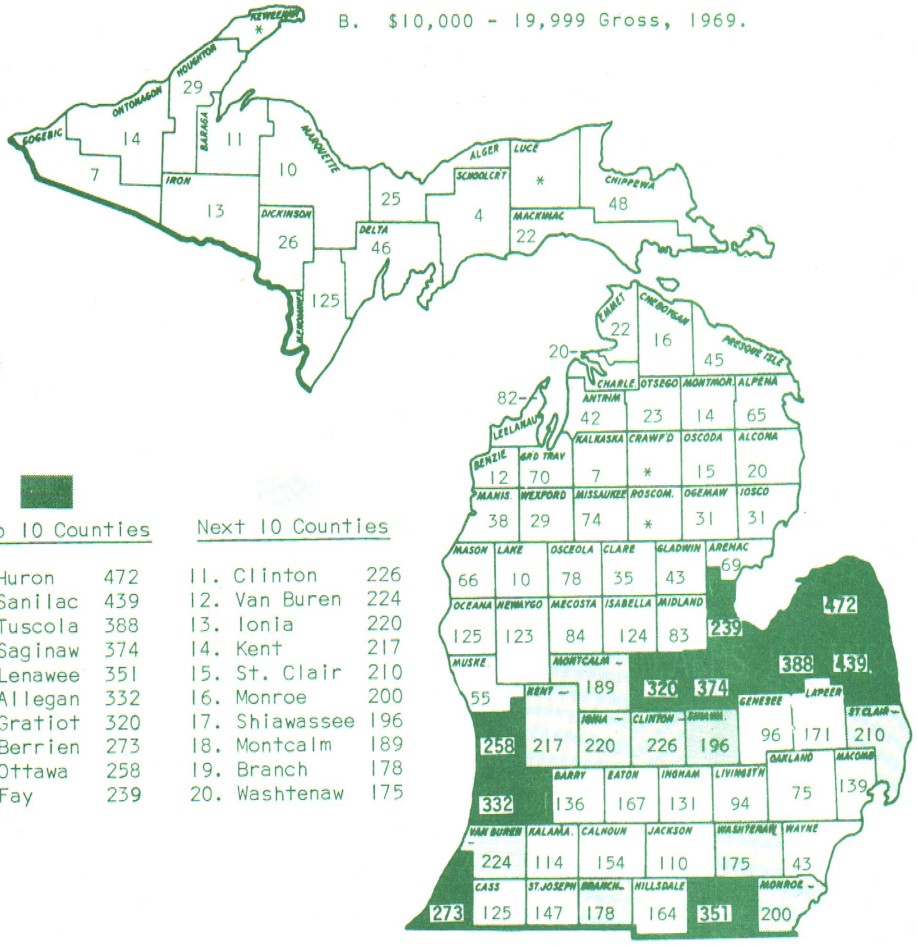
Top 10 Counties		Next 10 Counties	
1. Sanilac	568	11. Lapeer	311
2. Huron	492	12. Ionia	309
3. Allegan	468	13. Clinton	304
4. Tuscola	417	14. Washtenaw	304
5. Ottawa	417	15. Van Buren	283
6. Lenawee	407	16. Ingham	253
7. Berrien	373	17. Calhoun	250
8. Kent	352	18. Monroe	244
9. Saginaw	327	19. Bay	219
10. Gratiot	324	20. Hillsdale	217

*Less than 50 farms.



B. $10,000 - 19,999 Gross, 1969.

Top 10 Counties		Next 10 Counties	
1. Huron	472	11. Clinton	226
2. Sanilac	439	12. Van Buren	224
3. Tuscola	388	13. Ionia	220
4. Saginaw	374	14. Kent	217
5. Lenawee	351	15. St. Clair	210
6. Allegan	332	16. Monroe	200
7. Gratiot	320	17. Shiawassee	196
8. Berrien	273	18. Montcalm	189
9. Ottawa	258	19. Branch	178
10. Fay	239	20. Washtenaw	175



STATE 20-YEAR TREND

1949 - N. A.
1954 - N.A.
1959 - 4,891
1964 - 9,436
1969 - 11,434

STATE 20-YEAR TREND

1949 - N. A.
1954 - N. A.
1959 - 12,779
1964 - 13,374
1969 - 9,282

% of All Farms in District

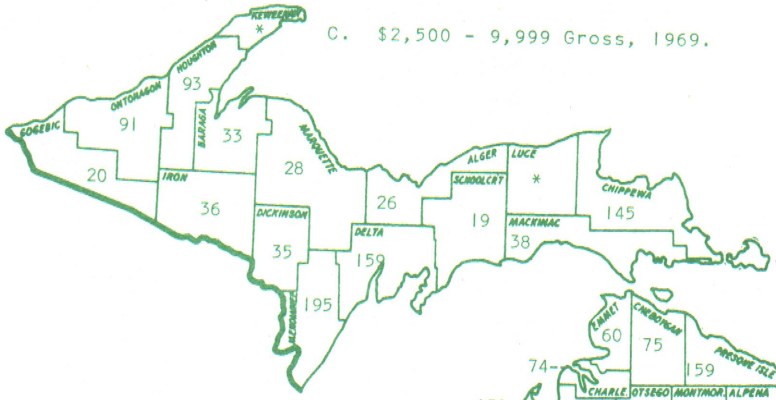
Dist.	Economic Class I & II	III	IV & V
1	9.0	14.1	34.5
2	14.9	11.3	29.4
3	9.1	9.9	33.9
4	14.5	11.8	29.4
5	12.5	12.0	32.0
6	17.6	16.5	33.0
7	17.2	11.8	27.7
8	13.5	10.1	28.6
9	14.6	10.6	28.2
State	14.7	11.9	30.1

A. Number Class I and II Farms--Economic class I farms have sales of $40,000 or more, and class II, $20,000 to $39,999. In 1969 there were 3,975 in class I and 7,459 in class II. The 15 percent in these two classes produced 65 percent of total sales. The top 10 counties with such farms, located in southern Michigan, had 36 percent of the state total (Fig. 30A). District percentages of such farms ranged from 9 percent for the U.P. to 18 percent for #6. Individual counties had from 2 to 26 percent.

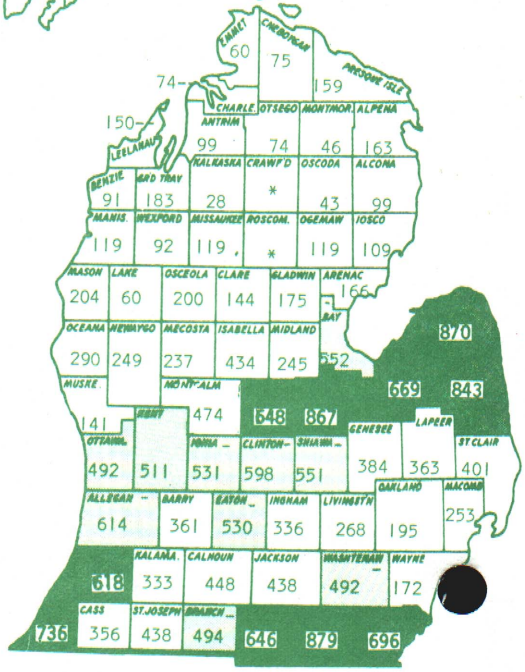
B. Number Class III Farms--These 9,282 farms with $10,000 to $19,999 gross income in 1969 were about 12 percent of all. They produced 16 percent of all farm sales. Top counties were nearly the same as for class I and II farms (Fig. 30B). The top 10 had 37 percent of all such farms. Class III farms increased slightly from 1959 to 1964, but decreased over 30 percent from 1964 to 1969. Rising prices, as well as increased volume of business done by the farmer, increases the number of farms in the higher classes. These factors, plus the discontinuance of farmers in lower classes, reduces their number.

FIG. 30 - NUMBER FARMS BY INCOME LEVEL (CON'T)

C. $2,500 - 9,999 Gross, 1969.



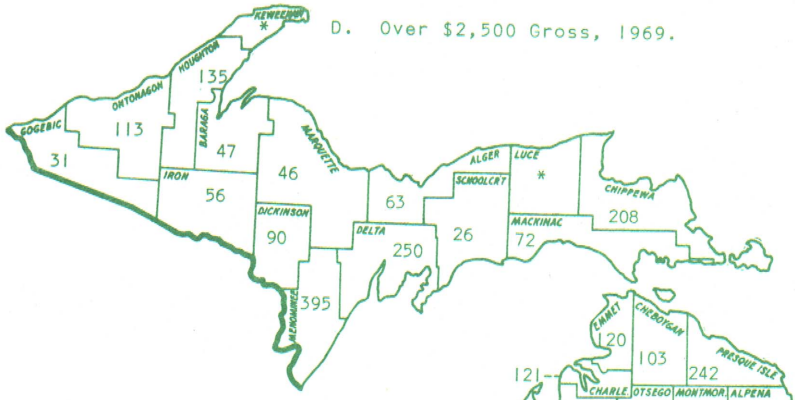
Top 10 Counties		Next 10 Counties	
1. Lenawee	879	11. Allegan	614
2. Huron	870	12. Clinton	598
3. Saginaw	867	13. Bay	552
4. Sanilac	843	14. Shiawassee	551
5. Berrien	736	15. Ionia	531
6. Monroe	696	16. Eaton	530
7. Tuscola	669	17. Kent	511
8. Gratiot	648	18. Branch	494
9. Hillsdale	646	19. Ottawa	492
10. Van Buren	618	20. Washtenaw	492

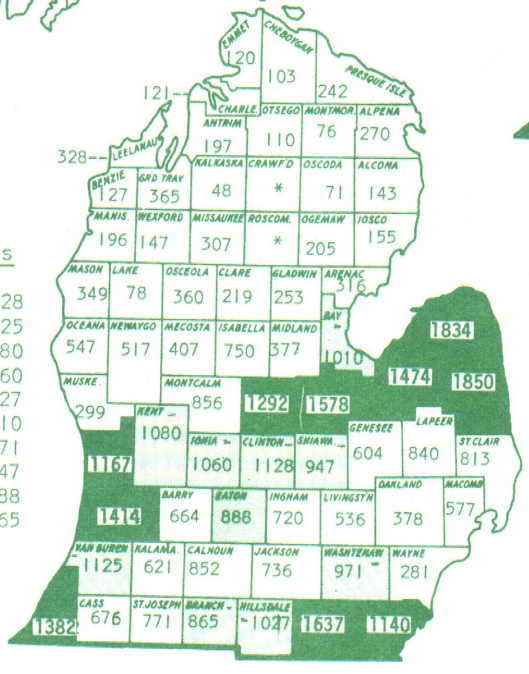


STATE 20-YEAR TREND

1949 - 53,911	1964 - 31,146
1954 - 50,029	1969 - 23,459
1959 - 41,010	

D. Over $2,500 Gross, 1969.





Top 10 Counties		Next 10 Counties	
1. Sanilac	1850	11. Clinton	1128
2. Huron	1834	12. Van Buren	1125
3. Lenawee	1637	13. Kent	1080
4. Saginaw	1578	14. Ionia	1060
5. Tuscola	1474	15. Hillsdale	1027
6. Allegan	1414	16. Bay	1010
7. Berrien	1382	17. Washtenaw	971
8. Gratiot	1292	18. Shiawassee	947
9. Ottawa	1167	19. Eaton	888
10. Monroe	1140	20. Branch	865

STATE 20-YEAR TREND

1949 - 60,943	1964 - 53,956
1954 - 62,402	1969 - 44,175
1959 - 58,680	

*Less than 50 farms.

Ec. Cl. I-V Farms

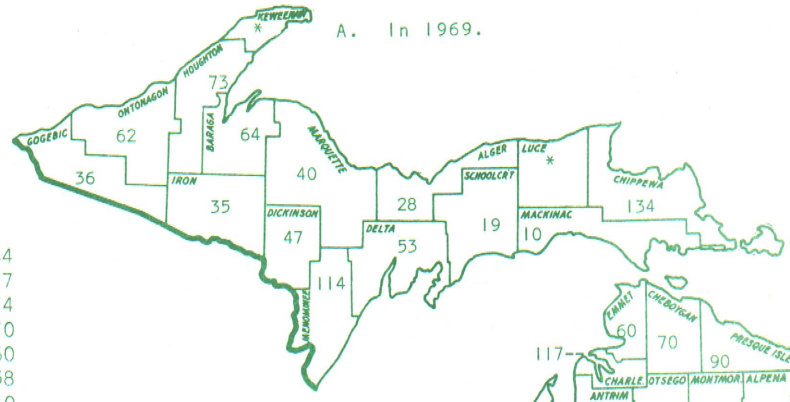
Dist.	% of all '69	No. Farms in '69	change '64-'69	% dec. 64-69
1	57.6	1555	-474	23
2	55.6	1955	-235	11
3	52.9	1424	-262	16
4	55.7	1790	-187	9
5	56.5	4514	-1263	22
6	67.1	8052	-2060	20
7	56.7	7465	-1009	12
8	52.2	9638	-2237	19
9	53.4	7782	-2043	21
State	56.7	44,175	-9781	18

C. Number Farms in Classes IV and V--Farms in these two classes, with sales of $2,500 to $9,999, numbered 23,459 in 1969, or 30 percent of all farms, and produced about 15 percent of total sales that year. Top counties are shown in Fig. 30C. The top 10 had 32 percent of all such farms. Farms in these two classes have bee decreasing rapidly. It is obvious that farms with this income cannot provide much, if any, net. Such farms persist either as a result of a substandard level of living, or off-farm work to supplement the farm income. In fact, 60 percent of class IV farmers worked off the farm and 66 percent of class V, and 39 and 50 percent, respectively, worked 200 days or more.

D. Number Farms in Classes I-V--Fig. 30D sums up the number of farms in the various counties in the three previous maps, or the total number of farms with a gross income of $2,500 or more. The top 10 counties had 33 percent of the state total. The number of class I-V farms decreased 18 percent from 1964 to 1969. The percentage decrease was the least in district 4, then #2, and the most in #1 and #5.

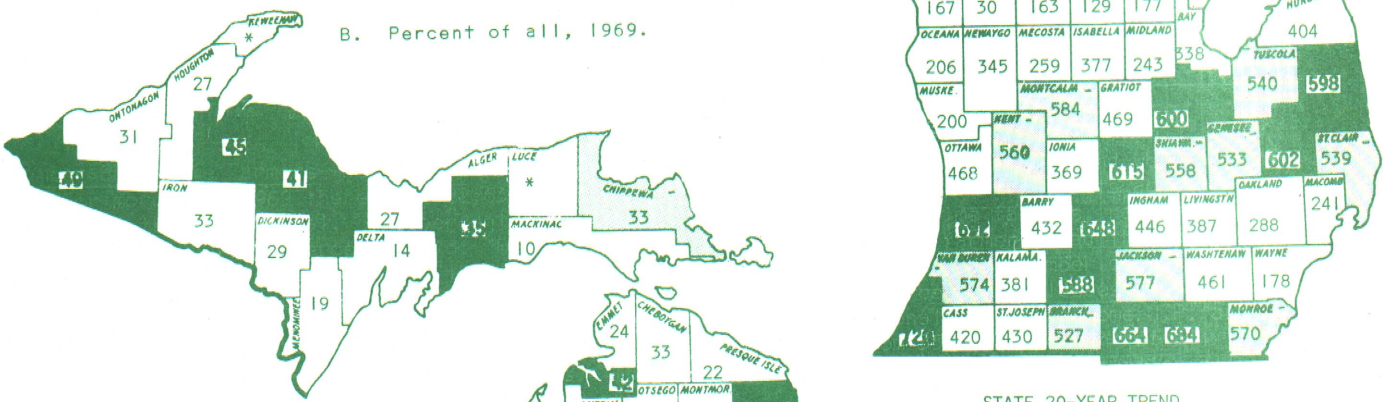
FIG. 31 - NUMBER PART-TIME FARMERS

A. In 1969.



Top 10 Counties		Next 10 Counties	
1. Berrien	720	11. Montcalm	584
2. Allegan	692	12. Jackson	577
3. Lenawee	684	13. Van Buren	574
4. Hillsdale	664	14. Monroe	570
5. Eaton	648	15. Kent	560
6. Clinton	615	16. Shiawassee	558
7. Lapeer	602	17. Tuscola	540
8. Saginaw	600	18. St. Clair	539
9. Sanilac	598	19. Genesee	533
10. Calhoun	588	20. Branch	527

*Less than 50 farms.



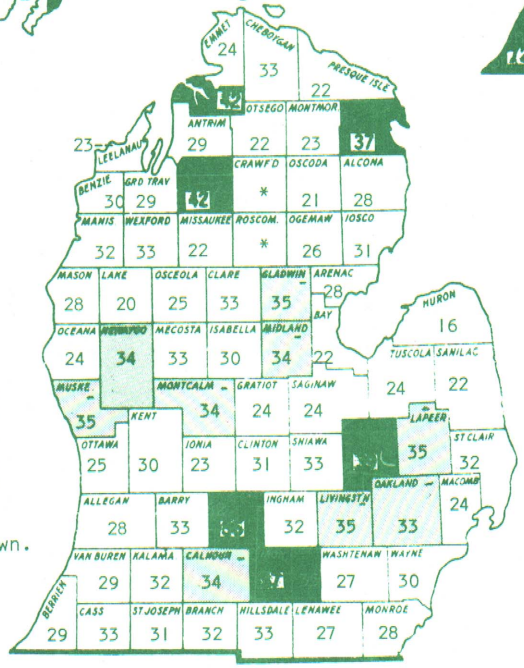
B. Percent of all, 1969.

STATE 20-YEAR TREND

1949 - N. A.	1964 - 23,683
1954 - N. A.	1969 - 22,637
1959 - N. A.	

Top 10 Counties		Next 10 Counties	
1. Gogebic	49	11. Gladwin	35
2. Baraga	45	12. Muskegon	35
3. Charlevoix	42	13. Lapeer	35
4. Kalkaska	42	14. Livingston	35
5. Marquette	41	15. Midland	34
6. Genesee	39	16. Montcalm	34
7. Alpena	37	17. Calhoun	34
8. Jackson	37	18. Newaygo	34
9. Eaton	36	19. Chippewa	33
10. Schoolcraft	35	20. Oakland	33

The shading reflects decimals not shown.



STATE AVERAGE - 29.0%

*Less than 50 farms.

District Data

Dist.	No. part-time farmers	% of all farmers
1	721	26.7
2	1026	29.2
3	748	28.4
4	948	29.5
5	2404	30.1
6	2631	21.9
7	3821	29.0
8	5860	32.3
9	4482	30.8
State	22,637	29.0

A. Number Part-Time Farmers--Part-time farmers are those with <$2,500 sales, under 65, and working off farm 100 days or more. In 1969 there were 22,637, or 29 percent of all. Sales of farm products accounted for 2.5 percent of the state total. The percentage of all farmers who were part-time farmers, ranged from 22 percent in district 8 to 22 percent in #6. Berrien county, with 720 part-time farmers, had the most (Fig.31A). Some 28 percent of all were in the top 10 counties. From 1964 to 1969, the number of part-time farmers declined about 4 percent vs. 18 percent for class I-V farmers and 25 percent for classes IV and V.

B. Percent of All Who Were Part-Time Farmers--The percentage was exceptionally high in some U.P. and northern counties with seven of the top 10 in these two areas (Fig. 31B). From 35 to 49 percent of all farmers in the top 10 counties were part-time farmers. The percentage was quite low in some counties all over the state. District 6 averaged the lowest and #8 the highest.

FIG. 32 - % FARMERS WORKING OFF FARM

Top 10 Counties

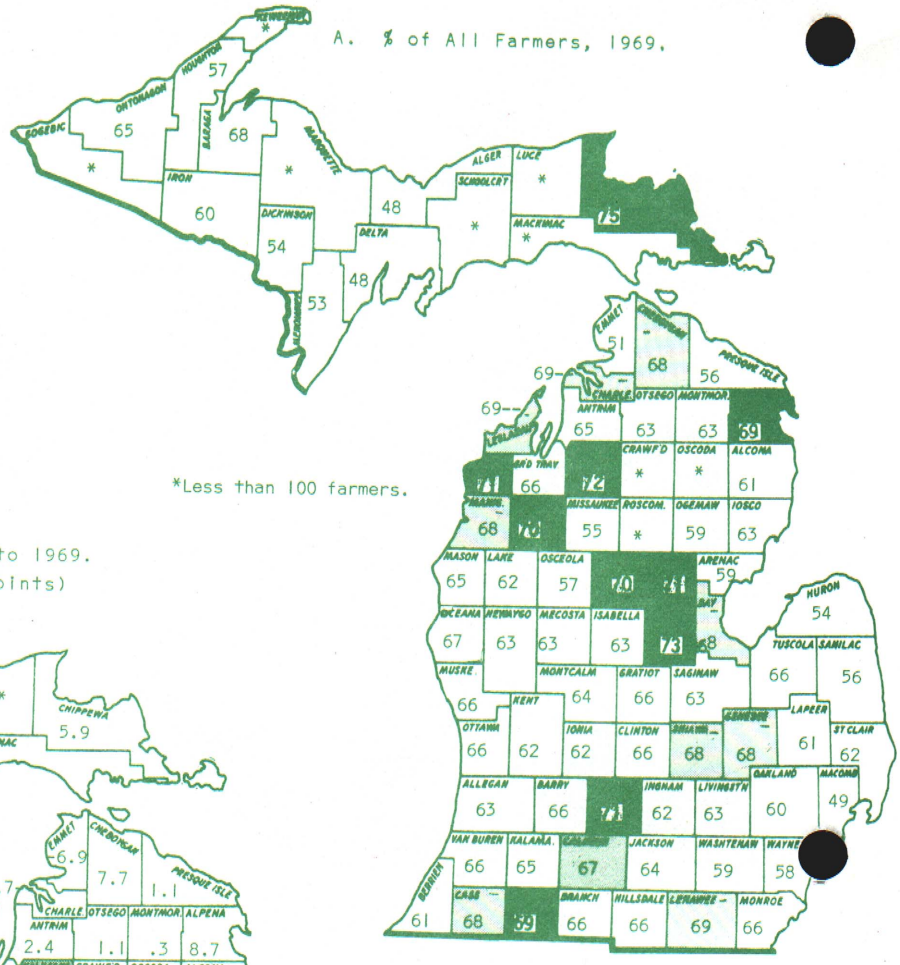
1.	Chippewa	75
2.	Midland	73
3.	Kalkaska	72
4.	Benzie	71
5.	Eaton	71
6.	Gladwin	71
7.	Wexford	70
8.	Clare	70
9.	Alpena	69
10.	St. Joseph	69

Next 10 Counties

11.	Lenawee	69
12.	Leelanau	69
13.	Charlevoix	69
14.	Cheboygan	68
15.	Genesee	68
16.	Manistee	68
17.	Bay	68
18.	Cass	68
19.	Shiawassee	68
20.	Calhoun	67

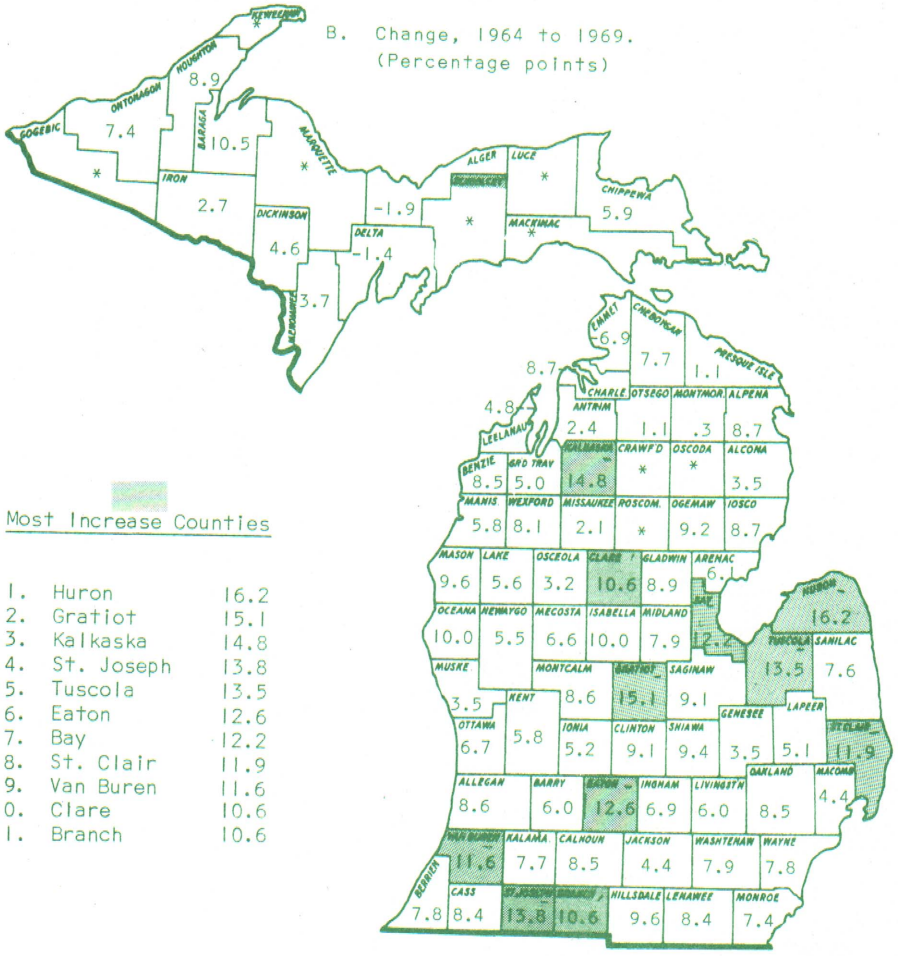
The shading reflects decimals not shown.

A. % of All Farmers, 1969.



*Less than 100 farmers.

B. Change, 1964 to 1969.
(Percentage points)



Most Increase Counties

1.	Huron	16.2
2.	Gratiot	15.1
3.	Kalkaska	14.8
4.	St. Joseph	13.8
5.	Tuscola	13.5
6.	Eaton	12.6
7.	Bay	12.2
8.	St. Clair	11.9
9.	Van Buren	11.6
10.	Clare	10.6
11.	Branch	10.6

*Less than 100 farms.

STATE AVERAGE - +7.6%

STATE 20-YEAR TREND (%)

1949 - 46.6	1964 - 55.3
1954 - 54.5	1969 - 63.7
1959 - 54.2	

Total wage income of farmers and their families from work off the farm in 1964 and 1969 was about half the gross sales of farm products, and considerably more than the net from farming. Nearly 50,000, or 64 percent of all farmers, worked off the farm some. District average percentages ranged only from 59 percent for the U.P. to 66 for #8. From 69 to 75 percent of the farmers worked off the farm in the top 10 counties, which were widely scattered over the state (Fig. 32A). On the basis of number of farmers working off the farm, Lenawee county topped the list of 1758, followed by Saginaw, Sanilac, Allegan, Berrien, Tuscola, Huron, Hillsdale, Clinton, and Van Buren.

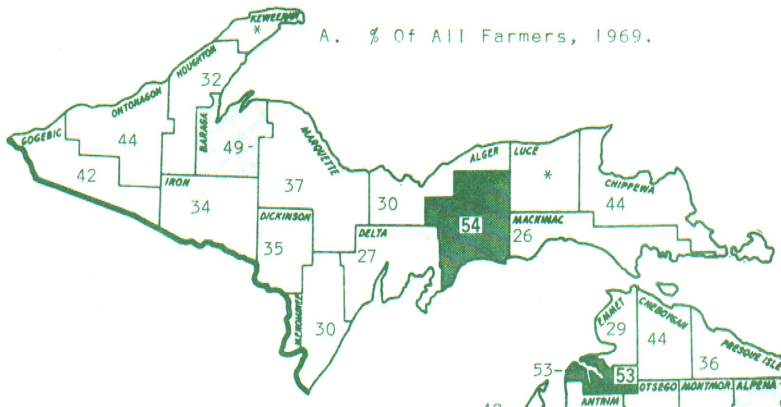
Nearly 8 percentage points more farmers worked off farm in 1969 than 1964. The top increase 10 counties had 10.6 to 16.2 percentage points rise (Fig. 32B). Most of these were in the southern half of the lower peninsula, with Huron county showing both the highest percentage and numbers increase.

FIG. 33 - % FARMERS WORKING OFF FARM 200 DAYS OR MORE

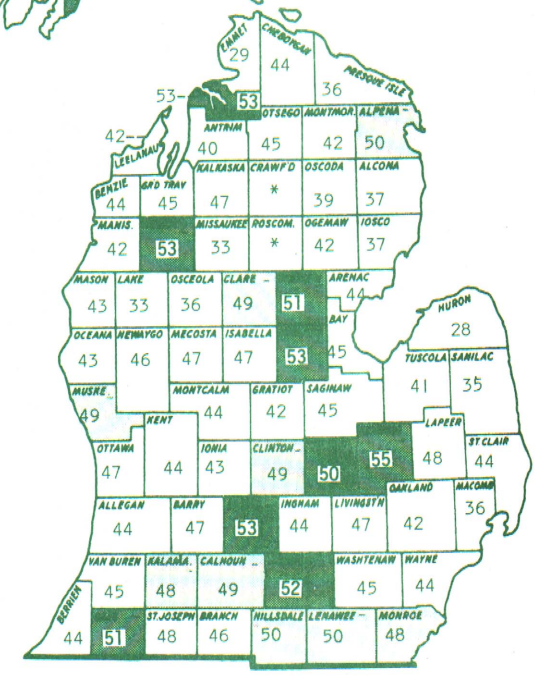
Top 10 Counties		Next 10 Counties	
1. Genesee	55	11. Lenawee	50
2. Schoolcraft	54	12. Alpena	50
3. Eaton	53	13. Hillsdale	50
4. Charlevoix	53	14. Clare	49
5. Wexford	53	15. Clinton	49
6. Midland	53	16. Calhoun	49
7. Jackson	52	17. Muskegon	49
8. Gladwin	51	18. Baraga	49
9. Cass	51	19. Monroe	48
10. Shiawassee	50	20. Kalamazoo	48

The shading reflects decimals not shown.

A. % Of All Farmers, 1969.



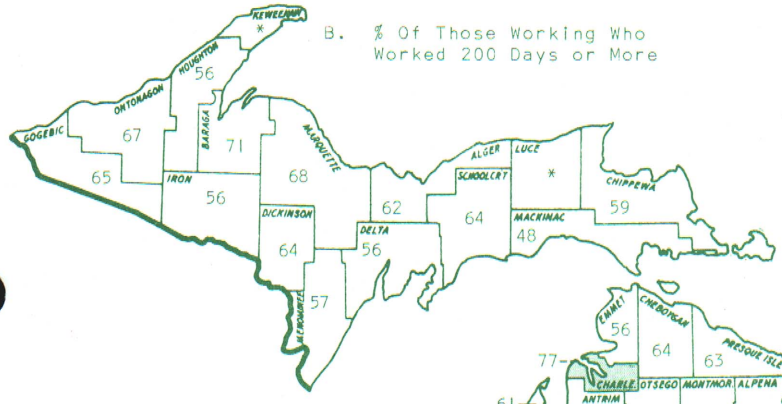
*Less than 100 farmers.

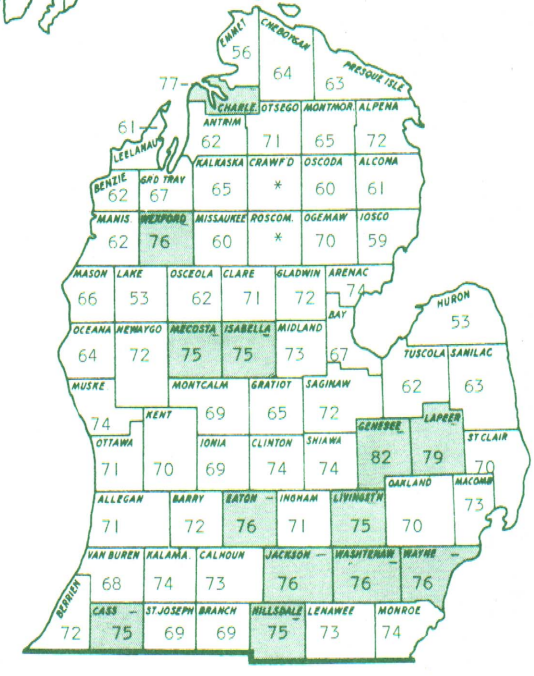


STATE 20-YEAR TREND (%)

1949 - 25.6
1954 - 32.7
1959 - 35.1
1964 - 38.4
1969 - 44.7

B. % Of Those Working Who Worked 200 Days or More





STATE AVERAGE - 70.1%

Counties With 75% or More	%	No. W.O.F.
1. Genesee	82	923
2. Lapeer	79	1043
3. Charlevoix	77	191
4. Wexford	76	229
5. Eaton	76	1260
6. Jackson	76	1075
7. Washtenaw	76	1003
8. Wayne	76	347
9. Mecosta	75	496
10. Isabella	75	796
11. Livingston	75	688
12. Hillsdale	75	1082
13. Cass	75	858

*Less than 100 farmers.

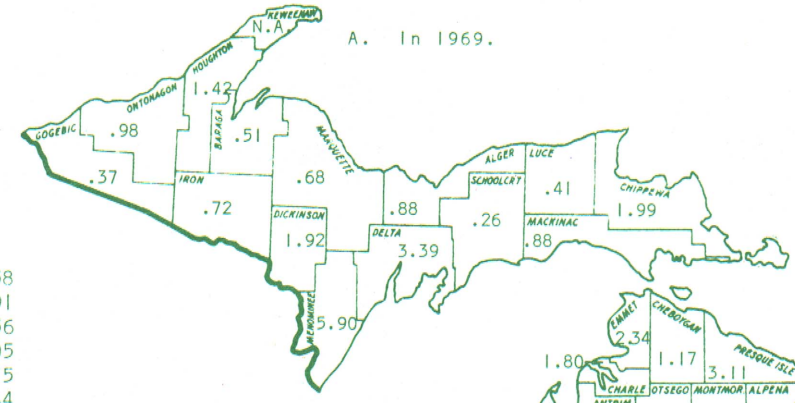
District Data

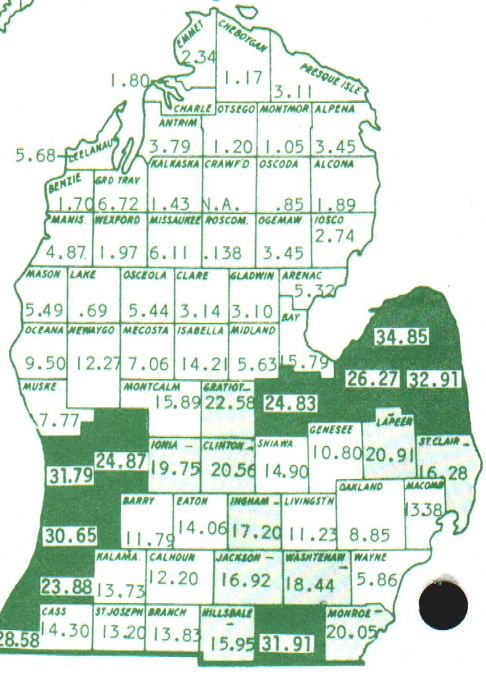
Dist.	No. Farmers	% of all farmers
1	956	35.4
2	1490	42.4
3	1096	41.6
4	1426	44.4
5	3615	45.3
6	4622	38.5
7	6011	45.6
8	8779	48.4
9	6802	46.7
State	34,807	44.7

Many "places" in the country get counted as farms in the census even though the operator's principal occupation might not be farming. In 1969, nearly 35,000, or 45 percent, of the reported 78,000 farmers worked off the farm 200 days or more. District percentages ranged from 35 percent for the U.P. to 48 percent for #8. The top 10 counties were widely scattered (Fig. 33A). Genesee topped the list with 55 percent, but Schoolcraft, with a small number of farmers, was next with 54 percent. In number of farmers working off the farm 200+ days, Lenawee county headed the list with 1,275, followed by Berrien, Saginaw, Allegan, and Hillsdale (1002). The state actual number has decreased slowly, but the percentage has risen from 26 in 1949 to 45 in 1969. Fig. 33B shows that 70 percent of all farmers who worked off the farm did so for at least 200 days in 1969. In 13 counties 75 percent or more were working this much, with Genesee being top at 82 percent. The high counties were widely scattered, but tended to be those with densely populated areas.

FIG. 34 - TOTAL FARM INCOME (MILLION DOLLARS) (ALL FARMS)

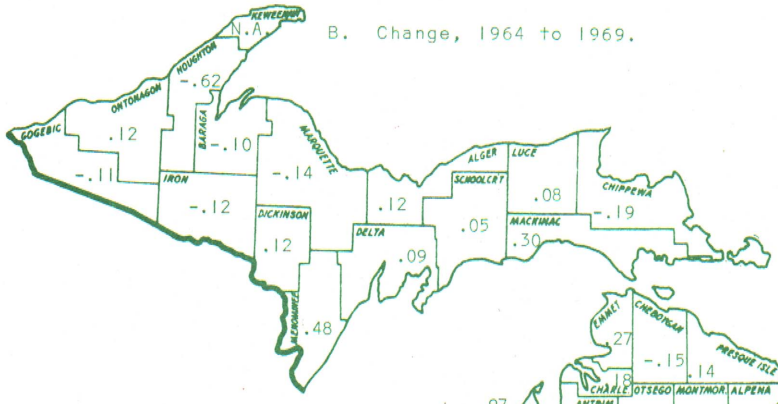
A. In 1969.

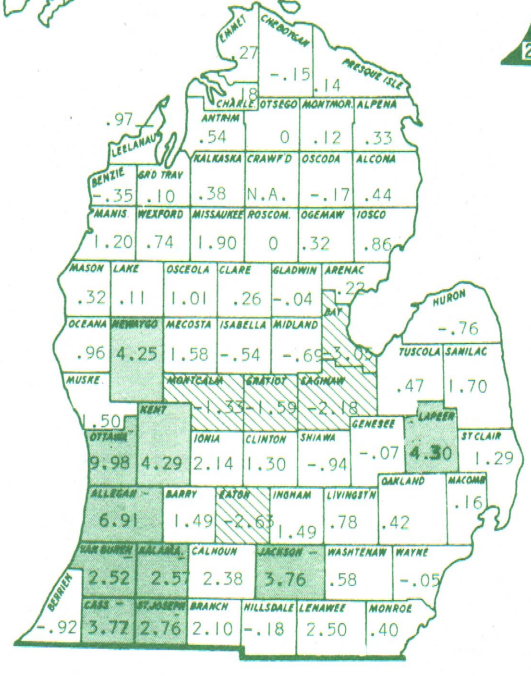




N. A. - Not available.

B. Change, 1964 to 1969.





STATE INCREASE - 62 Million Dollars (8.1%)

Top 10 Counties

1. Huron	34.85	11. Gratiot	22.58
2. Sanilac	32.91	12. Lapeer	20.91
3. Lenawee	31.91	13. Clinton	20.56
4. Ottawa	31.79	14. Monroe	20.05
5. Allegan	30.65	15. Ionia	19.75
6. Berrien	28.58	16. Washtenaw	18.44
7. Tuscola	26.27	17. Ingham	17.20
8. Kent	24.87	18. Jackson	16.92
9. Saginaw	24.83	19. St. Clair	16.28
10. Van Buren	23.88	20. Hillsdale	15.95

10 Most Increase Counties

1. Ottawa	9.98
2. Allegan	6.91
3. Lapeer	4.30
4. Kent	4.29
5. Newaygo	4.25
6. Cass	3.77
7. Jackson	3.76
8. St. Joseph	2.76
9. Kalamazoo	2.57
10. Van Buren	2.52

5 Most Decrease Counties

1. Bay	-3.05
2. Eaton	-2.63
3. Saginaw	-2.18
4. Gratiot	-1.59
5. Montcalm	-1.33

STATE 20-YEAR TREND (Mil. Dol.)

1949 - 474	1964 - 767
1954 - 545	1969 - 829
1959 - 623	

District Data

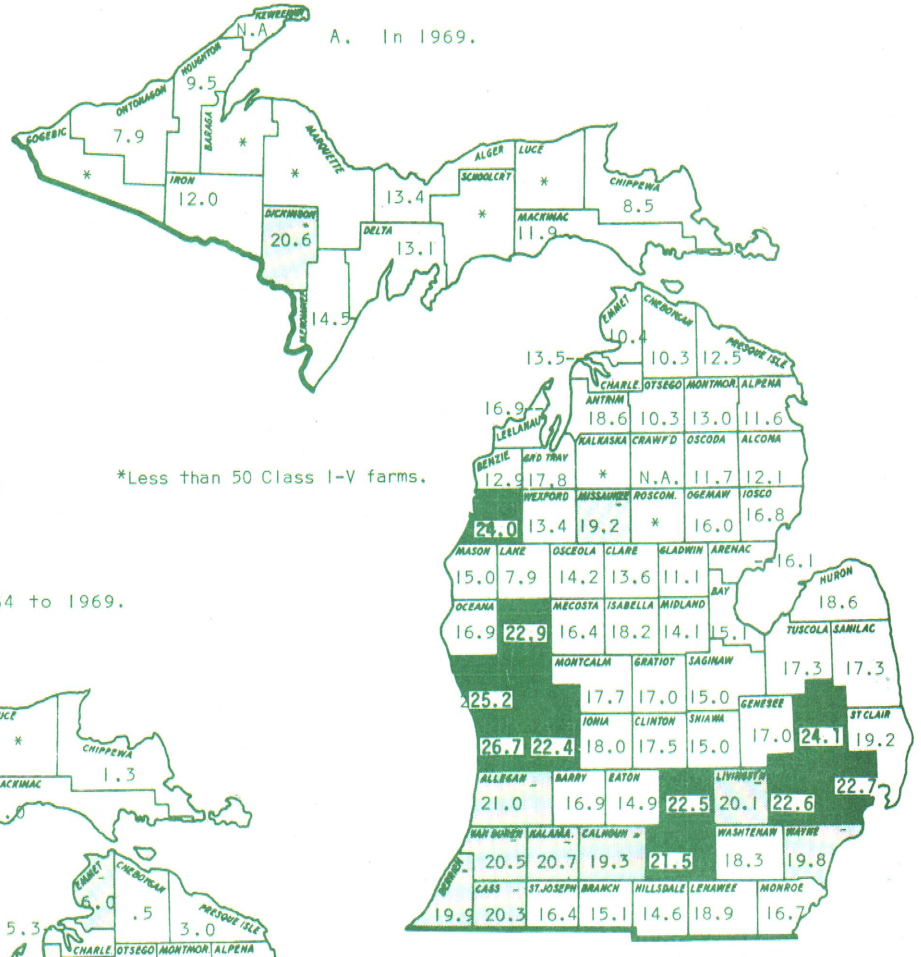
Dist.	Million Dollars	% of State Total	% Change 1964-69
1	20.3	2.5	+ .5
2	36.4	4.4	+19.1
3	19.1	2.3	+11.1
4	35.7	4.3	+25.0
5	77.0	9.3	- 1.7
6	140.0	16.9	- 2.5
7	167.8	20.2	+21.0
8	175.4	21.1	+ 8.5
9	157.7	19.0	+ 7.0
State	829.4	100.0	+ 8.2

The term farm income, as used here, means the cash receipts from the sale of crops, livestock and livestock products. The top 10 counties in total farm income were mainly in the Thumb and southwest Michigan (Fig. 34A). These 10 counties produced 35 percent of the state's sales. Tables 2 and 3 show the major sources of crop and livestock income for each county.

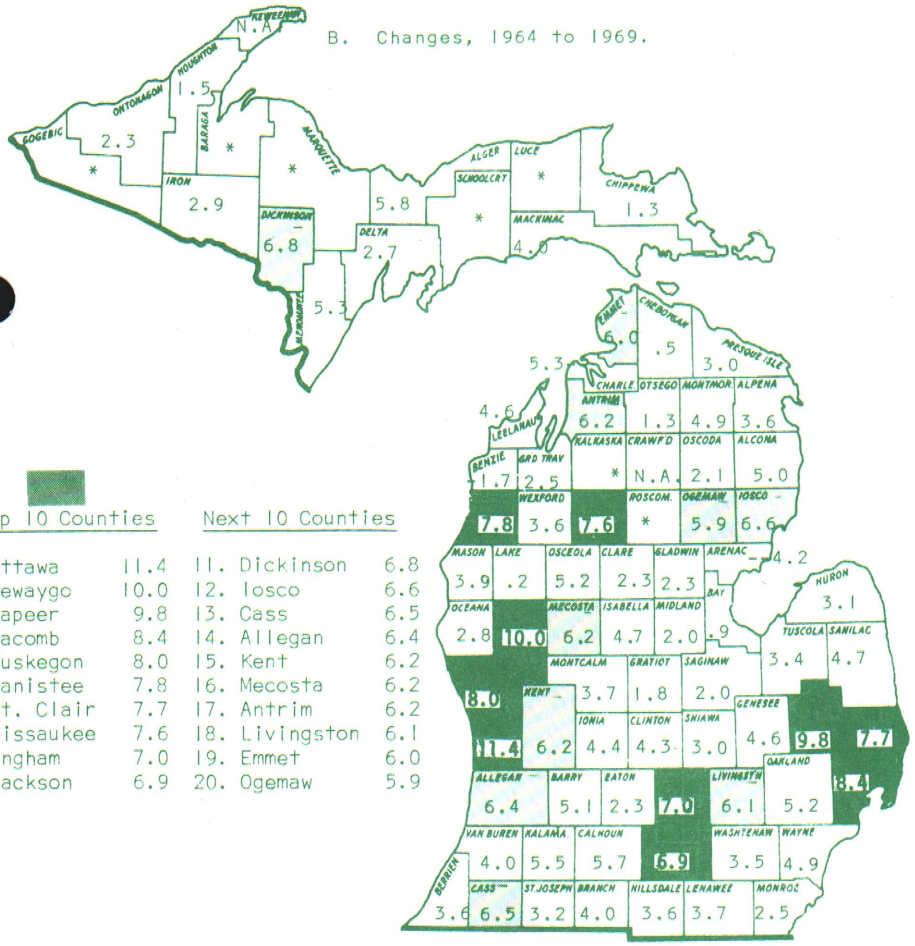
Total sales for the state in 1969 were $829 million--only 8 percent higher than 1964, even though prices received were 24 percent higher. Changes in income from 1964 to 1969 varied widely among the different counties (Fig. 34B). Ottawa and Allegan showed especially large increases, due in large part to higher livestock income. Some 24 counties showed decreases, sometimes due to lower prices, as changes for groups of products ranged from an 8 percent decrease for "cash field crops" to 52 percent increase for "meat animals," and sometimes due to lower crop and/or livestock production. Many of these counties are good agricultural counties.

FIG. 35 - AVERAGE FARM INCOME PER FARM (THOUS. $)
(I - V FARMS)

A. In 1969.



B. Changes, 1964 to 1969.



Top 10 Counties		Next 10 Counties	
1. Ottawa	26.7	11. Allegan	21.0
2. Muskegon	25.2	12. Kalamazoo	20.7
3. Lapeer	24.1	13. Dickinson	20.6
4. Manistee	24.0	14. Van Buren	20.5
5. Newaygo	22.9	15. Cass	20.3
6. Macomb	22.7	16. Livingston	20.1
7. Oakland	22.6	17. Berrien	19.9
8. Ingham	22.5	18. Wayne	19.8
9. Kent	22.4	19. Calhoun	19.3
10. Jackson	21.5	20. Missaukee	19.2

The shading reflects decimals not shown.

*Less than 50 Class I-V farms.

Top 10 Counties		Next 10 Counties	
1. Ottawa	11.4	11. Dickinson	6.8
2. Newaygo	10.0	12. Iosco	6.6
3. Lapeer	9.8	13. Cass	6.5
4. Macomb	8.4	14. Allegan	6.4
5. Muskegon	8.0	15. Kent	6.2
6. Manistee	7.8	16. Mecosta	6.2
7. St. Clair	7.7	17. Antrim	6.2
8. Missaukee	7.6	18. Livingston	6.1
9. Ingham	7.0	19. Emmet	6.0
10. Jackson	6.9	20. Ogemaw	5.9

*Less than 50 Class I-V farms.

STATE 20-YEAR TREND

1949 -	$6,368	1964 -	$13,433
1954 -	7,531	1969	18,030
1959 -	9,697		

STATE INCREASE - $4,597 (25%)

District Data

Dist.	Av. Income Per Farm 1964 $	Av. Income Per Farm 1969 $	Change $	% inc.
1	8,893	12,314	+3,421	38
2	13,009	17,887	+4,878	37
3	8,960	12,768	+3,808	42
4	13,465	19,251	+5,786	43
5	12,913	16,308	+3,395	26
6	13,759	16,835	+3,076	22
7	15,553	21,740	+6,187	40
8	12,780	17,259	+4,479	35
9	14,164	19,515	+5,551	38
State	13,433	18,030	+4,597	34

The top 10 counties in average income per farm for class I-V farms were widely scattered over the lower peninsula (Fig. 35A). Average income of these farms was about $23,500 vs. $18,030 as a state average. Some of these counties were predominately dairy, some fruit and some diversified. Four of the 10 counties were in the top 10 in crop sales per farm (with two more being 11th and 13th) and four were in the top 10 livestock sales per farm counties.

Only two of the top 10 counties in 1969 were in the top group in 1964 (Ingham and Ottawa)--the other 8 got there in 1969 by a rapid increase (Fig. 35B). Ottawa county, topping the list both in amount of increase per farm and in the 1969 actual total, got there because of a 50 percent increase in livestock income and a 40 percent increase in crops. District 7 showed the greatest dollar increase in income per farm at $6,187. The state average was $4,597, or 34 percent.

TABLE 4. AVERAGE CHARACTERISTICS OF CLASS I-V FARMS: SIZE, VALUE OF REAL ESTATE AND MACHINERY, INCOME AND EXPENSES, MICHIGAN, 1969

District and County	No. Farms	Size of Farm (Acres)		Value/A. In Farm		Farm Income		Farm Expenses*		Average Expense* Per Acre Cropland								
		Total	Crop-land	Land & Bldg.	Mach-inery	Per Farm	Per A. Cropland	Per Farm	Per A. Cropland	Live-stock Bought	Feed Bought	Seeds, etc.	Comm. Ferti-lizer	Agr. Chemi-cals	Gas and Oil	Labor	Machine Hire	All Others
						$	$	$	$				$	$	$	$	$	
1. U. P.																		
Alger	63	312	157	81	32	13,402	85	10,526	67	14.0	15.0	.7	1.4	.2	3.7	4.4	.8	26.6
Baraga	47	281	133	87	28	8,494	68	6,181	46	3.3	11.2	.5	1.5	.1	3.2	6.3	.2	20.1
Chippewa	208	328	240	79	31	8,494	35	6,031	25	2.4	3.9	.4	1.2	.0	2.1	1.3	.5	13.2
Delta	250	315	157	105	37	13,110	84	9,329	59	3.8	14.8	1.3	2.9	.5	3.7	7.1	.8	24.4
Dickinson	90	322	152	121	57	20,645	136	14,352	95	2.8	10.2	4.9	7.9	3.2	5.2	12.3	1.0	46.8
Gogebic	31	228	121	106	42	11,114	92	7,203	60	.6	24.3	2.2	.9	.1	3.5	2.3	.5	24.7
Houghton	135	217	116	89	36	9,549	82	6,665	57	2.3	13.8	1.6	3.7	.3	5.0	7.4	.7	22.0
Iron	56	345	133	75	29	11,967	90	9,253	70	4.4	8.0	2.7	5.1	1.8	4.7	10.0	.6	32.1
Keweenaw	-	-	-	-	-	-	-	N. A.	-	-	-	-	-	-	-	-	-	-
Luce (<25 farms)																		
Mackinac	72	343	190	97	41	11,879	62	8,369	44	5.1	7.8	.5	2.2	.1	3.5	1.9	.6	21.9
Marquette	46	430	168	83	24	12,160	72	9,523	57	1.6	6.5	1.3	3.5	.9	4.7	9.4	.9	27.5
Menominee	395	316	146	92	35	14,495	100	10,247	70	4.0	20.1	1.4	3.3	.3	4.5	5.4	1.4	30.1
Ontonagon	113	312	143	72	24	7,904	55	5,393	38	3.5	6.5	.5	.8	.1	3.2	2.6	.4	19.7
Schoolcraft	26	418	204	84	20	8,975	43	7,304	36	4.0	4.7	.5	2.0	.1	3.1	3.3	.1	17.4
Total or Av.	1,558	316	162	91	34	12,314	76	8,780	54	3.9	11.8	1.3	2.8	.5	3.7	5.2	.8	24.2
2. Northwest																		
Antrim	197	253	150	202	51	18,622	124	15,167	101	13.1	17.6	2.4	5.7	4.3	4.6	16.3	1.4	35.4
Benzie	127	220	107	251	54	12,869	120	12,179	114	6.6	8.1	1.7	7.0	10.5	6.2	32.9	1.7	38.1
Charlevoix	121	287	162	171	37	13,498	83	10,374	64	9.8	9.0	1.1	3.2	1.4	3.0	6.1	1.4	29.0
Emmet	120	317	168	135	45	18,412	110	13,049	78	8.5	13.9	1.7	4.8	1.1	4.3	9.0	.8	33.4
Grand Traverse	365	159	105	429	84	17,757	170	16,298	156	11.4	14.7	2.1	7.4	9.5	6.7	53.3	2.3	48.2
Kalkaska	48	274	165	173	37	*	176	23,956	145	25.2	53.8	1.0	3.8	2.1	5.1	11.9	.7	40.7
Leelanau	328	182	107	320	77	16,884	158	15,309	144	12.5	7.3	2.5	8.3	8.9	6.1	46.3	3.1	48.3
Manistee	196	245	147	239	52	24,001	163	20,132	137	3.7	7.1	4.5	10.7	9.2	7.0	49.6	3.6	41.1
Missaukee	307	259	170	165	49	19,213	113	13,301	78	14.4	17.7	1.5	3.8	.7	3.6	4.2	1.4	30.4
Wexford	147	235	134	150	34	12,390	93	8,473	63	6.8	9.8	1.9	3.8	.5	3.5	7.5	1.0	28.2
Total or Av.	1,956	227	135	235	55	17,887	132	14,699	109	11.0	13.8	2.2	6.1	5.0	5.0	25.6	1.9	37.7
3. Northeast																		
Alcona	143	251	164	174	36	12,080	74	9,049	55	15.9	8.4	.7	1.5	.3	3.0	2.2	.4	22.9
Alpena	270	204	129	152	47	11,646	90	9,264	72	12.8	9.3	1.4	2.9	.5	4.3	6.8	1.2	32.5
Cheboygan	103	400	196	134	24	10,263	52	7,131	36	2.5	4.6	.7	2.5	1.3	2.9	4.2	.6	16.8
Iosco	155	354	183	172	37	16,845	92	16,625	91	20.1	13.6	2.1	3.6	.6	4.0	9.7	.9	36.2
Montmorency	76	272	169	163	38	12,973	77	9,270	55	6.3	9.5	1.1	2.3	.6	3.8	4.2	2.3	25.0
Ogemaw	205	314	186	160	45	16,020	86	11,378	61	7.1	11.0	1.4	3.3	.6	4.6	4.7	.8	27.6
Oscoda	71	305	175	134	32	11,750	67	9,296	53	8.1	11.7	1.0	2.5	.3	3.1	3.3	.6	22.5
Otsego	110	324	144	125	32	10,325	72	7,829	54	9.8	6.9	1.2	2.8	.9	3.8	2.9	.7	24.9
Presque Isle	242	281	153	141	33	12,049	78	8,871	58	9.3	6.8	1.9	4.3	1.6	4.6	5.0	.6	23.5
Roscommon (<25 farms)																		
Total or Av.	1,395	290	162	151	36	12,768	79	9,999	62	10.8	9.2	1.4	3.0	.8	4.0	5.2	.9	26.6
4. West Central																		
Lake	78	265	153	135	35	7,935	52	6,027	39	3.1	9.0	1.2	1.7	.3	3.1	2.2	.8	17.8
Mason	349	201	143	223	65	15,052	105	11,790	82	6.6	6.9	2.3	4.6	4.4	5.3	14.4	1.7	35.9
Muskegon	299	169	117	331	82	25,168	215	19,436	166	11.5	16.2	3.6	8.5	6.6	8.0	43.7	2.6	65.2
Newaygo	517	201	138	218	62	22,885	166	15,508	112	9.9	13.9	2.7	6.0	4.0	5.5	19.7	2.6	47.8
Oceana	547	195	124	246	58	16,875	135	14,293	115	7.4	8.4	3.8	6.9	7.5	5.2	32.8	2.3	39.8
Total or Av.	1,790	197	132	239	63	19,251	146	14,655	111	8.4	10.9	3.0	6.1	5.3	5.6	25.1	2.2	44.0
5. Central																		
Clare	219	297	155	145	33	13,569	88	10,363	67	15.0	11.0	1.3	2.7	.5	3.9	5.2	1.0	26.2
Gladwin	253	242	159	171	44	11,096	70	8,196	52	10.9	6.2	1.4	3.5	.6	3.7	2.5	.9	21.8
Gratiot	1,292	202	171	351	64	16,972	99	12,356	72	10.4	7.7	4.0	9.6	2.5	4.5	2.9	1.9	28.5
Isabella	750	219	171	248	61	18,196	107	14,409	84	19.1	11.8	2.5	6.1	1.7	4.5	4.9	1.3	32.5
Mecosta	407	265	177	161	46	16,443	93	12,191	69	6.2	7.6	2.7	6.0	2.2	4.1	7.3	2.1	30.1
Midland	377	199	153	328	66	14,111	92	11,805	77	17.1	6.6	3.0	8.5	2.9	4.7	3.5	1.4	29.1
Montcalm	856	229	170	202	64	17,674	104	12,968	76	4.1	5.8	5.8	8.4	3.7	4.6	8.8	2.7	31.7
Osceola	360	271	166	138	41	14,214	86	9,776	59	8.3	13.2	1.2	2.7	.5	3.5	4.3	.9	24.1
Total or Av.	4,514	228	168	240	56	16,308	97	12,217	73	10.9	8.4	3.4	7.2	2.2	4.4	5.0	1.8	29.2

6. East Central																		
Arenac	316	224	167	236	65	16,113	96	12,224	73	7.4	7.1	3.2	8.0	2.2	4.6	6.2	1.6	32.6
Bay	1,010	156	136	453	99	15,116	111	12,175	90	3.6	2.8	4.7	14.9	4.2	6.2	7.8	2.6	42.8
Huron	1,834	205	178	315	69	18,640	105	15,[illegible]	85	15.2	12.6	2.5	9.2	2.2	5.0	3.4	1.7	33.4
Saginaw	1,578	187	161	451	79	14,974	93	11,[illegible]	72	4.1	4.6	3.3	10.3	2.5	5.0	5.2	2.0	34.7
Sanilac	1,850	206	178	267	72	17,304	97	12,[illegible]	69	5.7	8.6	2.3	7.5	1.6	4.4	4.0	1.9	32.8
Tuscola	1,474	207	178	439	77	17,323	97	13,248	74	5.2	6.7	3.6	10.5	2.6	5.1	4.3	1.6	34.8
Total or Av.	8,062	197	169	363	76	16,835	100	12,959	77	7.4	7.9	3.1	9.8	2.4	5.0	4.7	1.9	34.7
7. Southwest																		
Allegan	1,414	144	114	323	84	21,032	185	16,497	145	21.0	29.3	4.2	7.7	4.8	6.2	19.8	2.4	49.0
Berrien	1,382	124	99	498	99	19,885	200	16,991	171	6.1	7.5	5.3	9.6	13.5	8.7	55.3	3.4	61.1
Cass	676	240	182	280	54	20,347	112	16,873	93	13.0	24.0	2.4	6.4	2.1	4.2	7.4	2.0	30.8
Kalamazoo	621	224	175	388	55	20,693	118	18,003	103	21.3	12.9	3.8	5.9	2.2	5.0	11.5	1.7	38.3
Kent	1,080	166	128	379	79	22,422	175	16,931	132	11.9	12.5	4.7	6.5	7.0	6.6	26.1	2.1	54.1
Ottawa	1,167	117	89	401	95	26,707	299	20,111	227	22.2	69.2	5.1	7.9	4.8	8.2	37.8	3.1	67.8
Van Buren	1,125	152	113	377	86	20,510	181	18,409	162	8.2	11.3	4.1	8.4	10.7	7.1	51.2	3.3	57.2
Total or Av.	7,465	156	121	376	79	21,740	180	17,686	146	14.6	22.8	4.2	7.5	6.6	6.6	30.0	2.6	51.2
8. Southern																		
Barry	664	214	160	239	54	16,898	106	13,579	85	15.1	16.4	2.3	5.2	1.7	4.1	4.8	1.7	33.3
Branch	865	236	178	258	52	15,125	85	12,114	68	11.1	9.1	2.6	6.1	1.6	4.2	3.4	1.7	27.8
Calhoun	852	251	189	255	55	19,293	102	15,725	83	18.4	10.6	2.9	5.8	1.9	4.2	6.2	1.9	31.2
Clinton	1,128	198	161	317	64	17,511	109	13,130	82	11.7	11.4	2.7	7.0	2.2	4.4	5.6	2.1	34.4
Eaton	888	216	167	289	56	14,941	90	11,615	70	10.5	7.9	2.8	5.9	1.8	4.1	4.3	1.7	30.4
Hillsdale	1,027	195	150	271	56	14,598	97	11,507	77	11.4	14.0	2.2	5.8	1.7	4.5	4.2	1.9	30.5
Ingham	720	227	177	390	71	22,496	127	17,447	99	13.0	12.7	3.0	8.3	2.2	5.1	10.5	2.1	41.4
Ionia	1,060	218	170	276	63	18,019	106	13,589	80	12.2	10.6	2.4	6.3	2.5	4.6	6.1	1.9	33.2
Jackson	736	246	175	285	58	21,521	123	16,901	97	21.2	11.9	2.4	5.8	2.3	4.4	9.3	2.0	36.9
St. Joseph	771	248	196	265	48	16,364	84	13,248	68	10.2	12.2	2.4	6.1	1.4	4.1	3.8	1.5	25.6
Shiawassee	947	213	178	403	66	14,968	84	11,452	64	7.3	9.5	2.1	6.0	1.4	4.3	3.6	1.2	29.0
Total or Av.	9,658	222	172	295	59	17,259	100	13,491	78	12.7	11.3	2.5	6.2	1.9	4.3	5.5	1.8	31.9
9. Southeast																		
Genesee	604	203	164	527	66	16,867	103	14,460	88	23.0	12.2	2.0	5.7	1.8	4.4	6.2	1.3	31.6
Lapeer	840	214	165	421	80	24,061	146	17,951	109	12.7	12.0	3.0	6.4	2.8	5.9	16.7	1.5	47.9
Lenawee	1,637	213	182	441	65	18,934	104	16,483	91	21.2	10.4	3.1	9.3	2.1	4.7	4.0	1.9	33.9
Livingston	536	240	173	451	64	20,148	116	16,258	94	13.3	10.0	2.5	5.7	1.7	4.8	10.5	2.1	43.1
Macomb	577	126	104	917	108	22,657	217	17,898	172	7.6	11.8	8.8	9.1	3.9	9.7	39.3	2.2	78.8
Monroe	1,140	185	166	561	73	16,659	100	14,679	89	13.6	5.2	4.7	9.6	2.8	5.4	9.0	1.4	36.6
Oakland	378	192	135	966	70	22,572	167	19,156	142	18.3	14.1	9.4	4.3	2.0	5.9	29.0	1.4	57.0
St. Clair	813	185	153	388	75	19,183	125	15,227	100	19.0	14.7	3.7	6.3	1.7	5.1	8.1	1.4	39.5
Washtenaw	971	214	169	481	68	18,348	109	14,975	89	15.3	10.8	3.3	6.2	1.9	5.2	6.3	1.6	38.2
Wayne	281	127	107	1,396	96	19,797	185	16,541	153	6.7	9.0	17.6	7.6	3.0	8.9	32.7	1.3	67.3
Total or Av.	7,777	197	160	533	72	19,515	122	16,122	101	16.5	10.6	4.2	7.5	2.2	5.4	11.0	1.6	41.4
State	44,175	207	156	328	64	18,030	115	14,260	91	11.8	11.7	3.2	7.2	2.9	5.0	10.9	1.8	36.9

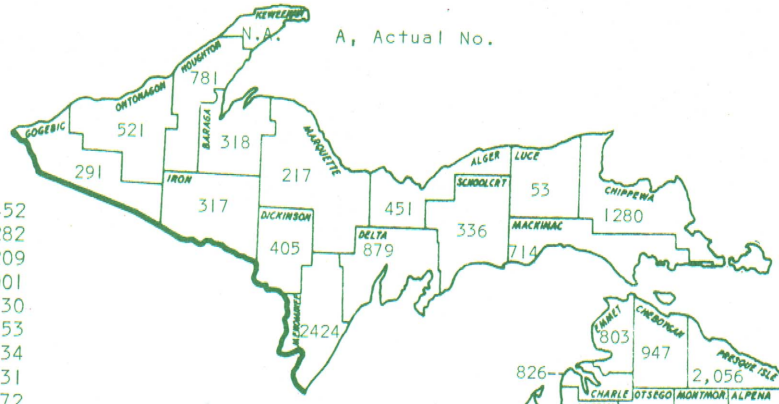
*Farm expenses are estimates made by farmers for their 1969 Agriculture Census report. Includes cash expenses (except lime) and depreciation, but not interest on farmers' equity in the business, nor a charge for unpaid family labor or his labor and management.

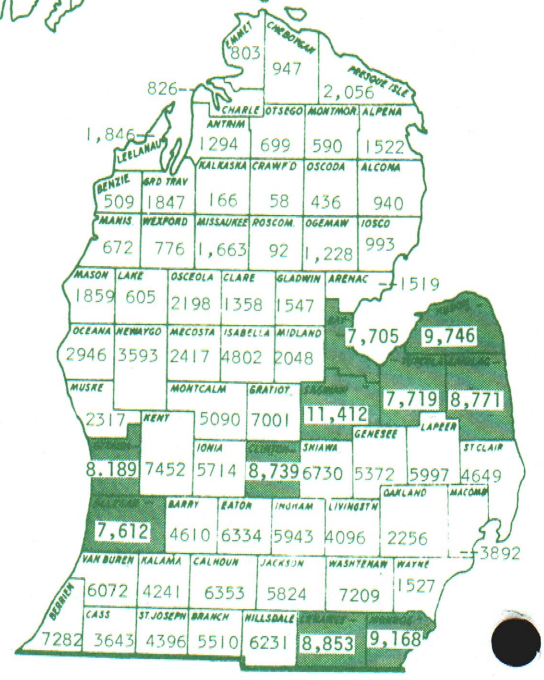
The 44,175 farms in economic classes I-V in 1969 had the following average characteristics: 207 acres in the farm with 156 acres of cropland, a land and buildings value of about $68,000, gross sales of $18,000, and farm expenses of about $14,300 (Table 4). Averages for the different districts of the state varied considerable with average farm size ranging from 156 A. in district 7 to 316 in district 1. The value of land and buildings per acre in the farm was lowest for the U.P. at $91, and highest in district 9 at $533. Machinery value per acre was lowest for the U.P. at $34 and highest in #7 at $79. Farm income per acre cropland ranged from $76 for the U.P. to $180 for district 7.

Farm expense estimates were obtained in the 1969 census and certain averages have been calculated. The U.P. had the lowest expenses at $54 per acre, and district 7 the highest at $146. The state average consisted of about $12 (shown as 11.8) for livestock purchased, $12 for feed, $11 for hired labor, $7 for fertilizer, $5 for gas and oil, $3 each for agricultural chemicals and seeds, $2 for machine hire, and $37 for all other items. The actual dollar averages, as well as the relative importance of the various expense items, varied greatly from one district to another. These variations generally related to the intensity and type of farming followed. As an average, the expenses included amounted to about 80¢ for every dollar of receipts in 1969, with the net per farm for class I-V farms to cover interest on the farmer's equity, wages for his labor and that of his family on the farm and his management being $3700. Prices received and paid by farmers, as well as farm land prices in early 1970 were much higher than the 1969 figures presented.

FIG. 36 - FARM POPULATION, 1970

A, Actual No.





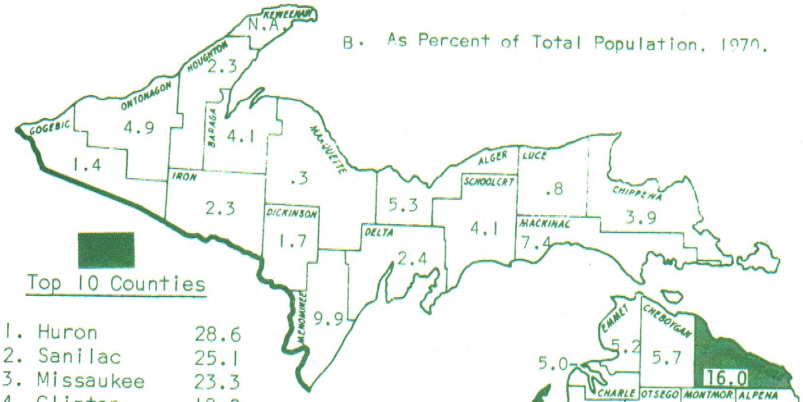
STATE TOTAL - 277,529

Source: "1970 Census of Population--Supplementary Report: (PC(S1)-27" U. S. Department of Commerce, Aug. 1972. This report presents revised figures on rural-farm and -nonfarm data by counties.

Top 10 Counties

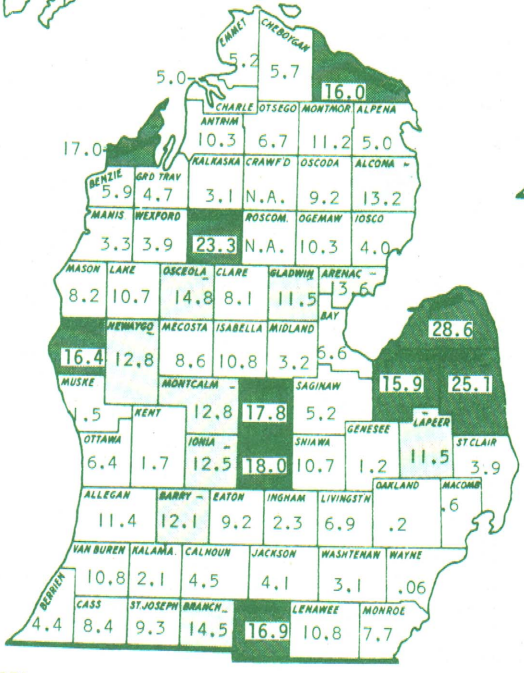
1. Saginaw	11,412	11. Kent	7,452
2. Huron	9,746	12. Berrien	7,282
3. Monroe	9,168	13. Washtenaw	7,209
4. Lenawee	8,853	14. Gratiot	7,001
5. Sanilac	8,771	15. Shiawassee	6,730
6. Clinton	8,739	16. Calhoun	6,353
7. Ottawa	8,189	17. Eaton	6,334
8. Tuscola	7,719	18. Hillsdale	6,231
9. Bay	7,705	19. Van Buren	6,072
10. Allegan	7,612	20. Lapeer	5,997

B. As Percent of Total Population, 1970.



Top 10 Counties

1. Huron	28.6
2. Sanilac	25.1
3. Missaukee	23.3
4. Clinton	18.0
5. Gratiot	17.8
6. Leelanau	17.0
7. Hillsdale	16.9
8. Oceana	16.4
9. Presque Isle	16.0
10. Tuscola	15.9



Next 10 Counties

11. Osceola	14.8
12. Branch	14.5
13. Arenac	13.6
14. Alcona	13.2
15. Montcalm	12.8
16. Newaygo	12.8
17. Ionia	12.5
18. Barry	12.1
19. Lapeer	11.5
20. Gladwin	11.5

Counties with 12% or more

1.	Huron	28.6
2.	Sanilac	25.1
3.	Missaukee	23.3
4.	Clinton	18.0
5.	Gratiot	17.8
6.	Leelanau	17.0
7.	Hillsdale	16.9
8.	Oceana	16.4
9.	Presque Isle	16.0
10.	Tuscola	15.9

State - 3.13%

Source: Calculated from figures shown in Fig. 36A.

District Data

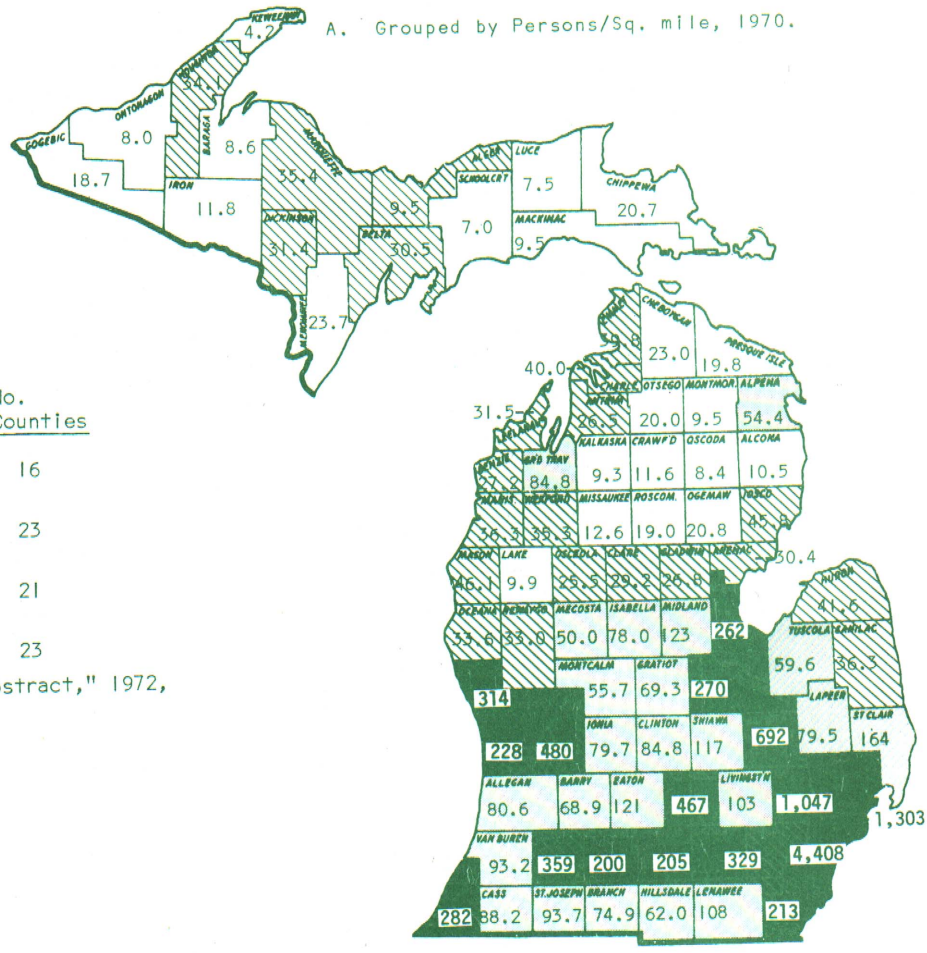
Dist.	No. Farmers	% of all Farmers
1	1592	59.0
2	2294	65.3
3	1663	63.1
4	2090	65.0
5	5164	64.6
6	7238	60.3
7	8418	63.9
8	12069	66.5
9	9114	62.6
State	29,652	63.7

The farm population consists of persons living on farms (as defined in the agricultural census). According to Fig. 36A, Saginaw county with its 11,412 farm population had the most of any county in 1970. The top 10 counties are rather widely scattered over the lower half of the lower peninsula. The total farm population of these 10 was nearly 88,000, or 32 percent of the state total, and the next 10 had an additional 24 percent.

If farm population is considered as a percentage of the total, as done in Fig. 36B, the top 10 counties includes only four of the 10 on actual number basis. In this case, the top 10 are much more widely scattered over the state, with more being in the northern part. This top 10 had a farm population of about 58,000 in 1970, 21 percent of the state total, and the next 10, 13 percent more. The farm population has been decreasing both in actual number and as a percent of the total.

FIG. 37 - URBAN AND AGRICULTURAL COUNTIES

A. Grouped by Persons/Sq. mile, 1970.



Persons/ Sq. Mile	Area Name	No. Counties
>200	Urban	16
50-200	Densely settled agricultural	23
25-50	Moderately settled agricultural	21
<25	Sparsely settled agricultural	23

Source: "Michigan Statistical Abstract," 1972, p. 37.

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TABLE 5. SELECTED CHARACTERISTICS OF URBAN AND AGRICULTURAL COUNTIES*, 1970

Item	Urban Counties	Agricultural Counties		
		Densely Populated	Moderately Populated	Sparsely Populated
Persons per sq. mile-range	>200	200-50	50-25	<25
average	629	87	33	14
Number counties	16	23	21	23
Population, 1970-Total	6,971,589	1,199,817	462,901	240,776
Urban (%)	85.2	32.1	33.0	31.8
Rural (%)	14.8	67.9	67.0	68.2
Farm (%)	1.4	10.1	9.4	6.6
No. Farmers, 1969-Total	24,420	35,984	13,415	4,124
In Ec. Classes I & I (%)	15.1	14.5	15.4	11.0
Part-time farmers (%)	30.0	30.6	24.9	25.8
Working off-farm any (%)	63.0	65.6	60.0	63.4
Working off-farm 200+ days (%)	45.9	46.9	38.1	39.4
Per Farm Averages, 1969 (all farms)				
Acres in farm (total)	128	149	178	243
Real estate value ($)	60,290	48,930	39,400	29,400
Farm product sales ($)	11,310	10,420	10,759	8,249
Per Acre in Farm Averages (all farms)				
Real estate value ($)	470	327	222	121
Farm product sales ($)	88.07	69.71	60.59	33.92
Farm production expenses ($)	73.29	57.07	47.91	25.50
Net ($)	14.78	12.64	12.68	8.42

*Grouped according to total population per square mile.
Sources of data: U. S. Census of Population, 1970 and of Agriculture, 1969.

URBAN AND AGRICULTURAL COUNTIES

In a partially completed study by the author on county characteristics related to the amount of work done off the farm by farmers, various criteria were used to classify the counties into a few groups. Some of the information tabulated for one of these, namely, density of population, is of interest in relation to this publication.

Sixteen counties with 200 or more persons per square mile were classified as urban (Fig. 37). The remaining 67 counties were classified as agricultural, but divided into three groups of nearly equal number of counties, also on population density, defined as densely, moderately and sparsely populated. Fig. 37 shows the location of the four groups of counties and Table 5 presents average data for their characteristics. Obviously, the persons per square mile and the percent urban, were high in the urban counties. About one-third of the total population in all three groups of agricultural counties were urban, and two-thirds rural with 6-10 percent of that 68 percent on the farm.

Thirty percent of all farmers were in the 16 urban counties and 46 percent in the 23 densely populated agricultural counties. About 15 percent of the farmers in each group of counties, except the sparsely populated agricultural were in economic classes I and II ($20,000+ sales). The percentages of the farmers who were part-time, and who worked off the farm any or 200+ days were nearly the same for all four groups, contrary to expectations.

The average size of the farm was inversely related to population density, with the average size in the sparsely populated counties approximately double that in urban counties. Average land and buildings value per farm was just the reverse, with the smaller size farm in the urban counties twice that in the sparsely populated. Farm product sales, as an average for all farms, was practically the same for all groups, except being about a fourth less for the sparsely populated counties.

As to "per acre in farm" averages--the value of land and buildings in the urban counties was nearly 4 times that in the sparsely populated; farm product sales and expenses about 2 3/4 times; and net about 75 percent greater, although there was little difference in the first three groups.