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Harry L. Hopkins, Administrator
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Division of Social Research

RESEARCH BULLETIN

THE PEOPLE OF THE DROUGHT STATES

Prepared by
Conrad Taeuber
and
Carl C. Taylor

under the supervision of
T. J. Woofter, Jr.
Rural Research Section,
Division of Social Research,
Works Progress Administration
and
Carl C. Taylor, in charge
Division of Farm Population and Rural Life,
Bureau of Agricultural Economics,
and
Social Research for the Resettlement Administration

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THE PEOPLE OF THE DROUGHT STATES

INTRODUCTION

This is the second of a series of three bulletins devoted to the problems of the areas of intense drought distress. The first bulletin outlined the area which has been most severely affected by the droughts of recent years. This bulletin shows how the uncontrolled settlement of the area led to numerous problems of adjustment between the people and the natural resources. It also shows that there has been much movement of the people of that area. Recent migration out of the area is projected against the background of much movement in the past and the normal "export" of population. The third bulletin will deal with the efforts to relieve distress during recent years. These bulletins are prepared by the Division of Social Research of the Works Progress Administration, in cooperation with the Division of Farm Population and Rural Life of the Bureau of Agricultural Economics and the Social Research Unit of the Resettlement Administration.

The data in this bulletin are based primarily on census reports. Wherever possible, county figures were combined to give total figures for the area outlined in the first bulletin of this series. Where that was not possible or where it would have entailed an unjustifiably large amount of work, data were used for the 10 Great Plains States—the Dakotas, Nebraska, Kansas, Oklahoma, Texas, Montana, Wyoming, Colorado, and New Mexico.

Other recent publications concerning the population of these States are: *The People of Kansas,* by Carroll D. Clark and Roy L. Roberts, published by the Kansas State Planning Board; *The People of South Dakota,* published by the South Dakota State Planning Board; and the chapter on the Great Plains by C. Warren Thornthwaite, included in *Migration and Economic Opportunity,* by Carter Goodrich and Others, which presents a study of the relation of climate and population in the Great Plains Area.

SUMMARY

Today 15,000,000 people are living in the 10 Great Plains States, which 50 years ago included only 3½ million persons. Population has grown at an unprecedented rate. Once the conquest of the prairie was possible, people from the eastern States and from European countries flocked into this region in large numbers. The development of the railroads which brought the farmer nearer his market, the development of the barbed-wire fence which enabled the small homesteader to guard his plantings from the ranger's cattle, and the development of the windmill which raised the much needed water to the surface—all contributed to the settlement of the Great Plains States. A large army of restive settlers flocked into the area, laying claim to more and more of the land. The demand for homesteads and the desire to bring each homestead under the plow were so insistent that no thought was given to those factors which might limit agricultural activities. And when conditions seemed unfavorable, an unstable population, avoiding rather than solving its problems, simply moved on. But after the first wave of settlement had subsided, a much slower process of adjustment began; villages and cities developed and, in many parts, farms too small for efficient operation were abandoned or combined with others.

From the time of earliest settlement, the population of the Great Plains has been a youthful one. Large families have been the rule, and long before wheat seemed necessary to win the World War, the area was producing a human "export crop." Every year has found numbers of young people moving to other farms, to nearby villages and cities, or to other States. Between 1920 and 1930, at least 5 of the 10 States reported more emigration than immigration and only 1 showed an excess of incoming persons over those outgoing.

Despite all the moving about, the opening of new territory for agriculture, and the large rate of natural increase, there has been virtually no change in the number of people living on farms since 1910. This fact indicates that the movement away from farms involved approximately 2½ million people, for without emigration the number of people living on farms in this area would have increased rapidly.

The settlement of the Great Plains has necessarily been expensive, and frequently it has worked great hardships upon the

individuals involved. Climate and soil imposed certain limitations upon agriculture and the development of suitable agricultural techniques was a slow and frequently a difficult process for settlers, most of whom came from more humid areas. Few pioneers were equipped to meet the ravages of drought or grasshoppers, or the needs of dry land farming, and a large number left even before they had proved up on their claims. Many who had come with high hopes of making their fortunes moved on again when these hopes proved unfounded; others remained, but their children, in turn, moved on.

As long as those emigrating were equipped with sufficient resources to establish themselves elsewhere, as long as employment opportunities were readily available throughout the Nation, movements out of the region attracted little attention. But now the migrants, whose characteristics and economic condition have been altered by recurring periods of low prices and severe droughts, constitute serious problems for other areas in the United States. In the Great Plains States there is little evidence that this movement outward, so frequently disruptive to existing social patterns, is fundamentally correcting the difficulties created by the rapid occupation of the area. Finally, there is no assurance that future immigration may not occur and lead to a repetition of the errors of original settlement.

THE PRESENT POPULATION OF THE AREA

15,000,000 People in the Area

About 15 million people live in the Great Plains drought States,[1] that region which was most affected by the droughts of 1934 and 1936 (table 1). Two-fifths of this population, some 6,000,000 in all, live on farms.

Table 1—THE POPULATION OF THE DROUGHT AREA, BY SIZE OF COMMUNITY, 1930

State	Number of Counties Included	Total Population 1930	Percent of 1930 Population							
			Rural				Urban			
			Farms	Open Country[a]	Villages[b]	Total Rural	2,500 to 9,999	10,000 to 24,999	25,000 to 99,999	100,000 and Over
Total	803	14,409,614	39.9	48.1	14.3	62.4	10.3	6.7	5.7	14.9
Minnesota	77	2,356,165	34.1	36.9	12.7	49.6	10.3	4.5	-	35.6
Iowa	61	1,448,178	41.3	48.5	14.8	63.3	11.9	3.5	11.5	9.8
Missouri	14	279,624	44.5	47.6	19.1	66.7	4.4	-	28.9	-
North Dakota[c]	53	680,845	58.4	63.2	20.2	83.4	5.9	6.5	4.2	-
South Dakota[c]	69	692,849	56.3	58.1	23.0	81.1	5.6	8.5	4.8	-
Nebraska[c]	93	1,377,963	42.5	44.7	20.0	64.7	8.6	5.7	5.5	15.5
Kansas[c]	105	1,880,999	37.6	45.1	16.1	61.2	10.0	11.5	4.9	12.4
Oklahoma[c]	77	2,396,040	42.7	55.6	10.1	65.7	11.2	7.1	2.4	13.6
Texas	101	1,208,468	37.7	50.4	10.7	61.1	14.6	6.5	9.3	8.5
Montana[c]	56	537,606	38.1	53.2	13.1	66.3	10.7	10.3	12.7	-
Wyoming	19	203,952	32.0	47.0	20.1	67.1	16.2	16.7	-	-
Colorado	47	923,608	25.0	35.4	10.7	46.1	8.6	5.1	9.0	31.2
New Mexico[c]	31	423,317	37.5	67.0	7.7	74.7	13.7	5.3	6.3	-

[a] All persons living outside incorporated places.
[b] Incorporated places with a population of less than 2,500.
[c] Includes entire State.
Source: *Fifteenth Census of the United States: 1930*, Population Vol. I.

This block of 10 States—North and South Dakota, Nebraska, Wyoming, Montana, Kansas, Oklahoma, Texas, New Mexico, and Colorado—contains one-eighth of the total population of the United States and one-fifth of its entire farm population. Two areas within these States have been especially affected by the droughts. In the northern area, including most of North Dakota, South Dakota, and contiguous sections, there are nearly 1½ million people, of whom approximately 800,000 are located on farms. The southern area, which includes northwestern Texas, western

[1] These States cover a much larger area than the physiographic area designated as the Great Plains.

Kansas, and adjacent territory, has more than a million people, one-half of whom live on farms.

Domination of Agriculture

Agriculture and grazing are to the Great Plains Area what coal and iron are to Pittsburgh, what automobiles are to Detroit, and what shoes are to Brockton, Massachusetts. With the exception of the Cotton Belt, no other region in the United States has so large a proportion of its population living on farms, or so large a percentage of its gainfully employed engaged in agriculture together with so small a percentage involved in manufacturing. Taking this section as a whole, 40 persons out of every 100 live on farms. There is not a single State where the ratio is less than 25 to 100, and in the Dakotas the farm population constitutes almost 60 percent of the total. It is apparent, therefore, that the economic and social life of the people on the Great Plains depends to a great extent upon agricultural enterprise.

Within the confines of the Great Plains proper there are no large industrial centers, the few sizable cities of the area depending directly or indirectly upon agriculture for their support. For the most part, their industries are engaged in the processing and transportation of agricultural products; their financial activities are concerned with farm credit and farm marketing; and their commerce is dominated by that wholesale and retail trade which relates to the smaller towns and to the open country.[2] The metropolitan newspapers which circulate in this region reflect the urban interest in agriculture inasmuch as they report grain, livestock, and other farm produce quotations as completely as the New York papers carry the stock market reports. The various radio stations located in this area display a similar interest in the farmer and his farm, in their efforts to secure and broadcast the latest information on volume of agricultural products marketed and prices received.

Although the automobile, the newspaper, and the radio have brought the farmer closer to the city, he continues to have his most intimate contacts with the village. The small town is his service station. Not only does it supply him with items which range in variety from lumber, fencing, and farm implements to the small daily needs of his household, but it likewise provides

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[2] The mining of precious metals in the Black Hills and on the eastern slopes of the Rocky Mountains affects only a small part of the population; the mining of coal is localized and employs comparatively few persons. Oil production has become important in limited areas of Texas, Oklahoma, Kansas, and Wyoming.

him with a market (or shipping point, at least) for the larger portion of his produce.

The varied ties which bind the villagers to agriculture are not fostered by trade alone. Many a small town man has his own memories of a childhood spent in the country; more frequently than not, he has a knowledge of actual farm work which has grown out of first-hand experience. His close relatives may still be farm operators. If he is a substantial business man, his first impulse will often be to reinvest his profits in the land. Again, he may be a "suitcase farmer," who lives on his farm only 6 to 8 weeks in the year; or he may be engaged in part- or full-time farming on a small tract lying on the outskirts of the village.

Another factor which tends to strengthen the bond between village and open country is to be found in the constant interchange of population. For instance, there is the retired farmer who has come to the village where he and his wife hope to enjoy in their declining years that social intercourse which they were denied in the isolation of their earlier rural life. The laborer who lives in town and works either part time or full time on the farm, and the farmer who, as his occupational record shows, has spent several years off the farm are further instances of this interchange of population.

Although the usual antagonisms between village and farm are not entirely absent, the fundamental interest in agriculture operates to render them largely superficial. Since the prosperity of all other types of activity in the Great Plains Area depends so largely upon the prosperity of agriculture, the farmer easily commands a widespread respect and his welfare stands out as a matter of general import. When farm affairs are thriving, business in town will thrive; but when agriculture is suffering a depression, village and urban interests cannot hope to escape the resulting ill effects.

Another factor operating to reduce urban and rural antagonisms derives from the idea that farming is something out of which a man can definitely make money. No activity which offers the allure of possible profits is ever regarded too lightly, either by town or country. In many instances, the farm operator outranks the average villager when comparisons are drawn between the two as to standard of living maintained, capital investment, average amount of operating capital required, and annual income—especially in "good" years. Whether or not the conception of farming as a money-making proposition is justified does not detract from its force. In the course of 23 years a certain wheat farm in Sheridan County, Kansas, produced a net income of only $21,000, thus averaging less than $1,000 annually for the entire period. But there was 1 year during this time when the net income was $20,000, another when it was $10,000, and a third when

it was $4,000.[3] These years of high income are likely to be publicized and remembered while other years of little or no income, or even net losses, are frequently disregarded. It is the larger profits which have a way of sticking in men's minds.

A Sparsely Settled Region

Agriculture in the midcontinent area has been developed on isolated farmsteads in a thinly populated region. Except in the eastern, more humid fringe of the area, and in the few spots devoted to irrigated or specialty crops, agriculture is commonly extensive. Early homestead policy provided for the settlement of four homestead families in each square mile of territory and while that goal was never fully realized, it set the farm pattern for much of the early settlement. Farms of 320 acres, two families per square mile, and later of 640 acres, one family per square mile, gradually replaced the earlier pattern, leaving the region today one of large farms, sparse population, and widely separated homes.

It follows that villages and small cities in this section of the country are far apart. Since each village of 500 persons requires a farm population of 500 to insure its support, generally speaking, a surrounding territory of no less than 100 square miles is needed for its existence. Or, in other words, if the sustaining district requisite for a settlement of 500 were conceived as a circle with the village as its center, the radius of that circle would be nearly 6 miles long. It is obvious that the area necessary for the maintenance of a small town in a locality where grazing predominates would be several times larger than in a community devoted to general farming.

To be sure, the number of people living in cities has been increasing rapidly, and, as a matter of fact, a large share of the increase in total population throughout the Great Plains has been in the cities. In Montana, for example, the urban population increased by 9,000 persons between 1920 and 1930, although the population of the State as a whole decreased by 11,000. Nevertheless, this entire region is still much less urbanized than the remainder of the United States. North Dakota in 1930 had only 16.6 percent of its population in urban areas (places of 2,500 persons or more), less than any other State in the country (table 1). South Dakota and New Mexico are primarily rural, with urban populations of only 19 percent and 25 percent, respectively. Colorado, with 54 percent of its people in cities and towns, is the most highly urbanized State in this

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[3] Goodrich, Carter, and Others, *Migration and Economic Opportunity*, Philadelphia: University of Pennsylvania Press, 1936, chap. V, pp. 202-250. This chapter was prepared by C. Warren Thornthwaite.

group, but the cities of Denver, Colorado Springs, and Pueblo account for three-fourths of its entire urban population. The predominantly rural characteristics of these 10 States can be gauged by the fact that there are only 7 cities in the area shown in figure 1 which have more than 100,000 inhabitants, while there are only 15 others with a population numbering more than 25,000 each.

A Relatively Youthful Population

In comparison with other parts of the Nation, the people of the Great Plains Region are young. In 1930 the proportion of children under 5 years of age was higher here than elsewhere in the country, and the proportion of men and women 65 or over was lower. This was especially true of the rural farm and urban population. It is probable that the higher proportion of children and the lower proportion of the aged in this area, as compared with the remainder of the country, will continue to hold through 1940 except as regards people living in villages.

In 1930, 5.4 percent of all persons in the United States were 65 years of age or over, but in the Great Plains the percentage was only 4.8 (table 2). The smallest proportion of persons of this age group, only 4 percent, was found among the people living on farms. Even in 1940, according to the estimates of Thompson and Whelpton,[4] only 5.5 percent of the farm people will be 65 or over.

Table 2—AGE DISTRIBUTION OF THE TOTAL POPULATION OF 10 DROUGHT STATES AND OF THE UNITED STATES, 1930

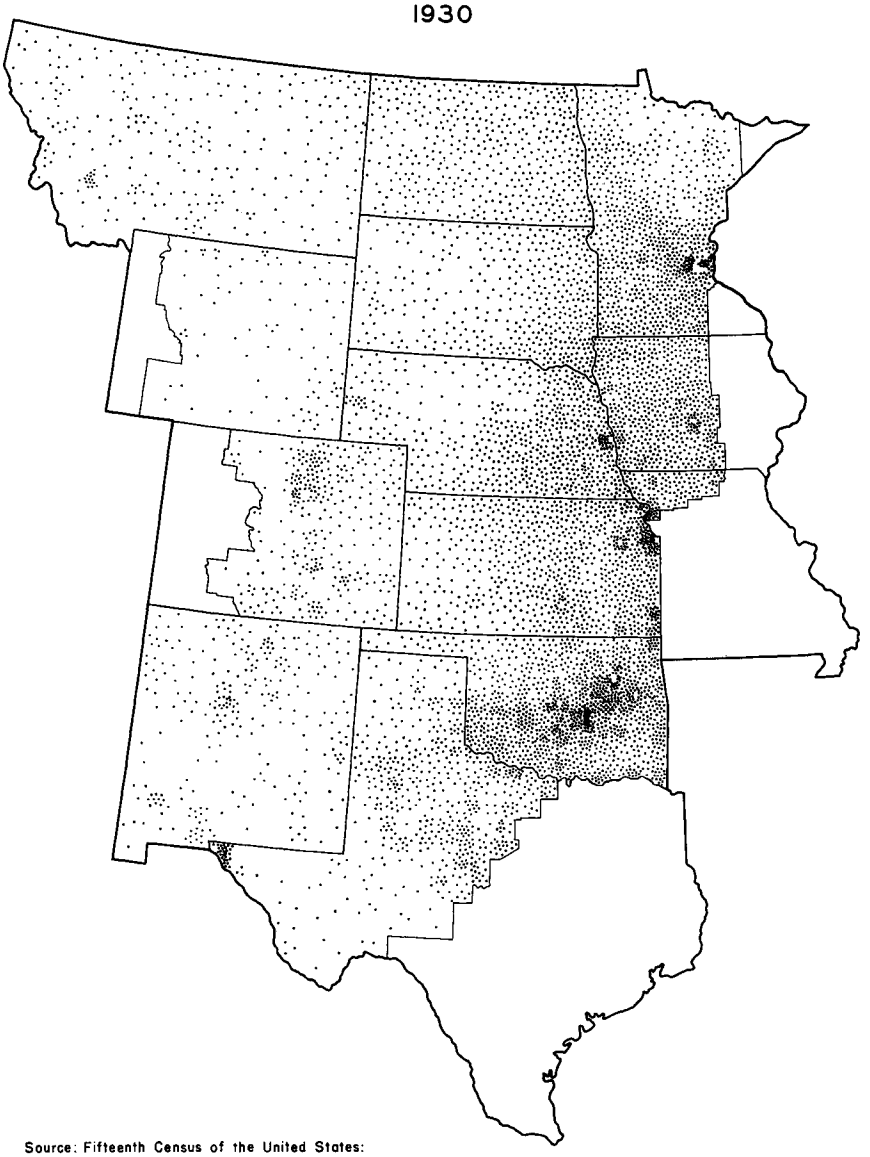
State	Total Population 1930	Percent in Each Age Group						
		Under 5 Years	5-14 Years	15-29 Years	30-44 Years	45-64 Years	65 Years and Over	Unknown
Total, United States	122,775,046	9.3	20.1	26.3	21.4	17.4	5.4	0.1
Total, 10 States	15,075,690	10.3	21.4	27.5	20.2	15.7	4.8	0.1
North Dakota	680,845	11.1	23.2	27.3	18.5	15.3	4.5	0.1
South Dakota	692,849	10.3	22.1	26.0	20.3	15.9	5.3	0.1
Nebraska	1,377,963	9.5	20.2	25.9	21.0	17.1	6.3	-
Kansas	1,880,999	9.1	19.7	25.4	20.5	18.4	6.9	-
Oklahoma	2,396,040	11.0	22.7	28.4	19.3	14.5	4.1	-
Texas	5,824,715	10.5	21.7	29.1	20.2	14.4	4.0	0.1
Montana	537,606	9.2	20.5	24.6	22.0	18.7	5.0	-
Wyoming	225,565	10.0	20.3	26.2	23.6	16.0	3.8	0.1
Colorado	1,035,791	9.2	19.7	25.0	21.3	18.7	6.0	0.1
New Mexico	423,317	12.7	24.0	26.8	18.7	13.8	4.0	-

Source: *Fifteenth Census of the United States: 1930*, Population Vol. III, table 3.

It is a fact, however, that the proportion of aged persons is increasing in all parts of the country, and in the rural

[4] Thompson, W. and Whelpton, P.K., *Estimates of Future Population by States*, National Resources Board, Washington, D. C., December 1934.

FIG. 1 – OPEN COUNTRY POPULATION IN THE DROUGHT AREA 1930



Source: Fifteenth Census of the United States: 1930, Population vol. I, table 4

EACH DOT REPRESENTS 1000 PERSONS

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sections of the Great Plains States the percentage is likely to increase more rapidly than elsewhere. On one hand, the aging of the population in this area can be attributed to the general decline in birth rates which is being felt all over the country, for, as the present generation grows older, there are fewer children to take its place. Again, emigration of any large proportion of the population over a period of time tends to increase the proportion of aged persons in the population remaining in the area. The persons concerned in these migrations during recent years have included families with young children as well as the young single adults who accounted largely for such movements from farms in earlier years.

The possible consequences of migratory movements are strikingly illustrated by the population changes occurring in Montana between 1920 and 1930. The total number of persons living on farms decreased nearly 11 percent, a decrease which could have come about only as the result of considerable migration from the farms in that State. Since the persons moving away were mainly young adults, the proportion of farm operators between 25 and 35 years of age was only one-half as large in 1930 as it had been in 1920, while the percentage of those 65 years old and over had nearly doubled. There is no evidence that other parts of the Great Plains have experienced changes in age composition as extreme as those in Montana during the 10 years immediately before 1930, even though some emigration has been characteristic of all States in this area.

The trend toward an older population can also be seen in the data which relate to men working on farms. Since there have been fewer young men in the last two decades to replace the earlier generation, farm workers on the average represented an older group in 1930 than they did in 1920, and again, an older group in 1920 than in 1910. For instance, only 29 percent of all men working on farms in the United States were 45 or more years of age in 1910, whereas 38 percent were in that age group in 1930. Although the farm workers in the Great Plains States have been consistently younger than the average for the Nation as a whole, and although they still exhibited this distinguishing trait in 1930, their advantage in this respect is noticeably decreasing.

It may be emphasized that any considerable migration out of the 10 States in this area during the next several years may rapidly increase the proportion of old people in the population. In the event of such an increase, readjustments in agricultural practices might become more difficult and the need for public and private assistance might be notably augmented.

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SETTLEMENT OF THE GREAT PLAINS REGION

Unguided Early Settlement

Whether or not any attempt to guide settlement in the Great Plains could have been effective is a question that is now purely academic. Nor is it certain that the information concerning the area which was available in the eighties and nineties could have been used effectively in promoting settlement in some sections and retarding it in others. A carefully formulated policy might have provided for more gradual occupation as new agricultural techniques were developed, and it might have provided that certain portions of the region be withheld from agriculture altogether; but again such provisions might have been impractical.

The fact remains that no studied policy was evolved. Instead, the temper of the times was such that the Government made every effort to divest itself as quickly as possible of the remaining public domain. The pressure was irresistible, and treaties with Indian tribes were amended or abrogated as more and more new territory was demanded. Neither the dangers of the frontier nor the attempts of the United States Army to halt occupation could check the movement—the Oklahoma land rush set forth in dramatic fashion the attitudes which prevailed. From one standpoint the policy of actual settlement, if it can be called a policy, was successful. Rarely, if ever, has so large an area been occupied and brought under cultivation in so short a time. Rarely, if ever, have so many persons attempted settlement under conditions with which they were so wholly unfamiliar. As a large-scale experiment, the conquest of the Plains has few or no parallels.

Speculation, encouraged by the widely diffused ownership of small tracts, contributed greatly to the problems of early settlement. No methods were devised to prevent such perversion of the original intent of the homestead laws; and speculators, both large and small, unquestionably constituted a varied and numerous group. Many settlers came into the Great Plains planning to remain no longer than was necessary to establish title to a parcel of land.

Many of them were single and among the homesteaders were women, old people, excitement seekers, rovers,

> and people from the most widely separated walks of life. Not infrequently the homesteader had never been on a farm previous to his filing. It was a common practice for business men and other town people to file on homesteads.[5]

A study in 12 townships of western North Dakota classifies nearly one-half of the 669 farm operators who had moved out of the territory by 1925 as having come in the first place chiefly for speculative purposes. No more than one-fourth of these speculators had had any farming experience before filing on their homesteads and most of them left the area much more quickly than those persons who had come with the intention of locating permanently.[6]

Settlement Before 1870

Although the persons bound for Oregon and California during the forties crossed over the Great Plains, the settlement of this area did not begin until the decade between 1850 and 1860. Then it occurred in eastern Texas, Kansas, and Nebraska. It is true that population had begun to drift into Texas before this time, but the force of the flow did not reach the plains area of the State until almost 1900. The same can be said of New Mexico.

Like the whole body of westward migrants during this period, the early populations of the region were cosmopolitan. The population of Kansas in 1860, for instance, included persons who were born in every State and in 28 foreign countries.[7] Nevertheless, the Great Plains Area was for the most part originally settled by persons who came from Iowa, Missouri, and States immediately east of them. While 90 percent of the 107,000 persons in Kansas in 1860 had been born in other States or in foreign countries, almost 12 percent were natives of Missouri and more than 50 percent were born no farther east than Ohio. Many of those who were not born in Missouri had lived in that State immediately preceding their move directly across the border into Kansas.

Before 1850 there was very little occupation of the area west of the 96th meridian, a line which runs north and south near the present cities of Lincoln and Beatrice in Nebraska, Topeka and Coffeyville in Kansas, and Gainesville and Houston in Texas.

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[5] Willson, E. A., Hoffsommer, H. C., and Benton, A. H., *Rural Changes in Western North Dakota,* North Dakota Agricultural Experiment Station, Bull. No. 214, Fargo, North Dakota, January 1926.

[6] *Idem.*

[7] *Eighth Census of the United States: 1860,* Population Vol. I.

The few early settlements that did exist in the 10 Great Plains States clung closely to the partially timbered areas and to the valleys of the larger streams. By 1860 the population of these States was 873,000, with almost 70 percent in Texas and more than 92 percent in Texas, Kansas, and New Mexico (table 3). The remaining 8 percent was distributed throughout Colorado, Nebraska, and the Dakota Territory. But if two persons per square mile is taken as a criterion of the beginning of pioneer settlement, then no part of Colorado or the Dakota Territory had really reached the settlement stage by 1860.

Table 3—THE POPULATION OF THE 10 DROUGHT STATES, 1850 TO 1930

State	1850	1860	1870	1880	1890	1900	1910	1920	1930
Total, 10 States	274,139	872,892	1,481,603	3,549,264	6,303,541	8,167,482	11,246,147	13,083,829	15,075,690
Increase in number over preceding decade		598,753	608,711	2,067,661	2,754,277	1,863,941	3,078,665	1,837,682	1,991,861
Percent increase over preceding decade		218	70	140	78	30	38	16	15
Texas	212,592	604,215	818,579	1,591,749	2,235,527	3,048,710	3,896,542	4,663,228	5,824,715
New Mexico	61,547	93,516	91,874	119,565	160,282	195,310	327,301	360,350	423,317
Colorado	-	34,277	39,864	194,327	413,249	539,700	799,024	939,629	1,035,791
Kansas	-	107,206	364,399	996,096	1,428,108	1,470,495	1,690,949	1,769,257	1,880,999
Nebraska	-	28,841	122,993	452,402	1,062,656	1,066,300	1,192,214	1,296,372	1,377,963
North Dakota	-	4,837	14,181	135,177	190,983	319,146	577,056	646,872	680,845
South Dakota					348,600	401,570	583,888	636,547	692,849
Montana	-	-	20,595	39,159	142,924	243,329	376,053	548,889	537,606
Wyoming	-	-	9,118	20,789	62,555	92,531	145,965	194,402	225,565
Oklahoma	-	-	-	-	258,657	790,391	1,657,155	2,028,283	2,396,040

Source: *Fifteenth Census of the United States: 1930*, Population Vol. I, p. 10.

For the 10 years ending in 1870, the United States Census reported marked increases in the populations of the settled areas throughout the region, showing gains of 326 percent in Nebraska, 240 percent in Kansas, 193 percent in Dakota Territory, 36 percent in Texas, and 16 percent in Colorado (table 4).

Table 4—PERCENT INCREASE OF POPULATION PER DECADE IN 10 DROUGHT STATES, 1860 TO 1920

State	Percent Increase of Population					
	1860 to 1870	1870 to 1880	1880 to 1890	1890 to 1900	1900 to 1910	1910 to 1920
North Dakota	193.2	853.2	299.2	67.1	80.8	12.1
South Dakota				15.2	45.4	9.0
Nebraska	326.5	267.8	134.9	0.3	11.8	8.7
Kansas	239.9	173.4	43.4	3.0	15.0	4.6
Oklahoma	-	-	-	205.6	109.7	22.4
Texas	35.5	94.5	40.4	36.4	27.8	19.7
Montana	-	90.1	265.0	70.3	54.5	46.0
Wyoming	-	128.0	200.9	47.9	57.7	33.2
Colorado	16.3	387.5	112.7	30.6	48.0	17.6
New Mexico	-1.8	30.1	34.1	21.9	67.6	10.1

Source: *Fifteenth Census of the United States: 1930*, Population Vol. I, p. 12.

But since the increase in population in Texas, New Mexico, and Colorado for the decade was approximately equal to the number of persons added by the excess of births over deaths, these three States evidently had little or no net inward migration

for the census period. People were, however, flowing rapidly into Kansas, Nebraska, and the Dakota Territory. Total population in these States jumped from 141,000 in 1860 to 502,000 in 1870, although the area occupied by pioneer settlement expanded very little during the period (figure 2 and table 3).

Settlement From 1870 to 1910

From 1870 to 1880, this region was to experience still further and more rapid settlement. The population of Texas went beyond a million and a half; that of Kansas approximated a million; and that of Nebraska, a half million. Colorado had nearly 200,000 people, the Dakotas more than 135,000, and New Mexico almost 120,000. Population, although still small in both States, almost doubled in Montana and more than doubled in Wyoming (table 3).

During this decade there was also a marked expansion of the area of settlement. The western boundary of the main region containing a population of two or more persons per square mile closely approached the western boundaries of Kansas and southwest Nebraska, and moved to the center of Texas. At the same time, the various scattered areas having a population of this density more than doubled in northern New Mexico, central Colorado, southeastern North Dakota, southeastern Wyoming, and western Montana (figure 2). Considering the Great Plains States, with the single exception of Oklahoma, population increased 2,068,000, almost 140 percent, and the area of settlement more than doubled in size. Nearly all of Kansas, one-half of the States of Nebraska, Texas, and Colorado, and one-third of New Mexico were settled by farming population by the end of the decade.

Between 1880 and 1890 geographic occupation was practically completed in Kansas and Nebraska and was spreading rapidly in all other States of the region. Frontier settlement pushed nearly halfway across the Dakotas, spread over most of Colorado, and rapidly covered western and central Montana. The population gained 265 percent in Montana, 201 percent in Wyoming, and 299 percent in Dakota Territory (table 4). A small section of east central Oklahoma which was opened for settlement near the end of the decade was occupied by 259,000 persons at the beginning of 1890 (table 3). Thus, all the States in the region were in the process of settlement at the close of this 10-year period. The total population had more than quadrupled between 1870 and 1890 (table 3).

In no decade following 1890 did the Great Plains Area gain so greatly in percent of population or in percent of occupied territory as it had done in the 10 years immediately preceding that date. From 1890 to 1900, population increased only 1,864,000,

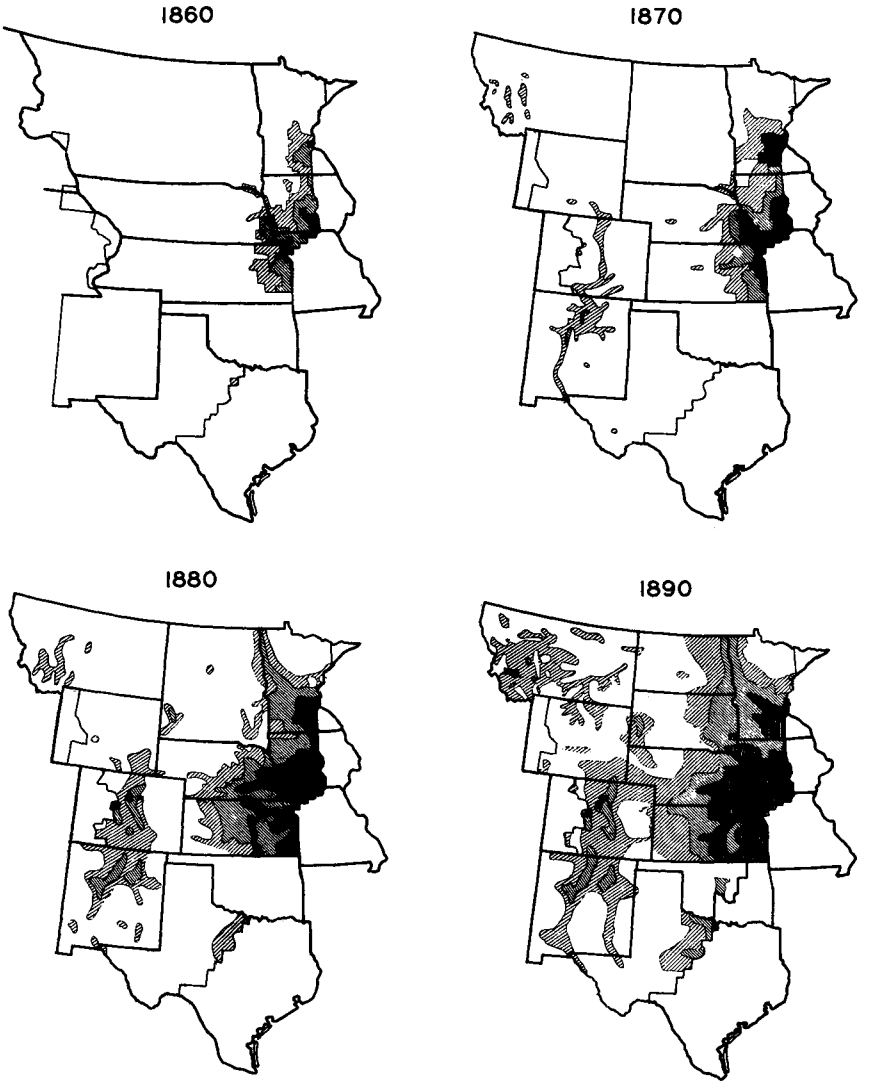
or 30 percent (table 3). There was, however, much movement within the region. Droughts occurred during this period and speculative values as well as prices collapsed. The remainder of Oklahoma was opened for settlement, and the opportunities of a pioneer country were offered to many who were already feeling the pressure of economic distress. Numerous homesteads were abandoned, and many persons who had settled only recently in western Nebraska, western Kansas, Montana, Wyoming, Colorado, and New Mexico shifted to other parts. The western sections of Kansas and Nebraska and the drier portions of other States suffered net losses in 114 counties, and some areas were abandoned altogether. This was the time when the population of Omaha, Nebraska, declined from 140,000 to 103,000. Increases in population as shown for the various States of the area clearly reflect the influences at work; for while Nebraska and Kansas reported increases of only 0.3 and 3.0 percent respectively, Oklahoma gained 206 percent, Montana 70 percent, and North Dakota 67 percent (table 4).

From 1900 to 1910 total population in the 10 States increased 3,079,000, nearly 38 percent. As soon as the effects of the adverse conditions of the previous decade had worn off, renewed immigration flowed into areas which had reported emigration prior to 1900. Consequently, the area west of the 100th meridian rapidly increased its numbers between 1900 and 1910, but population changes to the east of this line were less consistent. Oklahoma's increase in population for this period was 110 percent; North Dakota's, 81 percent; and Wyoming's, 58 percent. Except in their eastern fringes where there were either no gains at all or even some losses as a result of migration, the Dakotas as a whole reported a continued influx of population. But from southeastern Nebraska and eastern Kansas there was, with little exception, a considerable exodus. To what extent persons who had returned to eastern counties of these States during the nineties were represented among the migrants of this decade cannot be determined, but undoubtedly there were many such who were again venturing west.

Although population continued to increase in the region as a whole until 1930, very little new territory was occupied after 1910 except in Wyoming and eastern Montana (figure 2). As practically all the territory settled before 1870 lay east of the 100th meridian and as the larger portion of the area lying between this meridian and the Continental Divide was occupied by 1910, it can be said, roughly, that the Great Plains were settled in the 40 years between 1870 and 1910.

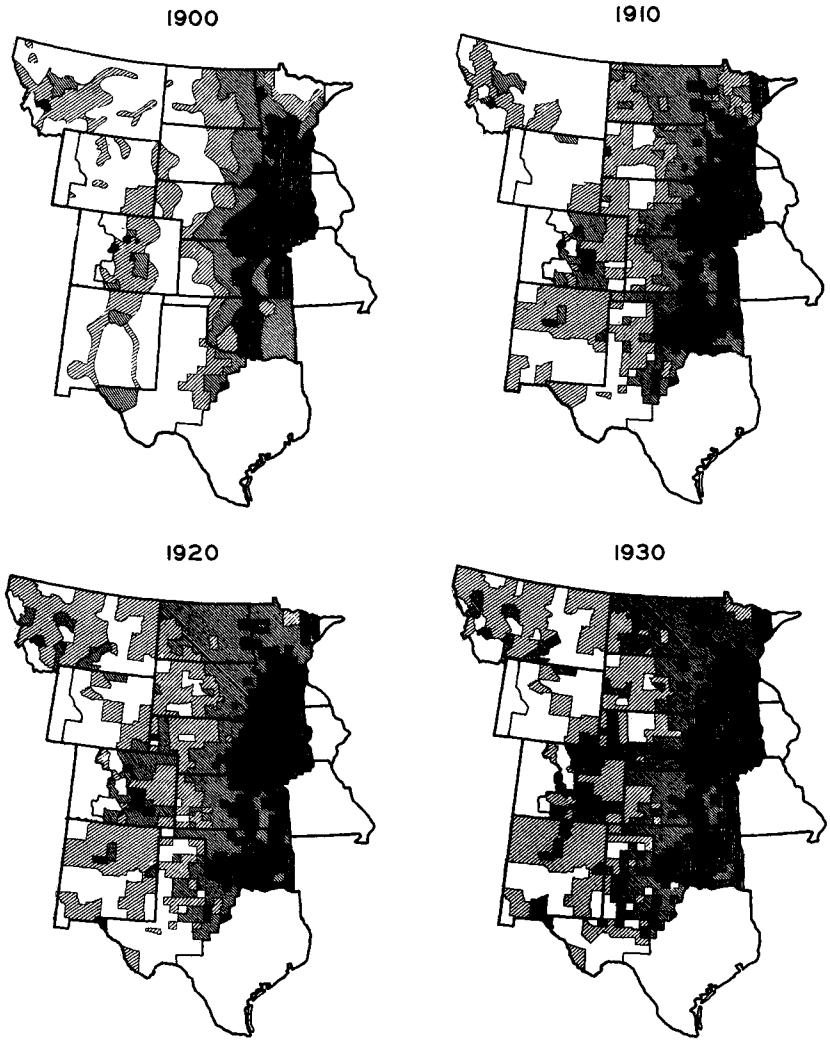
A map showing the progress of settlement decade by decade would reveal population flowing steadily westward in 1870, the two main currents entering eastern Texas and eastern Kansas and Nebraska with a thin stream coming up from the south into

FIG. 2 – DENSITY OF POPULATION
IN THE DROUGHT AREA
1860 – 1930



SOURCE: ATLAS OF THE HISTORICAL GEOGRAPHY OF THE UNITED STATES,
PUBLISHED JOINTLY BY THE CARNEGIE INSTITUTION OF WASHINGTON, D.C.
AND THE AMERICAN GEOGRAPHICAL SOCIETY OF NEW YORK

FIG. 2 – DENSITY OF POPULATION
IN THE DROUGHT AREA
1860 – 1930 – Continued



central New Mexico and Colorado. By 1880 the tide westward had moved well across the States of Kansas and Nebraska in the north, as far west as central Texas in the south, and had entered the Dakota Territory. The stream from the south had widened into a lake spreading over north central New Mexico and central Colorado and reaching into southeast Wyoming. By 1890 the westward tide had completely covered Kansas and most of Nebraska, had reached the plains section of Texas, and had moved almost halfway across the Dakotas, connecting in northern Colorado and southern Wyoming with the populations already settled there. The areas of settlement in New Mexico and Colorado had expanded in all directions, and something like a great irregular pool of population had appeared in western and central Montana (figure 2).

Oklahoma, by reason of its Indian occupation, was the one State in this group which still remained largely unsettled by 1890. By 1900 the tide had pushed a little farther west in Texas and had covered all of Oklahoma except the "panhandle" or "strip"; but it had receded somewhat in the western parts of Kansas and Nebraska, in the Dakotas, and in the eastern parts of Colorado and New Mexico. By 1910 practically all the plains section of Texas, all of northern New Mexico, all of Oklahoma, and most of Colorado were covered, while the areas which had lost population during the previous decade were once more being filled in.

Sources of Early Population

While much of the increase in the population of the Great Plains States between 1870 and 1910 represented children born into families residing in this region, no other combination of

Table 5—PERCENT OF THE TOTAL NATIVE WHITE POPULATION OF 10 DROUGHT STATES BORN OUTSIDE THE STATE, 1870, 1890, AND 1910

State	1870	1890	1910
North Dakota	84.2	56.5	52.9
South Dakota		64.9	54.5
Nebraska	79.8	63.7	40.8
Kansas	80.2	61.6	46.4
Oklahoma	-	97.8	71.2
Texas	49.5	37.2	28.0
Montana	87.1	75.0	66.1
Wyoming	95.2	81.0	73.1
Colorado	80.8	75.1	64.6
New Mexico	3.1	18.8	41.5

Source: Galpin, C. J. and Manny, T. B., *Interstate Migrations Among the Native White Population as Indicated by Differences Between State of Birth and State of Residence*, U. S. Department of Agriculture, Bureau of Agricultural Economics, October 1934, table 2, p. 7.

10 States could be found in the whole country which would show for that period a consistently greater percentage of total population born elsewhere (table 5).

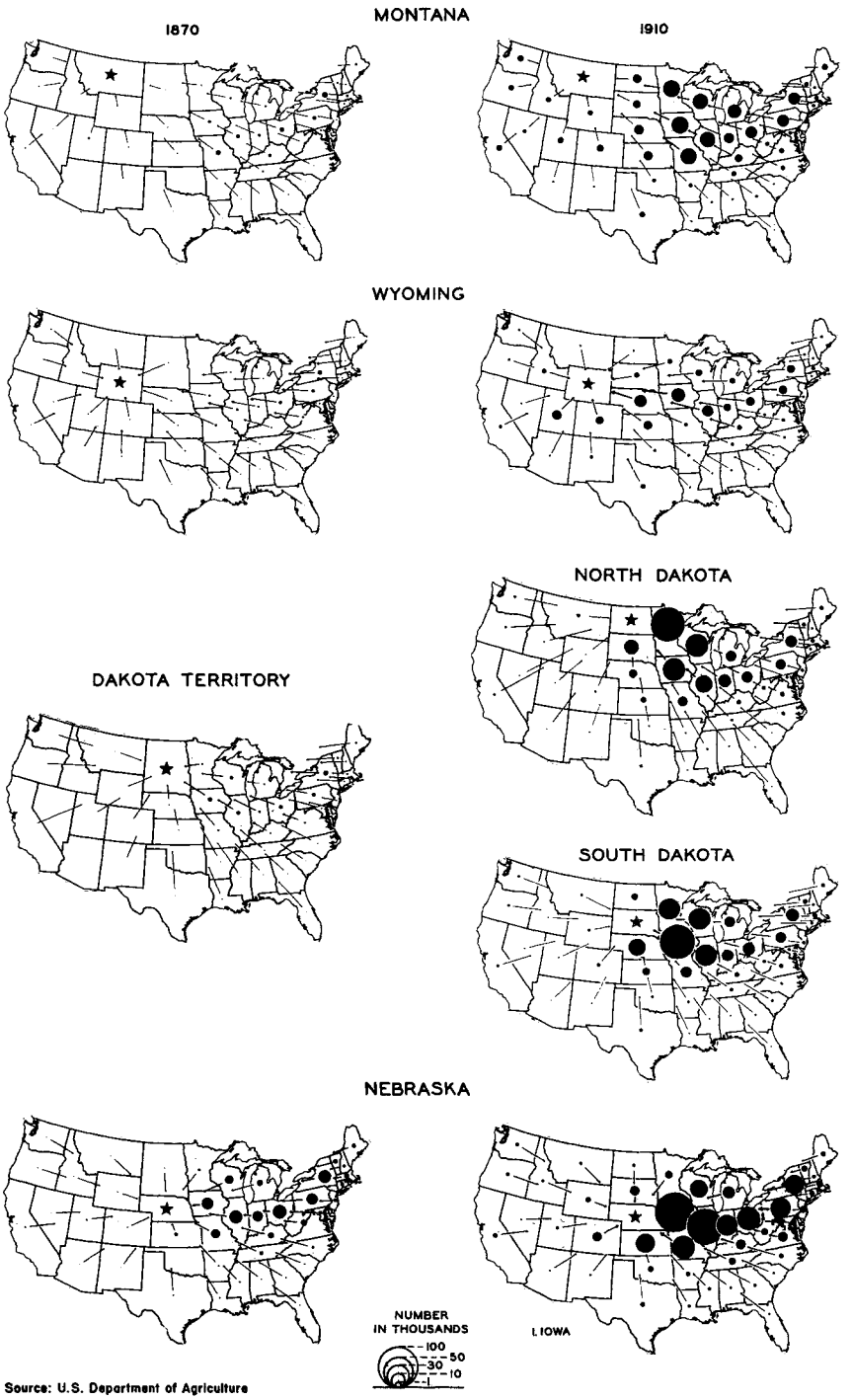
Since families moving into the Great Plains Region have

tended to bring with them the farming practices of other more humid areas, and since maladjustments of population to land have resulted, the previous locations of such families are of considerable importance.

The vast majority of the migrants came from an area roughly bounded on the west by the eastern limits of the Great Plains States and on the east by the Appalachian-Allegheny Mountains, a portion of the country dominated by medium-sized farms and a row-crop agriculture. The 10 States of the Nation which have contributed the greatest numbers of their native born to the 10 Great Plains States are Missouri, Iowa, Illinois, Ohio, Kentucky, Tennessee, Arkansas, Mississippi, Alabama, and Georgia (figure 3).

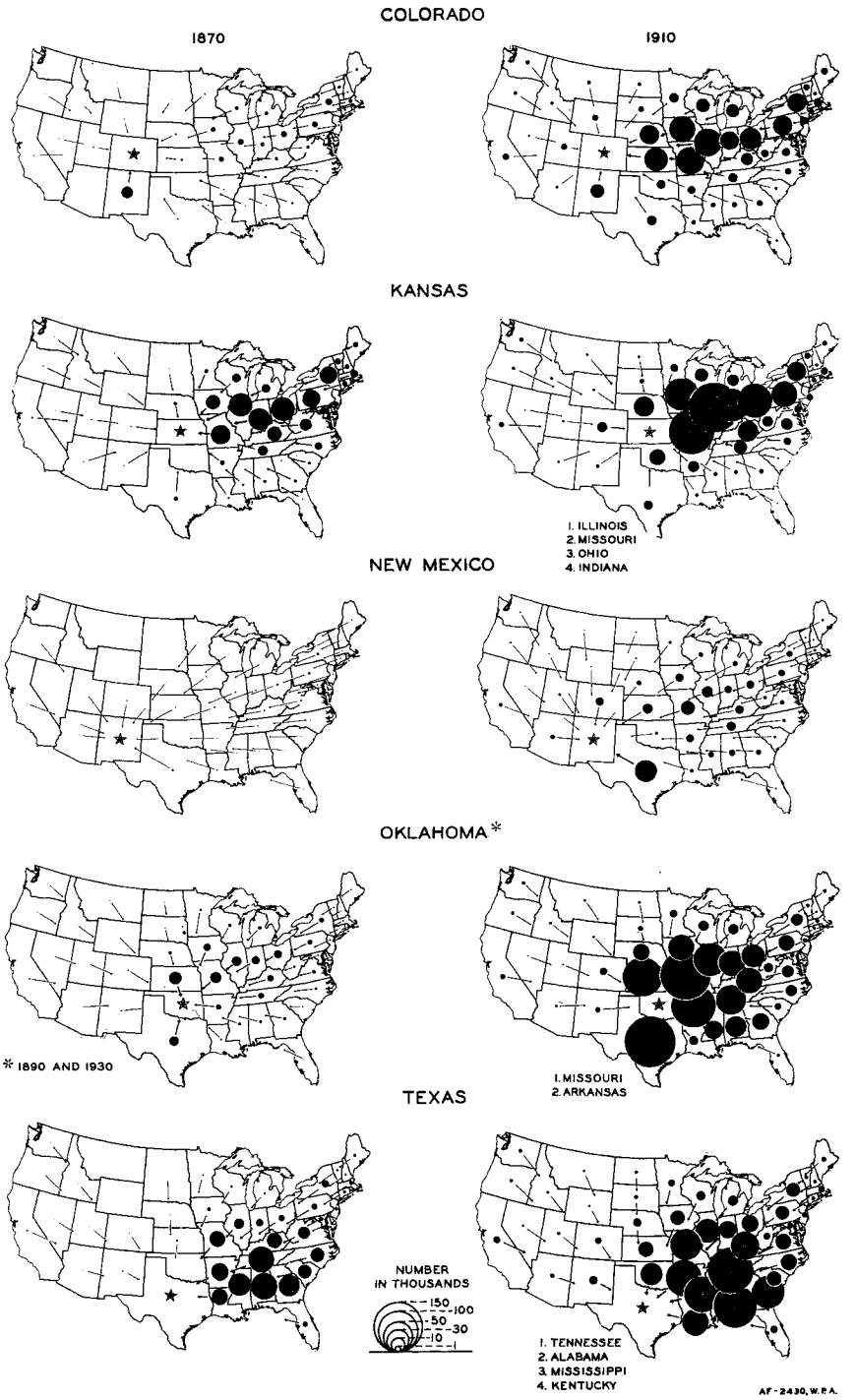
Fig. 3 - STATE OF BIRTH OF NATIVE-BORN WHITE MIGRANTS RESIDING IN 10 DROUGHT STATES

1870 AND 1910



Source: U.S. Department of Agriculture

FIG. 3 - STATE OF BIRTH OF NATIVE-BORN WHITE MIGRANTS RESIDING IN 10 DROUGHT STATES 1870 AND 1910 - Continued



THE FARM POPULATION SINCE 1910

Although there has been much moving about, with population losses reported in some areas, the number of people on farms in the Great Plains States on January 1, 1935, was almost exactly what it had been on January 1, 1930, on January 1, 1920, and on January 1, 1910 (table 6). Between 1910 and 1935, the estimated increase in farm population for these 10 States was only 45,000, which was less than one-third the number of children born to farm women in this area during any one normal year of the period.

Table 6—FARM POPULATION OF 10 DROUGHT STATES, 1910 TO 1935

State	1910 Estimated[a] January 1	1920 Census[a] January 1	1930 Estimated[b] January 1	1935 Census[c] January 1	Percent Change		
					1910 to 1920	1920 to 1930	1930 to 1935
Total	6,067,119	6,093,862	6,117,300	6,111,835	0.4	0.4	-0.1
North Dakota	369,212	394,500	394,300	385,614	6.8	-0.1	-2.2
South Dakota	370,820	362,221	387,300	358,204	-2.3	6.9	-7.5
Nebraska	631,467	584,172	581,300	580,694	-7.5	-0.5	-0.1
Kansas	830,197	737,377	701,900	703,743	-11.2	-4.8	0.3
Oklahoma	1,022,016	1,017,327	1,014,300	1,015,562	-0.5	-0.3	0.1
Texas	2,293,474	2,277,773	2,329,700	2,332,693	-0.7	2.3	0.1
Montana	111,273	225,667	201,600	195,262	102.8	-10.7	-3.1
Wyoming	52,264	67,306	72,100	74,507	28.8	7.1	3.3
Colorado	202,857	266,073	278,600	276,198	31.2	4.7	-0.9
New Mexico	183,539	161,446	156,300	189,358	-12.0	-3.2	21.2

[a] Truesdell, Leon E., *Farm Population of the United States*, U. S. Department of Commerce, Bureau of the Census, 1926, table 8, p. 45.

[b] By Bureau of Agricultural Economics on basis of *Fifteenth Census of the United States*, taken as of April 15, 1930.

[c] *United States Census of Agriculture: 1935*. State Bulletins. Second Series. table 2.

Since 1920 the region's farm population has not varied by more than 5 percent in any year.[8] Between 1920 and 1930 changes were irregular, but no large increases or decreases were reported. Small losses occurred during 1928 and 1929 and were continued through 1930, but during 1931 and 1932 slight gains were made. The number of people living on farms declined during 1933 in North Dakota, Montana, Colorado, Oklahoma, and Texas. In 1934, farm population decreased in each of the 10 Great Plains States. By January 1, 1935, therefore, migration from farms had largely offset the increases which occurred between 1931 and 1933, and the number of farm people in the region as a whole

[8] Data concerning annual changes in the farm population, natural increase, and migration are based on information in the files of the Bureau of Agricultural Economics.

again approximated the 1930 figure, the actual change being less than one-tenth of 1 percent. During 1935 the further losses in each of these 10 States, except Nebraska, were such that total farm population on January 1, 1936, was nearly 2 percent less than it had been the previous year. It seems likely, too, that there were continued decreases during 1936.

Although the farm population of the region as a whole showed little change between 1930 and 1935, there were striking changes in some parts of the area. Some gains were made in the western parts of Kansas and Nebraska and in several counties of western Oklahoma, southwestern Wyoming, and that section of North Dakota which lies south of the Missouri River, but in general the drier portions of the Great Plains Area reported losses in numbers. Decreases in farm population were notable in the Panhandle of Oklahoma and even more so in the cotton-growing area which embraces southwestern Oklahoma and the adjoining eastern margin of the Great Plains of Texas, but the change in the wheat-growing section of the Texas Panhandle was slight. The farms showed marked losses in northwestern North Dakota and northeastern Montana, in central and eastern South Dakota, and in the irrigated Arkansas and South Platte Valleys of Colorado. Little change was reported for western Kansas and Nebraska and on the plains of western Colorado, but the number of persons on farms was considerably augmented in the Rio Grande Valley and in the mountainous portion of New Mexico.

As a general rule, the drier parts of all the Great Plains States have been losing some farm population while the more humid parts have been reporting slight gains. The areas of severe drought distress, as measured by amounts of Federal aid per capita between 1933 and 1936, showed decreases in farm population.[9] In the 137 counties in which Federal aid amounted to $175 or more per capita, the farm population decreased by 4.5 percent between 1930 and 1935, but in the 179 counties in which such aid was less than $58 per capita, it increased by 4.4 percent (table 9, page 52). The farms suffered the greatest loss in population, 5.1 percent, in the 148 counties in which per capita aid ranged from $119 to $175. Whether or not high grants and benefits tended to retard or increase the outward migration of persons living on farms cannot be tested by these figures, but it does appear to be significant that the greatest decline did not occur in areas with the most Federal aid per capita.

Since the Great Plains States have birth rates which are consistently high—among the highest in the entire country—the fact that farm population in this entire area has remained

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[9] See Cronin, F. D. and Beers, H. W., *Areas of Intense Drought Distress, 1930-1936*, Research Bulletin, Series V, No. 1, Division of Social Research, Works Progress Administration.

at a stationary level evidences a considerable movement away from farms. Between 1910 and 1935, the number of babies born to farm women in this area exceeded the number of farm persons dying by nearly 100,000 per year; and, had there been no migration to or from farms, total farm population would have increased to this extent. But the influx of population had been so great during the first wave of rapid settlement that within a comparatively short time many parts had acquired as many people as they were able to absorb. Hence the children and grandchildren of the early settlers, reaching maturity and seeking economic opportunities, were often forced to migrate. As a matter of fact, net migration from the farms in the Great Plains was approximately 2½ million persons from 1910 to 1935. Some of these persons went to nearby towns and villages, but others became the human "exports" which this area has been contributing to the remainder of the United States in increasing numbers during recent years.

From 1930 to 1935 there was a natural increase of 490,000 in the farm population of the area, while the number of people moving to farms during these 5 years and still remaining there on January 1, 1935, was 356,000. The total increases would, therefore, have been 846,000 if there had been no migration away from farms; but since there was a decrease of about 6,000 persons (table 6), it can be estimated that approximately 852,000 persons had moved away during this period and had not returned by January 1, 1935. It follows that the outgoing migration exceeded the incoming by nearly half a million persons. This was less than half the number who moved away from farms in the preceding 10 years of urban prosperity, 1920 to 1930; during those years, the net movement away from farms amounted to almost 1,200,000. Since many of the persons who left the farms went to nearby towns and cities, it does not follow that there were corresponding decreases in the total population of these States.

More than half the migration away from farms as shown for the entire Great Plains Area took place in Texas and Oklahoma where the bulk of the movement to and from farms since 1930 has occurred. In New Mexico, on the other hand, the net movement has reflected a steady trend to the farms from towns and cities and from farms in other States.

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AN AREA OF RAPIDLY CHANGING POPULATION

Many Settlers Did Not Stay

From the time of the earliest settlement there has been much moving about in the region of the Great Plains. The tie which bound the settler to the land was not very strong at best; and unfavorable conditions—droughts, grasshoppers, or personal misfortune—often proved too much for him. So long as he had only a small capital investment, so long as there was another free quarter section of open land beckoning him on, the incentives to remain where he was were few. Experience furnished posterity with the old quip concerning the Homestead Act: "The Government wagered a quarter section of land that the settler could not live on it for 5 consecutive years—and the Government frequently won."

Although it is not possible to measure with complete accuracy the amount of movement, it is clear that a considerable turnover of population has always been characteristic of this area (figures 4-8). Even in modern colonization projects, where settlers are carefully selected and are provided with the best available equipment and techniques, much turnover in personnel is to be expected; and in the settlement of the Great Plains many conditions were definitely against the settler. More than 3,000,000 original homestead entries were filed between 1863 and 1936; but only 58 percent of them were finally completed, 41 percent being canceled or relinquished. The remaining 1 percent were still pending or were otherwise uncompleted early in December 1936.[10]

Even during the period of settlement, many persons were leaving. In Montana 28,000 original homestead entries were filed between 1920 and 1930, but at the end of the decade there were 24,000 fewer persons living on farms in this State than in 1920. For this same period, Colorado listed 24,000 homestead entries, but the farm population increased by only 13,000. In New Mexico farm population decreased by 5,000 although there were 28,000 homestead entries, and in Wyoming only 5,000 people were added to the farm rolls although homestead entries numbered 37,000. Since it is known that many of the persons who filed on homesteads in these four States from 1920 to 1930 were

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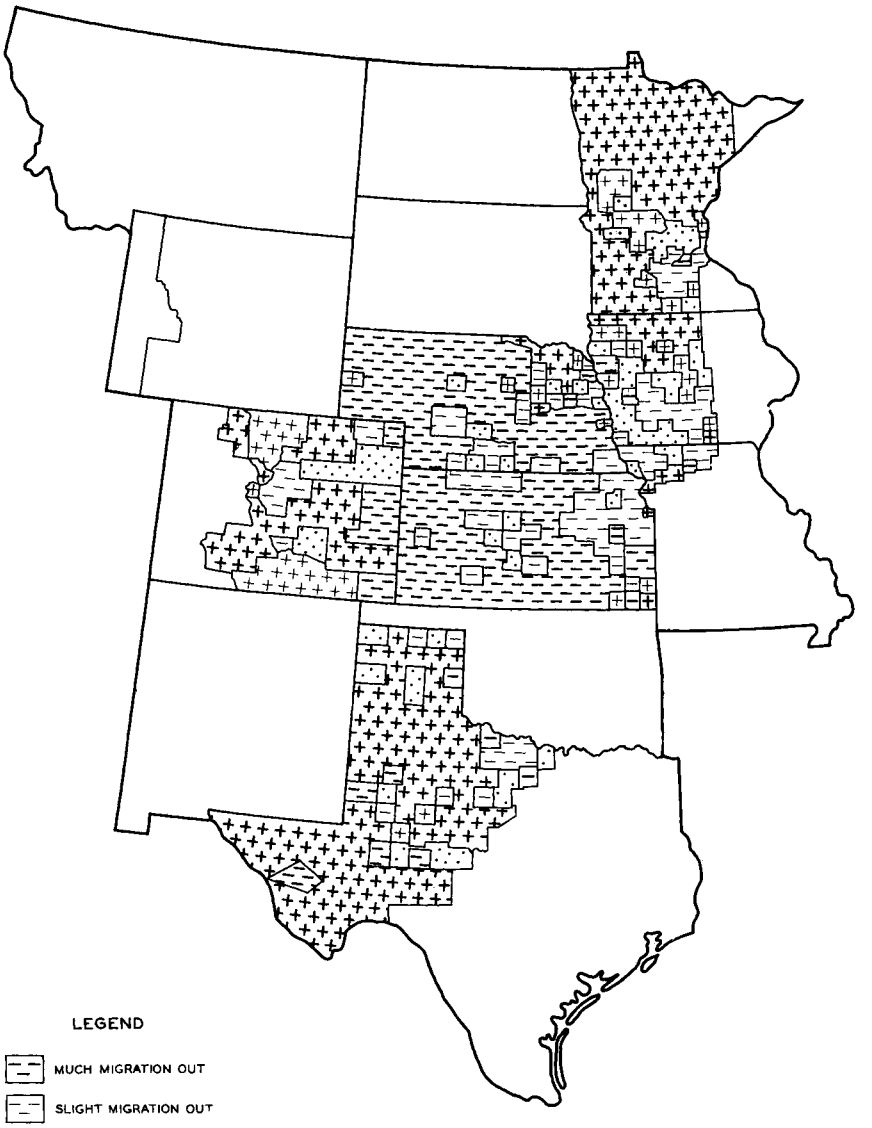
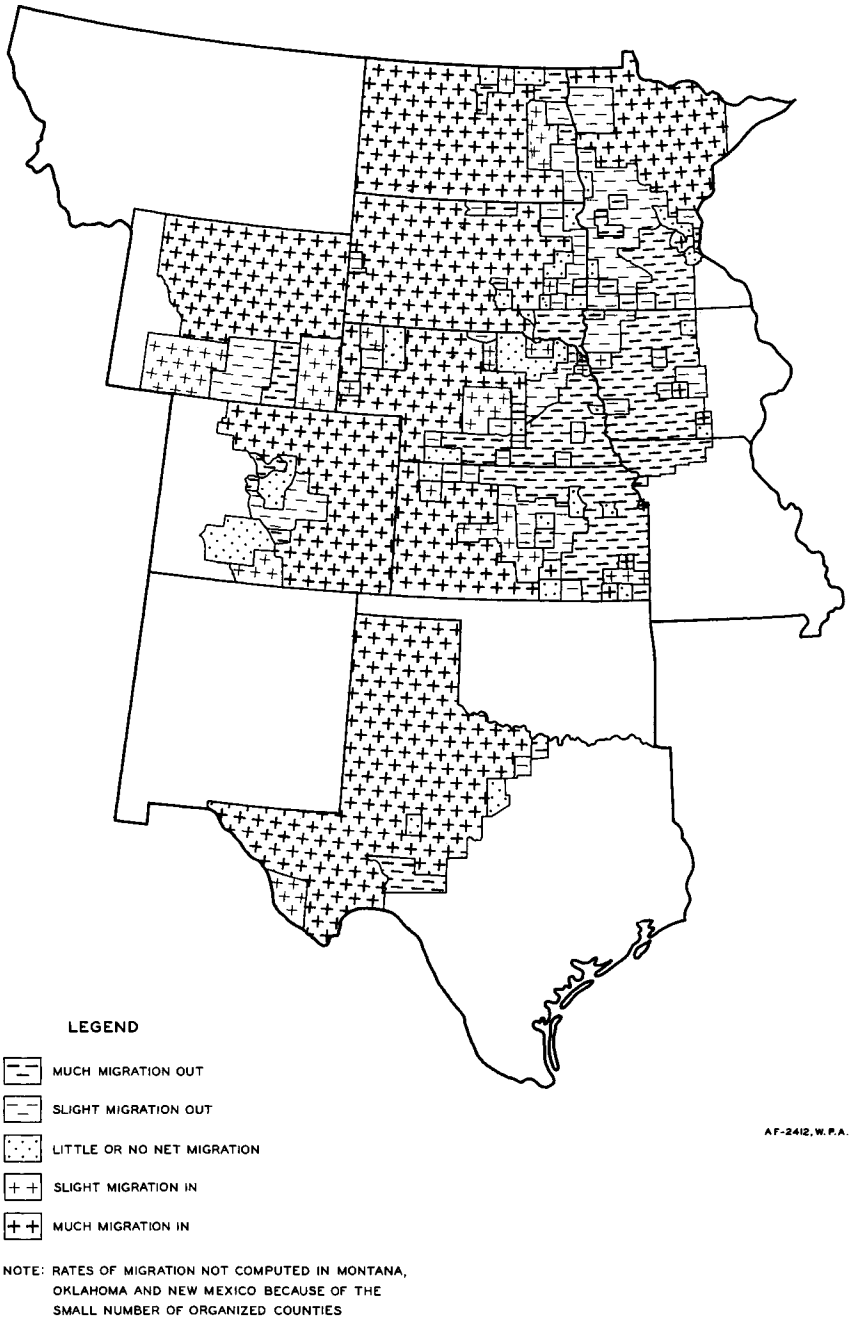
[10] Information supplied by General Land Office.

FIG. 4 - NET MIGRATION OF TOTAL POPULATION IN THE DROUGHT AREA 1890-1900



NOTE: RATES OF MIGRATION NOT COMPUTED IN MONTANA, NORTH DAKOTA, SOUTH DAKOTA, WYOMING, NEW MEXICO AND OKLAHOMA BECAUSE OF THE SMALL NUMBER OF ORGANIZED COUNTIES

FIG. 5 – NET MIGRATION OF TOTAL POPULATION IN THE DROUGHT AREA 1900–1910



NOTE: RATES OF MIGRATION NOT COMPUTED IN MONTANA, OKLAHOMA AND NEW MEXICO BECAUSE OF THE SMALL NUMBER OF ORGANIZED COUNTIES

FIG. 6 – NET MIGRATION OF TOTAL POPULATION IN THE DROUGHT AREA 1910 – 1920

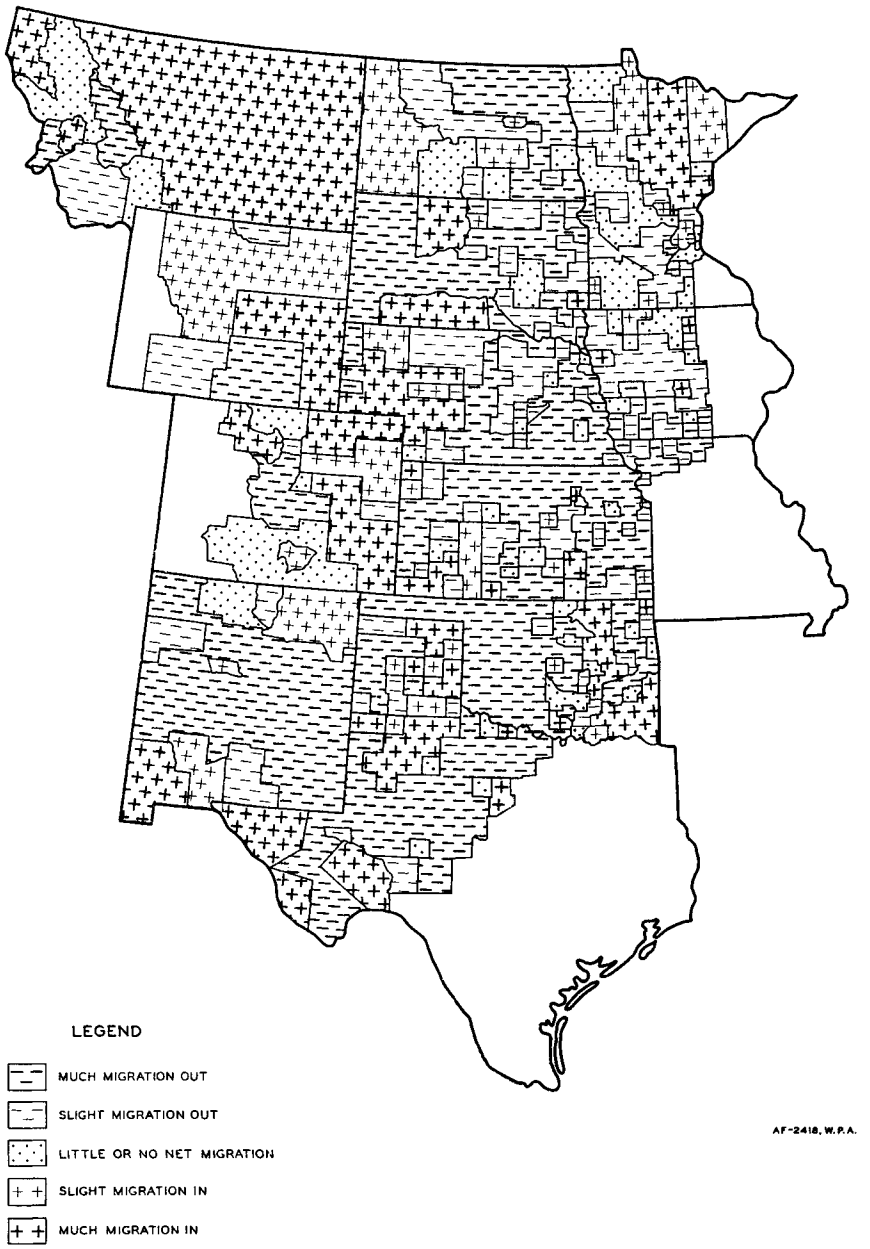
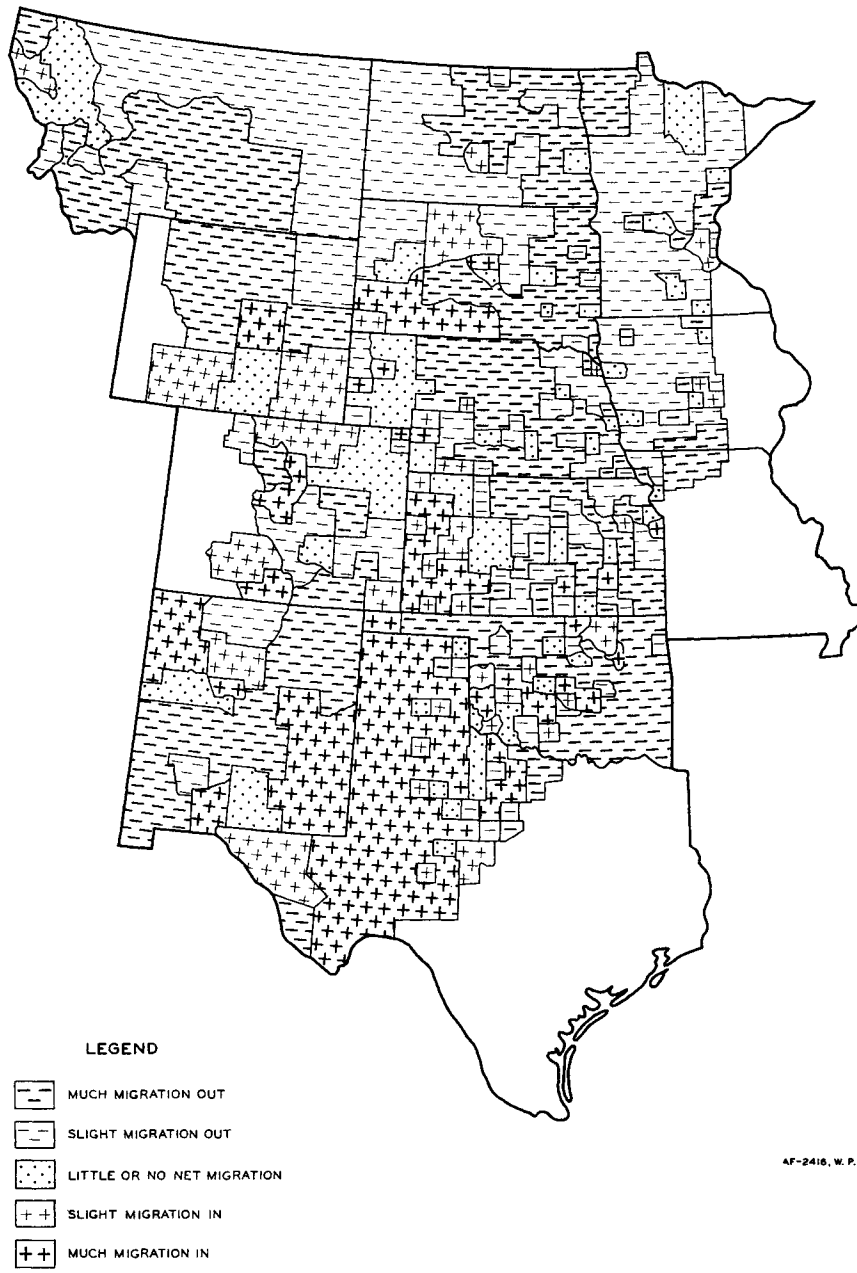


FIG. 7 – NET MIGRATION OF TOTAL POPULATION IN THE DROUGHT AREA 1920 – 1930



not newcomers to the farms of the region, there was obviously much shifting about within the area. Yet there was also an invasion of new settlers on the western edge of the Great Plains as the older settlers were leaving.

That many of the early settlers did not remain long where they had first established themselves and that later settlers also showed much instability is demonstrated by a recent study of turnover of farm population in Kansas.[11] This study disclosed that out of all the farmers who were living in western Kansas in 1895, two-thirds had moved away within 10 years and only one-tenth remained in the same township or had a son living there in 1935. Of the total number of farmers in the area in 1905, only two-fifths still remained at the end of 10 years; the same ratio held also for the 10-year periods beginning in 1915 and in 1920. Farmers who were in western Kansas in 1925 were apparently more settled, as only one-half of them had withdrawn at the end of 10 years.

In sample areas in eastern Kansas, the records were carried back to 1860. Two-thirds of the farm operators who were in this part of the State in 1860 had moved away by 1865. Somewhat greater stability was displayed in the succeeding years, as one-half of those who were there in 1870 still remained in 1875. The two 5-year periods which followed told the same story. One-half of the farm operators resident in 1875 were no longer there in 1880; and of the operators there in 1880, one-half had gone by 1885. After 1885, when eastern Kansas had passed beyond the frontier or settlement stage, the changes in residence were somewhat less frequent, 10 years usually elapsing before one-half of the total number of farm operators recorded at the beginning of a period had left. There has been some further evidence of more persistent residence in later years, but even by 1935 only two-thirds of the farm operators present 5 years before still remained in the same township or had a son living there.

Results for other parts of Kansas were similar. The author of the study concludes that "in all parts of the State the original or early settlers and their descendents constitute an extremely small proportion of the later or contemporary community." In all but one of the areas studied, "8 percent is the highest representation the settlers of 1860 held 75 years later."

Movement Since 1930

The continued movement among the farm population of the drought States has not lessened throughout the depression years of 1930

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[11] Malin, James C., "The Turnover of Farm Population in Kansas," *The Kansas Historical Quarterly*, Vol. IV, No. 4, November 1935, pp. 339-372.

to 1935 (figure 8). During these years 1,600,000 persons moved from towns and cities to farms in this region, but, on the other hand, 2,000,000 left the farms to go to towns and cities. In addition, approximately 100,000 persons moved from farms in these 10 States to farms in other States.[12] In the first years of the depression, however, there was a slowing down of the regular movement from the country to the town. In 1931, for instance, South Dakota, Nebraska, Oklahoma, Colorado, and New Mexico reported more people moving to farms than from farms; in Texas, the same condition obtained in 1932. In spite of these exceptions, however, the net movement was from farms to towns and cities.

Nevertheless, nearly 6 percent of the 6,000,000 farm people in the 10 Great Plains States in 1935 did not live on farms in 1930.[13] This movement from towns and cities to farms was most pronounced in New Mexico, Wyoming, and Colorado; it was least marked in Texas, Nebraska, and the Dakotas. In North and South Dakota fewer than 4 percent of the 1935 farm population had moved to farms after 1930, such persons averaging somewhat more than 200 per county in North Dakota and slightly less than 200 in South Dakota. In New Mexico, however, the number of people who moved to farms after 1930 was 800 per county, and in the cotton-growing sections of the staked plains[14] the numbers per county ranged from 500 to 1,000.

Substantial numbers of such newcomers were also reported in the irrigated districts, especially along the Arkansas, South Platte, North Platte, Yellowstone, and Milk Rivers. In most of the dry-land farming counties from the Oklahoma Panhandle north to the Canadian line, the Census of Agriculture taken at the beginning of 1935 showed an average per county of 200 to 500 persons who had not been there 5 years previously. The result of these various movements was an increase of farm population in some areas and a decrease in others. Although this movement to farms was comparatively less in the Great Plains States than in the remainder of the country, 25 Great Plains counties reported a relatively heavy migration away from farms, the number of persons moving to farms being equal to one-seventh of the number living on farms in 1930.

The proportions of single persons among migrants were greater in the Dakotas, Nebraska, Kansas, and Montana than in any other States in the area or in the remainder of the United States.

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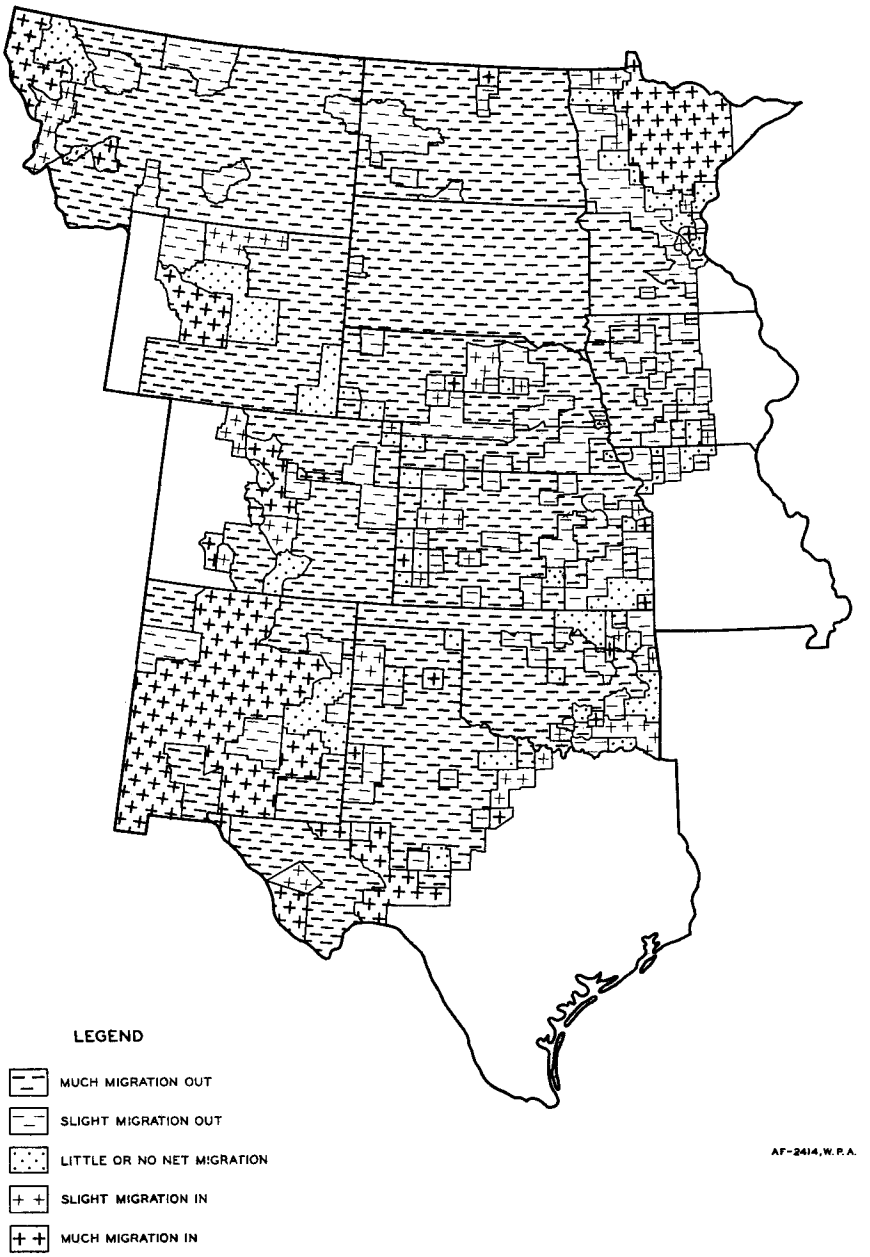
[12] Based on data in the files of the Bureau of Agricultural Economics.

[13] *United States Census of Agriculture: 1935*, State Bulletins, Second Series, table 2.

[14] A plateau in western Texas between the Canadian River Valley and midland Texas, extending to eastern New Mexico.

FIG. 8 – NET MIGRATION OF FARM POPULATION IN THE DROUGHT AREA 1930 – 1935



In Oklahoma, Texas, New Mexico, Wyoming, and Colorado the proportions of families among the migrants were comparable to the proportions of families shown as part of similar migrations in other sections of the Nation. In any case, the number of persons who had left home before 1929 and who had returned during the depression was very small.

A recent study in South Dakota yields the information that less than 2 percent of persons leaving home prior to 1929 had returned by 1935. It likewise shows that persons and families who moved to farms came from villages much more frequently than from cities. Although each of the counties included in the study reported that more people moved away than moved in, persons came into each of these counties from other counties in the State as well as from other States. There was also some movement to the open country from villages and cities.[15]

From 1930 to 1936 there was also a slowing down of the growth of the total population throughout this area.[16] Four of the States, South Dakota, Nebraska, Montana, and New Mexico, lost in total numbers during these years. North Dakota, Kansas, Wyoming, and Texas each sent more persons to other States than it received in return, but the excess of births over deaths was sufficient to maintain the numbers or to insure them small continued gains in total population. With rates of natural increase substantially above those for the United States as a whole, the Great Plains would have increased its population by 5 to 10 percent between 1930 and 1936 had there been no inward or outward migration; and only an extensive movement from these States to others can account for the decreases in total population in some States as well as for the fact that the reported increases are so small.

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[15] Unpublished tables in the files of the Bureau of Agricultural Economics.

[16] *Estimated Population of the United States by Six-Month Periods From January 1, 1930, to July 1, 1936*, released by the United States Bureau of the Census, January 21, 1937.

COMPARISON OF MIGRATION INTO AND OUT OF THE AREA

Between 1900 and 1910, Kansas and Texas neither gained nor lost as a result of migration, but in Nebraska persons moving away exceeded those moving in.[17] The other seven States continued to report an excess of incoming settlers. By 1910, however, the inward flow had largely ceased throughout the entire area; gains by migration were the exception, and losses attributable to this cause were more frequent. Some increases did occur in Montana and Wyoming during this decade under the stimulus of the World War, but in North Dakota, South Dakota, Nebraska, Kansas, and New Mexico, the tide was moving outward.

From 1920 to 1930, only Texas could show an excess of incoming persons, while Colorado, New Mexico, Oklahoma, and Wyoming reported no changes in population resulting from migration. In five States, North Dakota, South Dakota, Nebraska, Kansas, and Montana, emigration definitely exceeded immigration; and in Montana, the movement was so extensive that there were 11,000 fewer inhabitants in 1930 than there had been 10 years before.

Throughout the whole story of western pioneering it has not been uncommon to find the settlers of one locality sending their offspring on to other sections within the next generation; and the 10 Great Plains States are no exception to the general rule. Kansas and Nebraska had ceased to attract migrants in large numbers even before 1900. As a matter of fact, the people who left these two States in the nineties actually outnumbered new arrivals, although there was little resulting change in total populations, the natural increase being sufficient to offset the loss. Undoubtedly, the drought occurring in the early years of this decade played a major part in encouraging emigration, although it may also be that the drought only accentuated the change from a rapidly growing to a relatively stable population which would normally have set in after the first wave of settlement. Nebraska and Kansas were settled earlier than the other States in this region except Texas, and it is only to be expected that they would be first to show a cessation of the rapid rate of growth.

During and immediately after the first years of settlement, most of the persons living in the 10 States were, of course,

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[17] Based on comparison of rates of increase as reported by the census and estimated rates of natural increase. See appendix A for discussion of method.

recruited from other parts of the Nation or from foreign countries. But as the various States in this area became older, persons born and reared within their boundaries began to replace the earlier settlers who had died or moved away. Since 1900, each successive census of population in Nebraska has reported a smaller number of persons not native to the State; and the same can be said of Kansas, North Dakota, and South Dakota after 1910 (table 7). Meanwhile, the number of persons born

Table 7—MIGRATION TO AND FROM 10 DROUGHT STATES,[a] 1900 TO 1930

State	1900		1910		1920		1930	
	Persons Born in State and Living Elsewhere	Persons Living in State and Born Elsewhere	Persons Born in State and Living Elsewhere	Persons Living in State and Born Elsewhere	Persons Born in State and Living Elsewhere	Persons Living in State and Born Elsewhere	Persons Born in State and Living Elsewhere	Persons Living in State and Born Elsewhere
Total	828,670	3,260,203	1,492,038	4,419,804	2,235,164	4,663,072	3,288,884	4,790,378
North Dakota	24,164	95,788	47,963	216,996	100,700	204,092	175,823	181,009
South Dakota	43,341	150,945	80,479	254,762	129,431	247,194	191,719	233,454
Nebraska	145,280	424,616	244,232	414,056	331,472	402,676	453,156	375,937
Kansas	289,803	708,336	427,946	722,968	567,702	681,185	728,311	664,352
Oklahoma[b]	31,678	556,803	111,240	1,092,844	230,930	1,155,880	436,424	1,179,178
Texas	207,723	827,855	404,269	907,908	559,552	968,382	762,993	1,129,348
Montana	14,044	111,617	32,850	177,783	67,695	274,877	126,720	239,482
Wyoming	10,660	55,243	19,297	84,269	32,558	116,830	56,634	129,778
Colorado	42,226	291,196	89,818	430,264	155,866	492,079	251,316	512,764
New Mexico	19,751	37,804	33,944	117,954	59,258	119,877	105,788	145,076

[a] The number of persons born in each State and living elsewhere in the United States and the number of persons born elsewhere in the United States and living in each State. The small number of persons for whom State of birth was not reported are omitted from this table.

[b] Includes population of Indian Territory for 1900.

Sources: *Thirteenth Census of the United States: 1910*, Population Vol. I, table 20, p. 700; *Fourteenth Census of the United States: 1920*, Population Vol. II, table 15, p. 622; and *Fifteenth Census of the United States: 1930*, Population Vol. II, table 17, p. 148.

in this region and living elsewhere has been steadily increasing and was greater in 1930 than at any other time. By that year the persons born in Kansas and Nebraska but no longer domiciled there exceeded the number of residents who had been born elsewhere; and the trend was the same in each of the other eight States. According to the census, 3,000,000 persons who were born in other areas were living in the Great Plains States in 1900; in 1930, the number had become 3,500,000. But whereas these States had contributed only 500,000 of their native born to other parts of the United States in 1900, they contributed 2,000,000 in 1930.[18]

By the time settlement had been under way for a generation, the Great Plains States were contributing population to other States, both west and east. By 1870, persons born in Kansas were to be found in every State in the Union except Delaware. The largest number had gone to Missouri, while Illinois, Indiana, Iowa, Nebraska, and Arkansas received most of the others.

[18] Computed from data in table 7.

Nebraska, too, had begun to send its natives to all parts of the country, Missouri, Iowa, and Kansas being the favorite destinations. When the Dakotas achieved statehood just before 1890, persons who had been born there were to be found in every State in the Union.

The number of migrants from this area increased rapidly, especially after 1910. All 10 States contributed to the westward movement, and by 1930 all of them had made relatively large contributions to the Pacific Coast States. But in each case there was also much exchange of population with the States to the east which had contributed the largest number of persons. In general, the destinations of migrants from these States were more widely dispersed than the places of origin of incoming migrants. Originally settled as part of the westward movement, the Great Plains have, in turn, contributed to that movement and have more recently contributed also to the urban and eastward movement (figure 9).

FIG. 9 - NATIVE WHITE MIGRANTS BORN IN 10 DROUGHT STATES AND RESIDING ELSEWHERE 1910 AND 1930 – Continued

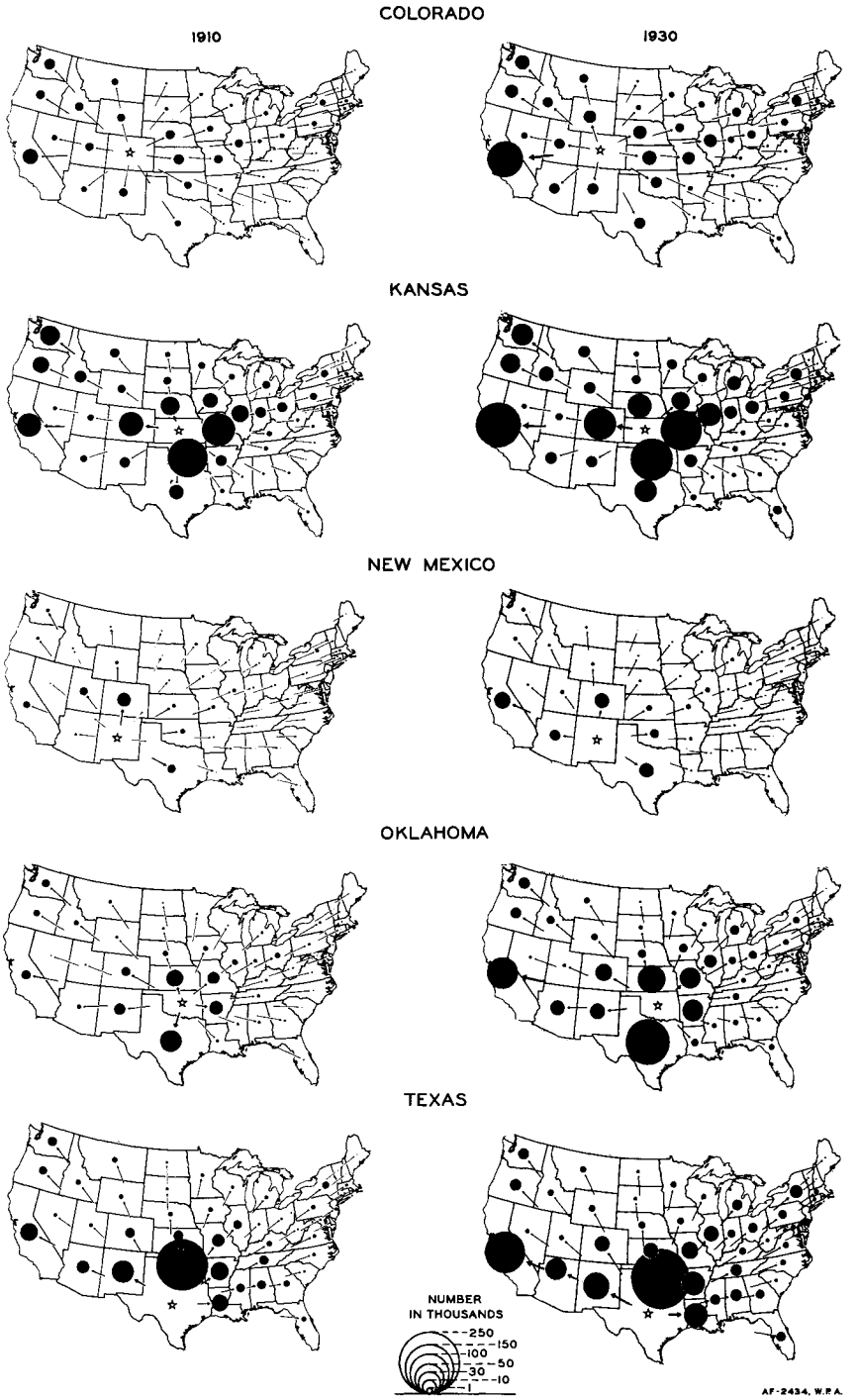
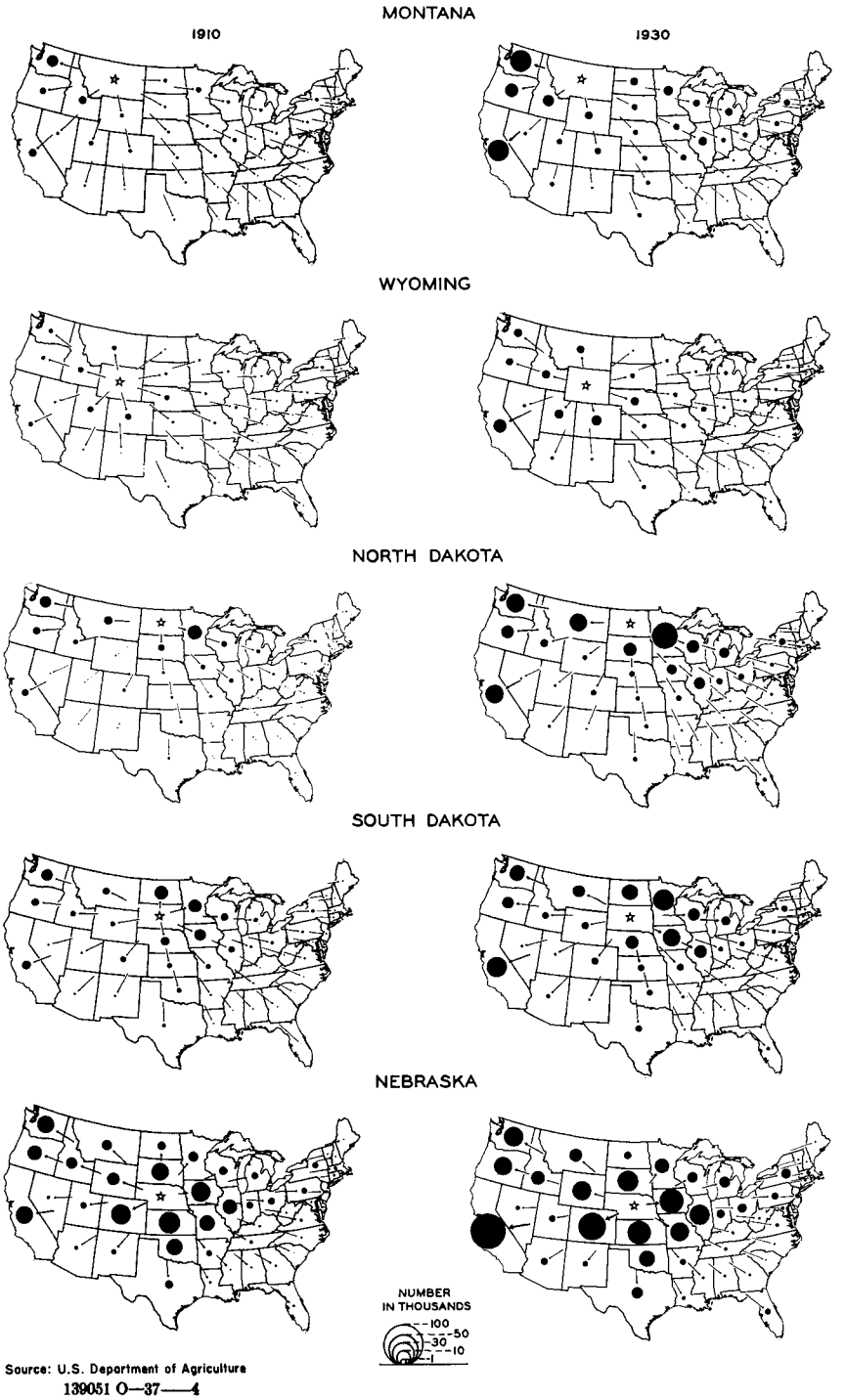


FIG. 9-NATIVE WHITE MIGRANTS BORN IN 10 DROUGHT STATES AND RESIDING ELSEWHERE 1910 AND 1930



Source: U.S. Department of Agriculture

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INTERSTATE ASPECTS OF RECENT MIGRATIONS

With the exception of Texas, the 10 Great Plains States had reached the stage of exporting population by 1920. People with sufficient resources to establish themselves elsewhere, and able to find employment in the new communities of their choice, caused the States receiving them no great concern. But in the recent years of extensive unemployment, their absorption has been more difficult.

The information as to volume and direction of recent migration is only fragmentary. In California, a count of persons "in need of manual employment," known locally as "tin-can tourists," was made at all points where important highways enter the State. During the 6 months ending December 15, 1935, it was found that more than 53,000 persons, members of parties "in need of manual employment," had come into California by motor vehicle.[19] Former residents of California, returning after residence elsewhere, formed approximately 20 percent of the total. Of the people from other areas, nearly one-half, 45 percent, came from the Great Plains. Oklahoma, which led the other States in the group, contributed 7,000 persons to the movement, while Texas, ranking second, sent only one-half as many. Kansas added more than 2,000; Nebraska, a similar number; Colorado and New Mexico, over 1,000 each. In this study the State of origin was taken as the State in which the automobile was registered; thus, it seems reasonable to suppose that some of the 9,500 persons who entered California in automobiles bearing Washington, Oregon, or Arizona registration plates might have come originally from the Great Plains Area.

During the 9½ months ending September 30, 1936, an additional 71,000 persons "in need of manual employment" entered California. Of these, 14 percent were in cars bearing California registration plates. More than one-half of the remainder, 54 percent, came from the Great Plains States. Oklahoma, with a contribution of 16,500 persons, again headed the list. Texas sent 6,200; Kansas, 2,600; and Colorado, New Mexico, and Nebraska each over 1,500.[20] During this period, the average number of these migrants

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[19] Taylor, Paul S. and Vasey, Tom, "Drought Refugee and Labor Migration to California, June-December, 1935," *Monthly Labor Review*, Vol. 42, No. 2, February 1936, pp. 312-318.

[20] From unpublished reports in the files of the Resettlement Administration. See, also, Rowell, Edward J., "Drought Refugee and Labor Migration to California in 1936," *Monthly Labor Review*, Vol. 43, No. 6, December 1936, pp. 1355-1363.

per month was less than it had been during the latter half of 1935; but in August and September of 1936, there were notable increases over the numbers reported for the same months of 1935. Most striking are the figures for Oklahoma, which show 3,900 persons for the month ending September 15, 1936, as compared with 1,800 persons for the corresponding month 1 year earlier. But it would be erroneous to assume from these figures that nearly 24,000 former inhabitants of Oklahoma had transferred their residence to California during the 15½ months ending September 30, 1936, for there are no records available on the numbers leaving California.

A recently completed study of 467 families that had moved to rural sections of the State of Washington since September 1932[21] showed that almost 40 percent of the total came from the 10 Great Plains States, with North Dakota, Montana, South Dakota, and Oklahoma leading. Another 40 percent, approximately, came from the three nearby States of Oregon, California, and Idaho. Undoubtedly some of the persons in this second group, likewise, had come from the Great Plains, but had made intermediate stops on the way. Almost one-fifth of the migrants from drought States were regarded in their adopted communities as having made an unsatisfactory adjustment both economically and socially. Only three-fifths of the families from the drought area were reported as having made a "permanent" settlement; of the other two-fifths, the majority had shown a high degree of transiency and were reported as unlikely to remain at their present locations.

The results of a recent survey in Oregon were similar to those recorded in the Washington study.[22] Of the families that moved to rural Oregon between January 1933 and June 1936, 40 percent had come from the Great Plains, the States of Kansas, Nebraska, and Colorado contributing the largest numbers. Forty-three percent came from three neighboring States, Washington, Idaho, and California; but some of these, too, had, no doubt, come originally from the Great Plains Area.

Movements from the Great Plains to the States on the West Coast are not a phenomenon peculiar to the depression, although the recent migrants may differ radically from those of an earlier period in their needs and characteristics. Between 1920 and 1930, each of the Great Plains States, except Texas, reported more persons moving out of the State than moving into it,

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[21] Landis, Paul H., *Rural Immigrants to Washington State, 1932-1936*, Agricultural Experiment Station, Rural Sociology Series in Population, No. 2, Pullman, Washington, July 1936.

[22] Breithaupt, L. R. and Hoffman, C. S., *Preliminary Information Concerning Immigration into Rural Districts in Oregon, January, 1933 to June, 1936*, Oregon Agricultural Experiment Station, Circular of Information No. 157, Corvallis, Oregon, August 1936.

while each of the West Coast States reported more persons moving in than moving out. In 1930, moreover, each West Coast State had in its population a larger proportion of people born in the Great Plains than it had in 1920.

Not all the migrants from the Great Plains Area have gone to the milder climates of the Pacific Slope, however. There has also been some movement into Minnesota and Iowa from the more severely affected drought areas, and population shifts from one to another of the Great Plains States themselves have undoubtedly been taking place during more recent years, just as they did between 1920 and 1930. In the study of farm abandonment in Tripp County, South Dakota, records were secured for 144 families that had moved out of the county between 1930 and 1934.[23] About one-third had moved across the nearby State line into Nebraska and one-twelfth had gone to Iowa. Most of the others had gone south or west.

It has been shown that these predominantly rural States, with relatively high reproduction rates, became "exporters" of population as agriculture in the region became more stabilized and as the early movement toward the frontier abated. Migratory movements outward, though arrested somewhat during the early part of the depression, were later increased by the drought and possibly also by some prospects of urban employment. But the interstate movement in its various aspects would indicate that drought and economic depression accentuated previously existing trends without radically altering the direction of movement of the twenties.

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[23] Hill, George W., *Rural Migration and Farm Abandonment*, Research Bulletin, Series II, No. 6, Division of Research, Statistics, and Finance, Federal Emergency Relief Administration, June 1935.

SOME FACTORS OF MALADJUSTMENT IN SETTLEMENT

Adjustment of Early Settlers Difficult

The major force impelling the early settler to migrate to the Great Plains was his desire for a farm. Hence, both the nature of settlement and the extent to which it could become satisfactory and stable were closely related to the development of agriculture as the basic enterprise of the area.

Not the least of the settler's difficulties lay in the legal restrictions under which he operated. The Homestead Act was based on experience acquired in settling an agricultural area where humidity was uniform and relatively high and where medium-sized farms were desirable. But the provisions of this act did not fit conditions which existed west of the 100th meridian. The quarter section originally permitted to the settler was too small either for grazing or for the practice of dry-land farming. Later, modifications were made to increase the grant of land per person and to regulate the settlement of desert lands and private irrigation projects, but even these changes proved of little material benefit.[24] This process of adjustment not only encouraged migration to other areas, but also, in some cases, involved failure to replace those settlers who moved elsewhere.

As long as the migrants from more humid areas remained along the eastern edge of the Great Plains States, the agricultural techniques which they brought with them could be readily applied. But as settlement pushed further into the more arid portions of the region, these techniques required considerable modification. The early settlers, those who came from eastern States as well as those who came from Europe, knew only the intensive moldboard culture. To them, any man who did not turn his soil completely over and pulverize it was slothful. To allow stubble to protrude as it does when the soil is partially turned with a disc harrow or plow was to demonstrate his laziness. Wheat seed beds were made almost as carefully as gardens had been made in the place of original residence. Thus, adaptation to the new environment was necessarily slow and difficult.

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[24] Hibbard, B. H., *A History of the Public Land Policies*, New York: The Macmillan Company, 1924. See especially chapters XVIII-XX.

The good farmers of the humid areas often found themselves at a disadvantage in the Great Plains insofar as the treatment of the soil was concerned. There were no experiment stations to determine better methods, and the individual farmer was able to improve his efforts only through his own and his neighbors' experiments. At least one farmers' club in western Kansas had spirited debates concerning the relative advantages of check-row planter and lister. The members of this club appear to have favored corn as against wheat, and numerous discussions were held as to the respective merits of the two.[25]

Acreage Expansion During and After the World War

The rapid expansion of wheat culture during and after the World War, especially during the years between 1927 and 1930 when it was stimulated by the post-war export trade, is directly related to maladjustments of population which have become apparent in recent years.

Between 1910 and 1914, the number of acres in wheat in the Great Plains increased by approximately one-third. Another gain of one-third was reported between 1914 and 1918, and by 1921 a peak was reached at 39,899,000 acres. For several years thereafter, wheat acreage was somewhat less; but in 1928 the earlier peak was exceeded by 2,500,000 acres. During 1929 and 1930, the number of acres thus employed rose to 44,500,000, which was 12 percent more than in 1921.

Montana may be taken as a specific example of the general expansion in wheat growing. As settlers moved into this State, the number of acres used for wheat production grew from 435,000 in 1910 to 1,655,000 in 1914. By 1918 it had reached 3,400,000, and by 1920 it was 3,680,000. This was the largest wheat acreage ever harvested there, and during the following 6 years there were some decreases. In 1927, however, a new high was reached with 4,200,000 acres; and in 1929 this level was surpassed when 4,419,000 acres, the largest number ever reported, were harvested. This was nearly 25 percent above the war-time peak. Since 1929, changes in acreage harvested have been somewhat erratic; but in 1933 and 1935, 3,500,000 acres of wheat were harvested, more than at any time during the World War.

Montana's population increased rapidly during the first great expansion in wheat production which took place between 1910 and 1920. The wheat-growing counties with promises of high profits were obviously attractive to migrants. But the advent of power farming lessened the demand for human labor, and the

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[25] Malin, James C., "The Adaptation of the Agricultural System to Sub-humid Environment," *Agricultural History*, Vol. 10, No. 3, July 1936, pp. 118-141.

population trend definitely changed. The acreage increases, which occurred between 1920 and 1930, saw a general exodus from the wheat-growing and other rural sections of the State; and the farm population, instead of gaining, lost 24,000 persons. During 1928, 1929, and 1930, when changes in wheat acreage were most pronounced, the changes in number of persons on farms were slight, although there were some fluctuations in number of farm families.

While the number of persons living on farms in the Great Plains Area remained nearly the same between 1910 and 1935, the number of farms increased. During the World War decade, 1910-1920, the increase was 177,000, or 15 percent. In Montana an exceptional gain occurred; the total, more than doubling, jumped from 26,000 to 58,000. South Dakota, Nebraska, Kansas, and New Mexico, contrary to the general trend, reported slight decreases. From 1920 to 1930, the area as a whole gained in number of farms even more rapidly than it had during the War years. Except in Colorado where there was virtually no change and in Montana where there was a drop from 58,000 to 47,000, each State reported an increase. Between 1930 and 1935 the number of farms continued to increase, both in the area as a whole and in each of the individual States.

Gains in farm acreage were likewise marked from 1910 to 1935. From 1910 to 1920, Montana reported the number of acres in farms nearly trebled, while each of the other nine States showed gains varying in degree. From 1920 to 1930 and from 1930 to 1935, still further expansion in farm acreage was reported.

As the inadequacy of the 160- and 320-acre farms became more and more apparent throughout the Great Plains, and as the development of power farming made it possible for the operator to utilize a greater acreage, the average size of farms increased (table 8) and the number of large farms multiplied more rapidly

Table 8—AVERAGE SIZE OF FARMS IN 10 DROUGHT STATES, 1870 TO 1935

State	Average Acres in Farms							
	1870	1880	1890	1900	1910	1920	1930	1935
North Dakota	176	271	277	343	382	466	496	462
South Dakota		203	227	362	335	464	439	445
Nebraska	169	157	190	246	298	339	345	349
Kansas	148	155	181	241	244	275	283	275
Oklahoma	a	a	a	a	152	166	166	166
Texas	301	208	225	357	269	262	252	275
Montana	164	267	351	886	517	608	940	940
Wyoming	25	272	586	1,333	778	750	1,469	1,610
Colorado	184	259	281	384	293	408	482	471
New Mexico	186	125	177	417	316	818	982	832

[a] Not available.

Source: *Fifteenth Census of the United States: 1930*, Agriculture Vol. IV, table 12, p. 53.

than the number of small farms. Between 1910 and 1935, the number of farms of 1,000 acres or over increased eight times as much as the number of all farms. In 1910, only 2.5 percent of all farms in this entire area included 1,000 acres or more; in 1920, 3.7 percent of all farms were of that size. By 1935 there had been a further increase to 4.6 percent.

Recent Migration in Areas of Acute Distress

Recent migrants from towns and cities to farms in the 10 Great Plains States went to areas of greatest distress less frequently than to other areas. It was shown in the first bulletin of this series, *Areas of Intense Drought Distress, 1930-1936,* that the average amount of Federal aid per capita may be taken as a measure of the extent of distress; counties receiving $175 per capita or more were most severely affected, and those receiving less than $58 per capita were least affected. In those counties in which Federal aid amounted to $175 per capita or more, only 4.3 percent of the 1935 farm population had not been living on a farm 5 years previously. But in those counties in which it was less than $58 per capita, the percentage of the 1935 farm population not on farms 5 years previously was 8.2, nearly double the figure for the most seriously affected counties (table 9). During the period 1930-1935, there were, in addition, decreases in the farm population in some of the areas which suffered most from the drought and increases in others which suffered less.

Table 9—CHANGES IN FARM POPULATION, 1930 TO 1935, BY AMOUNT OF FEDERAL AID PER CAPITA

Amount of Federal Aid per Capita, 1933-1936	Number of Counties	Farm Population				Persons Not on Farms in 1930	
		1930	1935	Increase or Decrease in Numbers	Percent Increase or Decrease	Number	Percent of 1935 Farm Population
Total	803	5,745,713	5,703,623	-42,090	-0.7	348,510	6.1
Less than $58	179	1,593,428	1,663,055	69,627	4.4	136,880	8.2
$ 58- $ 84	190	1,653,916	1,653,992	76	-	99,327	6.0
84- 119	149	1,086,048	1,043,070	-42,978	-4.0	51,682	5.0
119- 175	148	863,368	819,398	-43,970	-5.1	38,246	4.7
175 and over	137	548,953	524,108	-24,845	-4.5	22,375	4.3

Sources: *United States Census of Agriculture: 1935,* and Cronin, F. D. and Beers, H. W., *Areas of Intense Drought Distress, 1930-1936,* Research Bulletin, Series V., No. 1, Division of Social Research, Works Progress Administration.

There had been more migration before 1930 than from 1930 to 1935 into those sections of Nebraska, Kansas, Colorado, and Texas which were most acutely affected by the droughts between 1933 and 1936. In Texas, the 27 counties with the highest per capita aid reported an increase of 151 percent of their total population between 1920 and 1930, whereas the 12 counties with the lowest grants and benefits gained only 35 percent, less than one-fourth as much. In the latter group of counties, the

increases came primarily in villages and cities; in the former, they were more marked in the open country.

Similarly in Montana, where the decreases in farms and rural population between 1920 and 1930 were so great that they more than offset the slight gains in urban areas, the nine counties later reporting the smallest amount of Federal aid had a loss of 8 percent in total population, while the seven counties with the largest amount of relief gained 2 percent. In the first instance, the open country population decreased by 15 percent and in the second, by 1 percent. On the other hand, examples might be cited to show population increases during the twenties in areas where later grants and benefits were small and population decreases where later amounts of aid were large.

These facts only emphasize that the migration before 1930 was not always directed toward the best adjustment of natural resources and population and that more recent migrations from farms in the Great Plains States as well as from their villages and cities must be considered with this in view.

CONCLUSIONS

Continued study of the Great Plains Drought Area makes it increasingly evident that recent droughts are not solely responsible for the present distress. The return of normal rainfall would not insure prosperity. The nature of the climate, the character of the soil, and the extent of soil destruction which has attended the abuse of natural resources necessitate certain readjustments between the people and the land. It is often assumed that partial evacuation is a necessary part of any adequate plan of rehabilitation for the area. The report of the Study of Population Redistribution[26] concluded that, although 36,000 families had moved out of the region since 1930, nearly 59,000 of those remaining were surplus population.

At the present time, however, settlement techniques have not been perfected to such a stage that the resettlement of 59,000 families could be readily effected. Public opinion, arising from two sources, would probably resist any policy of evacuation.

On the one hand, such a program would receive little support within the area itself. Dry years were known before 1934, and many people think that what has been borne can be borne again. Moreover, earlier agricultural successes are vividly recalled, with a common disregard for the fact that a fortuitous combination of virgin soil, favorable climatic conditions, and high prices was responsible.

On the other hand, evacuation of the Great Plains might arouse antagonism in areas scheduled to receive the families. Migrants with sufficient funds to establish themselves in a new locality are still cordially received. But few areas are left today which welcome the individual whose major qualifications are willing hands and a strong back.

In attempting to visualize the future of population in the Great Plains Drought Area, two generalizations may be made. First, no governmental agency, State or Federal, will sponsor a program calling for the evacuation of a large number of families. Second, industrial development is not to be expected within the calculable future, and any rehabilitation of the distressed families in the area must, necessarily, be based upon agriculture.

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[26] Goodrich, Carter and Others, *op. cit.*

Relief, rehabilitation, and work agencies may continue to meet the most urgent human needs and to assist their clients to become self-supporting. Such activities will undoubtedly prevent much aimless and expensive migration. On the other hand, they may reduce migration from those sections from which partial evacuation should be encouraged.

Even with an extensive program of public assistance, many families will leave to seek better prospects, just as others in the area have done from the time of earliest settlement. A well equipped and widely used informational service might be of considerable benefit to such migrating families. A service of this type would probably reduce the volume and extent of that portion of the migration which is based on rumor, misinformation, or on mere hunches, and, at the same time, it might lead migrants more directly to locations where satisfactory adjustments would be possible. It might also reduce the tragic mistakes which frequently occur when settlers, relocating under unknown conditions, become victims of unscrupulous land speculators or dealers.

The alternating migrations into and out of the Great Plains in the past have been described. Periods of resettlement have followed periods of abandonment. Unless some far-reaching changes in attitude and policy toward land ownership and land use occur, a new wave of immigrants may come in to take the places of those who have recently left. Cheap land and the prospects for speculative gain are almost certain to attract new settlers. Even the most distressed portions of the area reported some migrants to farms between 1930 and 1935. Some future difficulties may be prevented if the lands which have recently reverted to public ownership are held for uses to which they are best adapted. Moreover, restrictions upon the utilization of privately owned lands, as through zoning, might eliminate much of the waste which now results from futile attempts to defy the forces of nature. Furthermore, the transfer of selected tracts to public ownership might assist in preventing the recurrence of those errors which have been so numerous in the history of the region.

The shifting of publicly or privately owned land from agriculture to grazing would tend to reduce the resident population, for it would either displace persons or prevent the replacement of those who had left. A number of proposals have been made which would probably offset such decreases. Irrigation, where feasible, might be employed to provide resettlement of a small part of the existing population. Again, more effective combinations of land along rivers with land farther away would serve to rearrange the present population pattern rather than to increase or decrease the total numbers. The various attempts to conserve available water and soil resources might reduce

the necessity for sudden dislocations of large numbers of people and might tend to stabilize the population of the area.

Unless there is prolonged economic distress, a decrease of migration from these States may be expected. The population of the entire country is rapidly approaching stability in numbers because of the declining birth rate and the virtual cessation of immigration. While these relatively youthful agricultural States are still contributing more than their share of the children of the country, it seems possible that their birth rates will decline more rapidly than those of the rest of the Nation. The results will be an increase in the proportion of older people and a decrease in the proportion of persons in the young adult age groups which provide most of the migrants. In these respects, it seems likely that the population of the Great Plains Area will become similar to that of the remainder of the country. Kansas and Nebraska, the older States of this group, already give evidence of this tendency. Other conditions being equal, the result will probably be a decrease in the number of migrants and an increase in the stability of residence.

Stability of residence itself is not necessarily a desirable goal, but the high degree of mobility which has been characteristic of the Great Plains Area indicates an unsatisfactory adjustment between man and his natural environment. Emigration as a technique for making adjustments is relatively inefficient for it provides little assurance of betterment to the individual and rarely strikes at the basis of the maladjustments involved. A high degree of mobility in a population impedes the proper functioning of those social institutions which are essential to a satisfactory farm life. Any successful program to adapt agriculture to the available natural resources would tend to reduce the volume of migration to and from the area. The success or failure of the efforts to control erosion and conserve available resources will be measured ultimately by the welfare of the people of the Great Plains Drought Area. Unless a satisfactory farm life can be developed on the basis of the resources of that region, no amount of modification of the physical environment will be worth while.

Appendix A

CONSTRUCTION OF MAPS SHOWING MIGRATION

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CONSTRUCTION OF MAPS SHOWING MIGRATION

The balance of migration to or from the drought area is shown in figures 4 to 8. In preparing the basic data, it was assumed that the rate of natural increase for each county in a State is the same as the rate for the State as a whole. The natural increase in a county for a decade is expressed as a percent of the population present at the beginning of the 10-year period. Counties were classified by the extent of migration according to the following scheme:

When the rate of population change is equal to the	The county is classified as showing
Rate of natural increase -4.9 to +4.9	Little or no net migration
Rate of natural increase -5.0 to -14.9	Slight migration out
Rate of natural increase -15.0 or more	Much migration out
Rate of natural increase +5.0 to +14.9	Slight migration in
Rate of natural increase +15.0 or more	Much migration in

Rates of natural increase for 1920 to 1930 were taken from estimates of the National Resources Committee; rates for the other decades were estimated according to ratios of children under 5 to women 20-44 years of age as computed from the census. If NI represents natural increase and C-W, the ratio of children to women, the relationships used may be expressed as follows:

$$\frac{NI_{(1910-1920)}}{NI_{(1920-1930)}} = \frac{C\text{-}W_{(1920)}}{C\text{-}W_{(1930)}}$$

Changes in population due to changes in boundaries have been eliminated by combining adjacent counties which changed boundaries at some time during the period under discussion. In order to avoid the necessity of combining the counties of a State into groups too few in number to be of value for this analysis, certain States were omitted in the early years for which no satisfactory groupings could be secured. These States were growing at a rapid rate, but their populations were small. For Colorado, Kansas, Nebraska, and Texas, the rates were computed back to 1890; for North Dakota, South Dakota, and Wyoming,

back to 1900; and for all the States in the Great Plains, from 1910 to 1920 and from 1920 to 1930. No correction has been made for the relocation of the 100th meridian, March 17, 1930, when the boundary line between Texas and Oklahoma was moved.

It is apparent that "much migration out" does not in all instances imply an actual decrease in the population of the area. The highest rate of natural increase was 33 percent (Oklahoma, 1900-1910). A total increase of 28-37 percent would have been classified as "little or no net migration," 18-27 percent as "slight migration out," less than 18 percent as "much migration out." The lowest rate of natural increase was 11 percent (Montana, 1920-1930). An increase of 16-25 percent was considered as "much migration in" and one of 6-15 as "little or no net migration."

The extent to which "much migration out" represents decreases in the population is shown in table A.[1]

Table A—NUMBER OF COUNTIES IN THE DROUGHT AREA WITH MUCH MIGRATION OUT AND WITH AN ACTUAL DECREASE IN POPULATION, 1890 TO 1930

State	Number of Counties							
	1890 to 1900		1900 to 1910		1910 to 1920		1920 to 1930	
	Much Migration Out	Actual Decrease in Population	Much Migration Out	Actual Decrease in Population	Much Migration Out	Actual Decrease in Population	Much Migration Out	Actual Decrease in Population
Total	174	104	252	177	381	269	353	278
Minnesota	1	–	21	21	3	3	12	12
Iowa	2	1	44	43	11	11	13	13
Missouri	1	1	14	14	9	9	10	10
North Dakota	–	–	4	3	19	8	23	14
South Dakota	–	–	10	3	31	15	31	17
Nebraska	55	35	31	21	46	33	42	41
Kansas	65	52	37	33	57	57	34	34
Oklahoma	–	–	–	–	45	27	47	26
Texas	48	13	85	33	124	80	79	67
Montana	–	–	–	–	4	4	21	15
Wyoming	–	–	1	1	2	2	13	7
Colorado	2	2	5	5	13	10	15	14
New Mexico	–	–	–	–	17	10	13	8

This procedure may seem to overstate migration into a region and to understate migration out of it. As a general rule, the crude rate of natural increase is higher than the State average in rural areas and lower in urban areas. If the rate of natural increase in a county is higher than the average for the State, the effect will be to underestimate the extent of emigration or to exaggerate the extent of immigration as regards that county. The limits for the groups showing "much migration" in or out are set in such a way that the errors in classifying

[1] For data by counties on increases in population since 1920, see appendix B.

a county in one or the other of these groups is reduced to a minimum. Inasmuch as each of the Great Plains States, with but one exception, has more than 60 percent of its population in rural areas and inasmuch as the composition of the population in each State is relatively homogeneous, the classification of counties in one or the other of the two extreme groups apparently approximates a true portrayal of the migration which occurred. The fact that this method relates the natural increase to place of residence rather than to place of birth or death is an added advantage.

Appendix B

COUNTY DATA

COUNTY DATA

Table B lists the counties included in the drought area delimited in figures 1, 2, and 4-8. It shows percent increases or decreases in total population from 1920 to 1930, in farm population from 1930 to 1935, and in farms from 1930 to 1935.

Table B—POPULATION AND NUMBER OF FARMS IN 803 COUNTIES IN THE GREAT PLAINS REGION, 1920 TO 1935

State and County	Total Population 1930	Percent Increase or Decrease From 1920	Farm Population 1935	Percent Increase or Decrease From 1930	Number of Farms 1935	Percent Increase or Decrease From 1930
MINNESOTA						
Total	2,356,165	7.6	838,047	4.2	183,340	10.4
Aitken	15,009	-0.2	13,032	19.0	3,012	22.1
Anoka	18,415	17.8	7,641	14.9	1,763	21.0
Becker	22,503	-1.5	14,820	8.2	3,227	17.9
Beltrami	20,707	-23.5	10,643	16.0	2,440	17.1
Benton	15,056	7.0	8,663	3.0	1,680	5.6
Big Stone	9,838	0.7	5,206	-2.8	1,154	2.5
Blue Earth	33,847	7.5	14,290	-2.5	3,129	0.5
Brown	23,428	4.5	10,026	-1.9	2,116	0.5
Carlton	21,232	9.5	11,431	14.9	2,594	25.3
Carver	16,936	-0.1	10,464	3.9	2,153	5.5
Cass	15,591	-1.9	11,199	21.1	2,546	26.7
Chippewa	15,762	0.3	8,169	-6.7	1,687	-2.5
Chisago	13,189	-8.7	8,863	1.8	2,183	7.9
Clay	23,120	6.2	10,513	1.5	2,207	5.7
Clearwater	9,546	11.4	7,852	11.3	1,919	27.9
Cottonwood	14,782	1.5	9,601	-0.6	1,997	2.5
Crow Wing	25,627	4.3	9,939	30.7	2,201	29.8
Dakota	34,592	19.4	10,956	-2.4	2,315	2.8
Douglas	18,813	-1.2	12,105	-0.2	2,879	9.6
Faribault	21,642	3.1	12,043	-2.7	2,581	4.1
Freeborn	28,741	16.4	14,494	-1.6	3,126	1.2
Grant	9,558	-2.3	6,546	-0.5	1,425	3.5
Hennepin	517,785	24.6	20,636	12.7	4,701	18.1
Hubbard	9,596	-5.3	7,060	19.1	1,682	29.0
Isanti	12,081	-9.0	9,285	5.7	2,168	6.8
Itasca	27,224	14.0	12,434	22.2	2,803	23.0
Jackson	15,863	-0.6	10,805	-1.8	2,303	2.6
Kanabec	8,558	-5.8	7,415	11.1	1,727	12.5
Kandiyohi	23,574	6.9	12,350	-3.3	2,645	4.0
Kittson	9,688	-8.9	6,882	2.2	1,481	10.2
Koochiching	14,078	4.1	5,736	21.0	1,438	12.5
Lac qui Parle	15,398	-1.0	9,956	-5.4	2,141	1.5
Lake of the Woods	4,194	-	3,359	31.1	966	3.4
Le Sueur	17,990	0.7	9,973	4.2	2,249	5.1
Lincoln	11,303	0.3	7,492	-5.6	1,602	1.5
Lyon	19,326	2.6	9,608	-4.8	2,026	1.7
McLeod	20,522	0.4	11,825	-2.3	2,550	1.9
Mahnomen	6,153	-0.7	4,316	13.8	841	23.5
Marshall	17,003	-12.5	13,051	5.2	2,971	18.5
Martin	22,401	6.2	11,989	-5.5	2,505	-2.2
Meeker	17,914	-1.0	12,132	-0.9	2,547	2.7
Mille Lacs	14,076	-0.7	9,671	8.8	2,313	14.2
Morrison	25,442	-1.5	17,848	6.9	3,591	10.2
Murray	13,902	2.0	10,196	-0.9	2,110	3.5
Nicollet	16,550	10.1	7,640	*	1,566	6.3
Nobles	18,618	3.9	10,376	-3.1	2,191	3.4
Norman	14,061	-5.5	9,809	0.9	2,068	6.3
Otter Tail	51,006	0.4	33,617	0.6	7,284	8.7
Pennington	10,487	-13.3	5,960	14.4	1,300	18.2
Pine	20,264	-4.0	15,949	9.2	3,814	16.0
Pipestone	12,238	1.6	6,084	-3.1	1,313	4.6
Polk	36,019	-2.9	20,766	1.4	4,729	12.5
Pope	13,085	-4.0	8,533	-1.1	1,905	8.1
Ramsey	286,721	17.2	5,580	6.6	1,254	16.8
Red Lake	6,887	-5.2	4,704	0.5	981	10.1
Redwood	20,620	-1.4	12,992	-1.0	2,728	3.1
Renville	23,645	*	15,231	-1.2	3,184	*
Rice	29,974	5.9	11,126	-0.5	2,432	3.1
Rock	10,962	*	6,515	-3.8	1,382	3.3
Roseau	12,621	-5.1	10,195	11.3	2,287	19.0

Table B—POPULATION AND NUMBER OF FARMS IN 803 COUNTIES IN THE GREAT PLAINS REGION, 1920 TO 1935—Continued

State and County	Total Population 1930	Percent Increase or Decrease From 1920	Farm Population 1935	Percent Increase or Decrease From 1930	Number of Farms 1935	Percent Increase or Decrease From 1930
MINNESOTA—Continued						
St. Louis	204,596	-0.9	33,127	41.0	7,919	62.5
Scott	14,116	-0.9	8,019	1.0	1,679	6.5
Sherburne	9,709	0.6	5,999	4.7	1,355	11.6
Sibley	15,865	1.5	10,915	-0.6	2,334	5.4
Stearns	62,121	11.4	27,707	2.0	4,896	5.2
Steele	18,475	2.3	9,477	2.2	2,090	8.6
Stevens	10,185	4.2	6,249	-1.7	1,361	5.3
Swift	14,735	-2.4	8,945	-1.5	1,890	2.5
Todd	26,170	0.4	18,255	1.8	3,900	5.3
Traverse	7,938	-0.1	5,090	-2.1	1,171	5.6
Wadena	10,990	2.7	7,555	8.6	1,703	21.2
Waseca	14,412	2.0	7,986	-2.7	1,704	1.5
Washington	24,753	4.2	9,117	4.6	2,181	11.1
Watonwan	12,802	2.8	7,299	1.2	1,536	3.8
Wilkin	9,791	-3.9	5,967	1.4	1,278	6.7
Wright	27,119	-5.5	18,399	1.6	4,019	7.3
Yellow Medicine	16,625	0.5	10,359	-7.4	2,212	0.1
IOWA						
Total	1,448,178	3.1	586,600	-2.0	133,457	3.1
Adair	13,891	-2.6	8,637	-4.5	2,182	3.5
Adams	10,437	-0.8	6,838	-4.6	1,637	0.4
Appanoose	24,835	-18.7	9,694	8.6	2,304	8.3
Audubon	12,264	-2.0	7,977	-0.8	1,879	3.1
Boone	29,271	-2.1	10,557	-3.1	2,567	0.8
Buena Vista	18,667	0.6	9,599	2.1	2,179	4.2
Calhoun	17,605	-1.0	9,459	-2.4	2,174	*
Carroll	22,326	3.6	10,661	-4.3	2,152	-3.2
Cass	19,422	*	9,126	-3.9	2,243	2.0
Cerra Gordo	38,476	11.0	9,738	2.2	2,048	2.2
Cherokee	18,737	5.5	8,950	-1.3	1,903	3.8
Clarke	10,384	-1.2	6,037	-4.4	1,556	2.7
Clay	16,107	2.9	8,204	-3.9	1,790	-0.6
Crawford	21,028	2.0	11,681	-3.3	2,595	1.5
Dallas	25,493	1.5	10,398	-2.8	2,468	3.4
Decatur	14,903	-10.0	8,444	-1.6	2,088	6.0
Dickinson	10,982	7.2	5,692	0.3	1,290	5.4
Emmet	12,856	1.8	5,869	-3.2	1,315	2.3
Franklin	16,382	3.6	9,693	-2.8	2,154	3.5
Fremont	15,533	0.6	8,312	-7.7	1,871	-2.6
Greene	16,528	0.4	9,408	-0.6	2,127	3.2
Guthrie	17,324	-1.5	9,901	-2.3	2,524	6.1
Hamilton	20,978	7.4	10,006	-4.2	2,263	2.3
Hancock	14,802	0.5	9,494	-0.1	2,035	5.1
Hardin	22,947	-1.7	9,599	-6.3	2,239	2.8
Harrison	24,897	1.7	12,914	-3.3	2,942	-0.6
Humboldt	13,202	1.9	7,030	-2.4	1,533	3.9
Ida	11,933	2.1	6,517	-7.0	1,453	2.0
Jasper	32,936	18.2	13,467	-0.8	3,125	2.3
Kossuth	25,452	1.5	15,519	-2.2	3,153	3.3
Lucas	15,114	-3.6	7,249	3.5	1,730	8.5
Lyon	15,293	-0.9	9,454	0.8	1,885	3.6
Madison	14,331	-4.6	8,929	-0.8	2,238	4.0
Marion	25,727	3.1	10,429	-3.5	2,476	2.6
Marshall	33,727	3.4	10,921	0.4	2,401	2.1
Mills	15,866	2.9	7,265	-5.2	1,663	1.4
Monona	18,213	6.4	10,264	-7.7	2,182	0.6
Monroe	15,010	-36.0	7,549	-0.2	1,768	4.3
Montgomery	16,752	-1.7	6,997	-2.2	1,677	3.8
O'Brien	18,409	-3.4	9,064	-2.3	2,006	2.1

Table B—POPULATION AND NUMBER OF FARMS IN 803 COUNTIES IN THE GREAT PLAINS REGION, 1920 TO 1935—Continued

State and County	Total Population 1930	Percent Increase or Decrease From 1920	Farm Population 1935	Percent Increase or Decrease From 1930	Number of Farms 1935	Percent Increase or Decrease From 1930
IOWA—Continued						
Osceola	10,182	-0.4	6,428	-0.1	1,317	3.1
Page	25,904	7.3	9,339	-2.8	2,299	5.4
Palo Alto	15,398	-0.6	9,339	3.0	1,947	3.4
Plymouth	24,159	2.4	13,516	-3.4	2,881	3.7
Pocahontas	15,687	0.5	9,711	0.2	2,094	0.4
Polk	172,837	12.2	14,265	4.1	3,351	7.0
Pottawattamie	69,888	13.5	18,206	-5.9	4,205	3.2
Ringgold	11,966	-7.4	7,886	0.5	2,033	4.8
Sac	17,641	0.8	9,158	-0.8	1,995	6.5
Shelby	17,131	6.6	10,180	-5.4	2,186	-0.1
Sioux	26,806	1.3	15,237	-1.4	3,037	3.3
Story	31,141	18.9	10,429	-3.6	2,403	2.3
Taylor	14,859	-4.2	8,839	-0.2	2,295	5.4
Union	17,435	1.0	6,428	-0.8	1,662	2.2
Warren	17,700	-1.9	10,467	-3.7	2,623	4.0
Wayne	13,787	-10.3	7,614	3.5	1,938	4.0
Webster	40,425	7.5	11,843	-0.3	2,799	6.1
Winnebago	13,143	-2.6	8,366	2.7	1,753	6.8
Woodbury	101,669	10.3	15,617	-2.6	3,334	3.3
Worth	11,164	-4.0	6,883	-2.6	1,491	1.3
Wright	20,216	-0.6	9,307	-4.9	1,999	0.8
MISSOURI						
Total	279,624	-4.8	124,750	0.2	31,728	3.9
Andrew	13,469	-4.3	9,054	-0.9	2,324	3.8
Atchison	13,421	3.2	8,207	-2.7	1,674	3.8
Buchanan	98,633	5.3	10,382	3.7	2,479	5.3
Daviess	14,424	-13.3	9,592	-0.8	2,746	9.4
De Kalb	10,270	-12.2	7,554	4.5	2,040	6.9
Gentry	14,348	-8.2	7,873	-6.0	2,056	-3.6
Grundy	16,135	-8.1	7,391	4.9	2,040	13.3
Harrison	17,233	-12.6	11,567	-2.3	3,032	-1.7
Holt	12,720	-9.7	7,728	1.9	1,812	6.7
Mercer	9,350	-17.1	7,069	3.0	1,865	2.0
Nodaway	26,371	-4.9	14,748	-0.7	3,614	5.1
Putnam	11,503	-12.3	8,521	3.3	2,239	7.9
Sullivan	15,212	-14.4	10,170	-3.5	2,600	-1.6
Worth	6,535	-14.5	4,894	6.0	1,207	-0.2
NORTH DAKOTA						
Total	680,845	5.3[1]	385,614	-3.0	84,606	8.5
Adams	6,343	13.4	3,859	-8.4	970	4.4
Barnes	18,804	0.7	10,287	-2.1	2,331	12.0
Benson	13,327	1.8	9,076	-1.1	2,133	20.4
Billings	3,140	0.4	2,936	2.4	597	12.4
Bottineau	14,853	-1.7	9,521	-4.4	2,371	9.5
Bowman	5,119	7.4	3,091	-7.1	765	-6.1
Burke	9,998	5.1	6,027	-6.1	1,438	7.2
Burleigh	19,769	26.9	6,423	0.1	1,406	5.1
Cass	48,735	17.5	12,939	-5.3	2,640	1.7
Cavalier	14,554	-6.4	9,885	-3.6	2,151	9.2
Dickey	10,877	3.6	6,462	-4.2	1,432	5.4
Divide	9,636	*	6,551	-9.6	1,576	7.4
Dunn	9,566	8.4	8,039	3.2	1,564	11.2
Eddy	6,346	-2.3	3,324	-7.1	731	4.1
Emmons	12,467	10.4	9,122	-0.2	1,578	2.6
Foster	6,353	4.0	3,391	-7.1	818	14.1
Golden Valley	4,122	-14.7	2,429	-2.9	590	3.3
Grand Forks	31,956	11.0	10,151	-6.1	2,431	18.0
Grant	10,134	6.1	7,500	-7.7	1,502	-0.6
Griggs	6,889	-6.9	4,437	-7.7	1,078	14.6

Table B—POPULATION AND NUMBER OF FARMS IN 803 COUNTIES IN THE GREAT PLAINS REGION, 1920 TO 1935—Continued

State and County	Total Population 1930	Percent Increase or Decrease From 1920	Farm Population 1935	Percent Increase or Decrease From 1930	Number of Farms 1935	Percent Increase or Decrease From 1930
NORTH DAKOTA—Continued						
Hettinger	8,796	14.5	6,295	2.2	1,235	13.6
Kidder	8,031	3.0	5,535	-7.8	1,140	-2.1
La Moure	11,517	-0.4	7,719	*	1,729	13.7
Logan	8,089	4.7	6,128	-0.8	1,134	5.5
McHenry	15,439	-0.7	10,480	0.4	2,242	4.6
McIntosh	9,621	6.8	6,328	-0.6	1,160	5.4
McKenzie	9,709	1.7	8,085	4.1	1,931	11.1
McLean	17,991	4.2	12,289	0.3	2,642	10.6
Mercer	9,516	15.7	6,581	5.4	1,204	16.9
Morton	19,647	5.0	10,165	0.1	1,960	5.9
Mountrail	13,544	11.6	9,132	-7.4	2,213	5.5
Nelson	10,203	-1.5	6,257	-6.7	1,375	5.9
Oliver	4,262	-3.7	3,764	0.5	745	4.9
Pembina	14,757	-2.8	9,197	0.4	2,140	17.6
Pierce	9,074	-2.3	6,723	3.2	1,259	9.1
Ramsey	16,252	5.3	7,250	-7.3	1,718	16.9
Ransom	10,983	-5.5	6,511	-2.3	1,431	3.8
Renville	7,263	-6.6	4,680	-9.4	1,274	10.5
Richland	21,008	0.6	12,406	-1.2	2,656	8.2
Rolette	10,760	6.9	8,210	17.4	1,618	23.3
Sargent	9,298	-3.7	6,081	-6.0	1,467	8.3
Sheridan	7,373	-7.1	5,791	0.8	1,147	5.9
Sioux	4,687	41.7	3,762	5.6	757	10.0
Slope	4,150	-16.0	3,063	-5.6	753	2.2
Stark	15,340	13.3	7,738	-1.8	1,390	4.0
Steele	6,972	-5.8	4,897	-6.3	1,090	9.8
Stutsman	26,100	6.2	11,580	-9.1	2,792	12.8
Towner	8,393	0.8	4,629	-15.6	1,267	17.3
Traill	12,600	3.2	6,859	-7.3	1,557	8.5
Walsh	20,047	5.1	11,987	-3.7	2,631	6.0
Ward	33,597	16.6	12,107	-1.9	2,784	4.6
Wells	13,285	2.5	7,942	-4.8	1,670	4.6
Williams	19,553	8.7	9,993	-6.9	2,393	4.6
SOUTH DAKOTA						
Total	692,849	8.8	358,204	-8.2	83,303	0.2
Armstrong	80	-	22	-69.4	8	-20.0
Aurora	7,139	-1.5	4,509	-13.0	1,152	1.1
Beadle	22,917	18.9	7,835	-17.7	1,882	-9.4
Bennett	4,590	138.6	3,217	-24.7	783	-5.8
Bon Homme	11,737	-1.7	6,793	-6.6	1,499	0.5
Brookings	16,847	4.5	8,986	-6.8	2,047	2.8
Brown	31,458	6.6	10,334	-5.4	2,479	7.1
Brule	7,416	3.9	4,086	-11.8	984	-5.7
Buffalo	1,931	12.6	1,292	-19.1	304	-2.3
Butte	8,589	26.0	4,970	-0.2	967	-1.5
Campbell	5,629	6.1	4,214	-2.9	865	7.2
Charles Mix	16,703	2.7	10,262	-9.8	2,253	0.5
Clark	11,022	-1.0	6,635	-15.6	1,684	-2.1
Clay	10,088	4.5	5,908	-5.8	1,311	-0.1
Codington	17,457	5.5	5,571	-3.8	1,300	4.4
Corson	9,535	31.5	6,663	-5.6	1,464	-5.1
Custer	5,353	37.0	2,658	-1.4	645	2.5
Davison	16,821	19.0	4,432	-10.6	1,031	1.4
Day	14,606	-3.9	8,846	-5.7	2,082	5.3
Deuel	8,732	-0.3	6,064	-3.1	1,355	4.6
Dewey	6,476	34.9	3,506	-12.8	777	-10.7
Douglas	7,236	3.5	4,800	-4.9	1,046	1.8
Edmunds	8,712	4.5	5,741	-1.2	1,271	7.9
Fall River	8,741	25.1	3,248	-0.8	873	6.3
Faulk	6,895	7.0	3,860	-11.1	977	-0.1

Table B—POPULATION AND NUMBER OF FARMS IN 803 COUNTIES IN THE GREAT PLAINS REGION, 1920 TO 1935—Continued

State and County	Total Population 1930	Percent Increase or Decrease From 1920	Farm Population 1935	Percent Increase or Decrease From 1930	Number of Farms 1935	Percent Increase or Decrease From 1930
SOUTH DAKOTA—Continued						
Grant	10,729	-1.4	6,298	-5.4	1,442	3.8
Gregory	11,420	-10.1	6,979	-10.0	1,590	-3.3
Haakon	4,679	1.8	3,094	-5.7	846	5.6
Hamlin	8,299	3.0	5,109	-8.5	1,179	0.3
Hand	9,485	8.1	6,217	-13.1	1,576	-6.7
Hanson	6,131	-1.1	4,187	-8.5	930	0.2
Harding	3,589	-9.2	2,950	-6.3	738	-4.4
Hughes	7,009	22.7	2,164	-14.5	547	-7.3
Hutchinson	13,904	3.2	8,625	-2.4	1,805	3.0
Hyde	3,690	11.3	2,335	-8.9	581	-8.4
Jackson	2,636	6.6	1,489	-10.5	393	*
Jerauld	5,816	-8.2	3,268	-13.1	800	-6.4
Jones	3,177	5.8	1,963	-11.0	507	-4.3
Kingsbury	12,805	*	6,853	-14.3	1,625	-3.2
Lake	12,379	1.0	6,352	-3.2	1,437	6.3
Lawrence	13,920	6.8	2,166	6.2	490	19.2
Lincoln	13,918	0.2	8,164	-6.9	1,876	1.9
Lyman	6,335	-3.9	4,121	-12.4	1,049	-8.4
McCook	10,316	3.3	6,446	-4.9	1,427	-1.5
McPherson	8,774	13.9	6,187	-2.4	1,243	6.1
Marshall	9,540	-0.6	6,095	-2.9	1,392	7.2
Meade	11,482	22.6	7,178	-9.5	1,756	-3.5
Mellette	5,293	37.5	3,456	-16.9	820	-4.1
Miner	8,376	-2.1	5,261	-7.9	1,229	-2.5
Minnehaha	50,872	19.7	11,370	-5.6	2,498	3.1
Moody	9,603	-1.4	6,048	-4.7	1,358	-1.1
Pennington	20,079	57.9	5,315	-10.0	1,311	0.6
Perkins	8,717	9.1	6,087	-8.6	1,461	-2.7
Potter	5,762	31.5	2,865	-15.1	713	-1.9
Roberts	15,782	-4.4	10,416	-7.1	2,394	4.5
Sanborn	7,326	-7.0	4,266	-14.0	1,067	-3.2
Shannon	4,058	102.6	3,048	-3.8	654	12.2
Spink	15,304	-3.0	7,470	-14.3	2,025	1.6
Stanley	2,381	-18.1	1,437	-12.1	416	1.2
Sully	3,852	36.1	2,474	-16.7	672	-0.1
Todd	5,898	111.9	4,347	-4.5	892	-1.0
Tripp	12,712	6.2	7,585	-18.0	1,879	-8.7
Turner	14,891	0.1	9,147	-4.6	2,078	4.6
Union	11,480	3.4	7,237	-2.6	1,550	0.2
Walworth	8,791	4.1	3,495	-6.1	755	6.6
Washabaugh	2,474	112.2	2,158	-3.7	518	-6.0
Washington	1,827	20.1	1,637	*	364	15.6
Yankton	16,589	8.9	7,373	-4.1	1,648	2.0
Ziebach	4,039	8.6	3,020	-14.2	733	-8.7
NEBRASKA						
Total	1,377,963	6.3	580,694	-0.9	133,616	3.2
Adams	26,275	16.2	7,055	-2.7	1,759	2.6
Antelope	15,206	-0.2	10,013	-0.2	2,184	1.4
Arthur	1,344	-4.8	1,098	-7.2	230	-3.4
Banner	1,676	16.8	1,613	4.7	383	12.0
Blaine	1,584	-10.9	1,389	9.8	291	4.7
Boone	14,738	4.2	9,194	-3.7	2,037	2.6
Box Butte	11,861	41.1	3,752	-4.9	932	2.0
Boyd	7,169	-13.0	4,735	-0.8	1,114	6.3
Brown	5,772	-14.5	3,613	11.2	797	12.9
Buffalo	24,338	2.3	10,752	0.6	2,585	6.4
Burt	13,062	4.0	7,285	-3.1	1,602	2.1
Butler	14,410	-1.3	8,717	-1.3	1,968	4.5
Cass	17,684	-1.9	8,532	-0.4	2,051	-0.4
Cedar	16,427	1.2	10,679	-2.1	2,283	4.1
Chase	5,484	11.0	3,610	5.0	779	1.7

Table B—POPULATION AND NUMBER OF FARMS IN 803 COUNTIES IN THE GREAT PLAINS REGION, 1920 TO 1935—Continued

State and County	Total Population 1930	Percent Increase or Decrease From 1920	Farm Population 1935	Percent Increase or Decrease From 1930	Number of Farms 1935	Percent Increase or Decrease From 1930
NEBRASKA—Continued						
Cherry	10,898	-7.3	6,763	-6.4	1,450	-2.0
Cheyenne	10,187	21.2	5,451	7.5	1,321	18.4
Clay	13,571	-6.3	6,968	-4.0	1,781	-0.1
Colfax	11,434	-1.6	6,230	0.9	1,462	5.0
Cuming	14,327	4.1	9,240	-3.4	1,936	-0.4
Custer	26,189	-0.8	16,719	-4.3	3,842	2.9
Dakota	9,505	23.5	3,945	-4.2	846	0.2
Dawes	11,493	13.1	3,984	1.7	886	1.8
Dawson	17,875	11.7	9,274	1.6	2,123	1.8
Deuel	3,992	21.6	2,218	-2.7	544	8.8
Dixon	11,586	-1.9	6,835	-5.8	1,527	-0.2
Dodge	25,273	8.9	8,168	-3.8	1,921	2.3
Douglas	232,982	13.9	8,189	1.0	1,851	-1.7
Dundy	5,610	15.2	3,546	-2.5	736	3.8
Fillmore	12,971	-5.1	7,761	0.6	1,930	3.1
Franklin	9,094	-9.7	5,845	4.0	1,421	1.6
Frontier	8,114	-5.0	5,657	-2.1	1,401	2.5
Furnas	12,140	4.1	6,299	-1.5	1,589	2.6
Gage	30,242	1.8	12,675	0.6	2,997	3.4
Garden	5,099	11.5	3,382	-3.7	765	7.7
Garfield	3,207	-8.3	2,161	8.9	499	12.1
Gosper	4,287	-8.2	3,569	-0.6	869	2.7
Grant	1,427	-4.0	672	-4.5	115	-5.0
Greeley	8,442	-2.8	5,452	-4.7	1,157	-1.4
Hall	27,117	14.3	6,698	-1.7	1,658	1.8
Hamilton	12,159	-8.1	7,430	-2.7	1,831	3.7
Harlan	8,957	-2.9	5,351	*	1,300	3.4
Hayes	3,603	8.3	2,784	-10.5	662	2.5
Hitchcock	7,269	20.2	4,038	-3.8	950	0.8
Holt	16,509	-3.7	11,139	1.8	2,471	2.5
Hooker	1,180	-14.4	636	2.4	158	9.7
Howard	10,020	-6.7	6,910	2.1	1,624	4.6
Jefferson	16,409	1.7	7,793	2.0	1,936	12.8
Johnson	9,157	2.4	5,524	-0.7	1,334	2.4
Kearney	8,094	-5.7	4,981	-2.3	1,222	-2.2
Keith	6,721	27.0	3,583	-1.3	807	3.6
Keyapaha	3,203	-10.9	2,557	-5.1	571	-0.9
Kimball	4,675	3.9	2,280	-3.2	631	5.2
Knox	19,110	1.1	12,164	-3.5	2,704	2.7
Lancaster	100,324	16.8	14,246	4.4	3,328	5.0
Lincoln	25,627	9.4	9,882	0.1	2,262	3.3
Logan	2,014	26.2	1,363	-0.4	295	2.4
Loup	1,818	-6.6	1,591	3.7	331	4.4
McPherson	1,358	-19.7	1,317	9.7	319	16.0
Madison	26,037	15.7	8,839	-2.5	2,010	1.2
Merrick	10,619	-1.3	6,089	2.0	1,402	0.9
Morrill	9,950	8.7	5,681	-1.2	1,127	4.3
Nance	8,718	0.1	5,653	-0.2	1,216	1.6
Nemaha	12,356	-1.5	7,075	6.7	1,577	4.4
Nuckolls	12,629	-4.6	6,631	0.2	1,610	1.4
Otoe	19,901	2.1	9,226	-4.1	2,252	-1.2
Pawnee	9,423	-1.6	5,775	-3.9	1,404	-0.4
Perkins	5,834	47.1	4,004	3.5	958	-7.4
Phelps	9,261	-6.5	4,744	-0.9	1,210	1.2
Pierce	11,080	3.7	7,263	-1.7	1,651	3.1
Platte	21,181	8.8	11,377	1.3	2,323	6.9
Polk	10,092	-5.8	6,584	-0.1	1,541	2.3
Redwillow	13,859	21.2	5,271	0.2	1,229	3.4
Richardson	19,826	4.5	9,409	-0.8	2,081	6.0
Rock	3,366	-9.1	2,725	13.8	610	14.9
Saline	16,356	-1.0	8,476	1.7	2,188	4.8

Table 8—POPULATION AND NUMBER OF FARMS IN 803 COUNTIES IN THE GREAT PLAINS REGION, 1920 TO 1935—Continued

State and County	Total Population 1930	Percent Increase or Decrease From 1920	Farm Population 1935	Percent Increase or Decrease From 1930	Number of Farms 1935	Percent Increase or Decrease From 1930
NEBRASKA—Continued						
Sarpy	10,402	11.0	5,097	8.4	1,153	8.6
Saunders	20,167	-2.0	11,640	-1.2	2,790	3.4
Scotts Bluff	28,644	38.3	11,519	-2.5	1,977	10.3
Seward	15,938	0.4	9,885	3.1	2,232	4.7
Sheridan	10,793	12.1	5,754	-6.2	1,320	1.3
Sherman	9,122	2.8	6,307	-2.7	1,444	-1.5
Sioux	4,667	3.1	3,604	-9.9	818	4.2
Stanton	7,809	0.7	5,521	-4.5	1,249	2.0
Thayer	13,684	-2.1	7,840	4.0	1,833	7.0
Thomas	1,510	-14.8	971	22.3	219	25.9
Thurston	10,462	9.1	6,264	-3.0	1,289	4.5
Valley	9,533	-3.0	5,723	-3.4	1,371	5.5
Washington	12,095	-0.7	7,001	-5.1	1,637	1.6
Wayne	10,566	8.6	6,571	-3.1	1,523	2.8
Webster	10,210	-6.5	6,117	-3.2	1,568	2.1
Wheeler	2,335	-7.7	2,138	13.0	436	17.5
York	17,239	0.5	8,613	-4.1	2,010	0.6
KANSAS						
Total	1,880,999	6.3	703,743	-0.5	174,589	5.1
Allen	21,391	-9.0	7,818	-4.8	2,166	10.6
Anderson	13,355	2.8	7,235	-6.6	1,907	-0.4
Atchison	23,945	2.3	7,586	-1.9	1,887	7.5
Barber	10,178	4.5	4,649	-2.8	1,102	4.3
Barton	19,776	7.3	7,903	-0.5	1,758	3.8
Bourbon	22,386	-3.5	9,111	-0.3	2,418	10.9
Brown	20,553	-1.9	9,765	-4.6	2,294	4.1
Butler	35,904	-18.1	11,239	-3.3	2,738	3.0
Chase	6,952	-2.7	3,716	-1.7	917	9.3
Chautauqua	10,352	-10.7	5,426	6.9	1,311	6.5
Cherokee	31,457	-6.4	11,212	14.6	2,671	22.9
Cheyenne	6,948	24.4	5,095	4.7	1,143	4.8
Clark	4,796	-3.9	2,492	2.8	615	8.3
Clay	14,556	1.3	7,752	-1.6	2,070	7.5
Cloud	18,006	1.6	8,271	-1.3	2,190	5.5
Coffey	13,653	-4.2	8,692	1.4	2,364	8.9
Comanche	5,238	-1.2	2,529	-3.3	575	12.3
Cowley	40,903	16.3	11,675	-0.3	2,946	1.8
Crawford	49,329	-20.2	11,774	6.4	2,897	11.9
Decatur	8,866	9.2	5,693	0.2	1,414	5.5
Dickinson	25,870	0.4	10,551	-1.2	2,565	0.9
Doniphan	14,063	4.7	7,990	-8.7	1,739	1.9
Douglas	25,143	4.8	8,526	5.2	2,209	19.3
Edwards	7,295	3.4	3,265	-4.1	829	0.7
Elk	9,210	1.9	5,007	1.5	1,308	5.2
Ellis	15,907	12.5	7,836	-2.5	1,343	2.2
Ellsworth	10,132	-2.4	4,842	-4.8	1,181	1.9
Finney	11,014	43.5	4,512	0.6	1,029	6.0
Ford	20,647	44.7	5,514	-5.3	1,407	5.2
Franklin	22,024	0.4	9,265	-1.0	2,526	5.8
Geary	14,366	6.8	3,416	-1.4	773	0.5
Gove	5,643	18.9	4,264	10.0	911	2.4
Graham	7,772	1.9	5,705	-2.3	1,296	0.8
Grant	3,092	184.5	1,875	10.2	466	-12.6
Gray	6,211	31.8	3,657	-4.2	935	12.9
Greeley	1,712	66.5	1,096	6.3	311	10.3
Greenwood	19,235	30.7	8,671	-0.1	2,137	12.2
Hamilton	3,328	28.7	2,006	18.6	529	20.2
Harper	12,823	-6.1	6,481	-1.4	1,642	5.1
Harvey	22,120	6.6	7,386	-1.1	1,720	-1.5
Haskell	2,805	92.8	1,526	-12.9	429	-6.9
Hodgeman	4,157	11.3	3,244	9.2	790	7.9

Table 8—POPULATION AND NUMBER OF FARMS IN 803 COUNTIES IN THE GREAT PLAINS REGION, 1920 TO 1935—Continued

State and County	Total Population 1930	Percent Increase or Decrease From 1920	Farm Population 1935	Percent Increase or Decrease From 1930	Number of Farms 1935	Percent Increase or Decrease From 1930
KANSAS—Continued						
Jackson	14,776	-4.6	9,676	-3.5	2,588	5.8
Jefferson	14,129	-4.2	9,059	2.6	2,286	5.5
Jewell	14,462	-10.9	9,698	-5.3	2,601	1.1
Johnson	27,179	48.4	11,275	16.6	2,830	19.1
Kearny	3,196	22.1	2,055	7.1	516	11.7
Kingman	11,674	-3.7	6,826	0.9	1,638	5.9
Kiowa	6,035	-2.1	3,174	-7.4	730	-5.4
Labette	31,346	-7.9	10,619	3.6	2,698	8.0
Lane	3,372	18.4	2,102	-3.4	554	13.3
Leavenworth	42,673	11.1	9,459	10.5	2,260	12.9
Lincoln	9,707	-1.9	5,758	-8.8	1,427	-0.6
Linn	13,534	-2.0	8,765	-1.3	2,372	7.0
Logan	4,145	28.6	2,557	10.5	601	11.1
Lyon	29,240	11.8	10,490	-2.6	2,623	0.5
McPherson	23,588	8.0	11,387	-1.7	2,563	-4.7
Marion	20,739	-9.5	11,025	2.4	2,527	2.7
Marshall	23,056	1.4	11,749	-3.6	2,918	2.3
Meade	6,858	23.7	3,599	-2.7	883	-5.4
Miami	21,243	7.2	9,444	2.6	2,520	10.4
Mitchell	12,774	-8.0	6,684	-1.8	1,699	-0.6
Montgomery	51,411	3.6	11,113	7.3	2,750	9.0
Morris	11,859	-1.2	6,556	-2.8	1,622	3.2
Morton	4,092	28.8	1,843	-2.5	475	20.9
Nemaha	18,342	-0.8	10,902	-3.3	2,468	-0.1
Neosho	22,665	-5.6	9,165	3.9	2,311	7.2
Ness	8,358	11.6	4,929	-3.8	1,218	9.9
Norton	11,701	2.4	6,614	-3.6	1,688	-1.0
Osage	17,538	-5.8	10,115	-1.6	2,702	3.7
Osborne	11,568	-7.0	6,544	-5.7	1,692	2.4
Ottawa	9,819	-8.4	5,700	-3.4	1,631	0.9
Pawnee	10,510	12.7	4,590	-5.2	1,164	-2.3
Phillips	12,159	-2.8	7,873	-0.9	2,074	4.8
Pottawatomie	15,862	-1.8	9,193	-0.7	2,282	6.5
Pratt	13,312	3.1	4,738	-8.2	1,168	1.7
Rawlins	7,362	8.3	4,996	-1.5	1,143	-2.8
Reno	47,785	7.6	13,526	-2.1	3,140	0.1
Republic	14,745	-7.0	9,035	-3.2	2,357	2.8
Rice	13,800	-7.0	5,845	-4.5	1,447	1.4
Riley	19,882	-3.7	6,547	-3.1	1,625	3.6
Rooks	9,534	-4.3	5,455	-6.4	1,402	0.8
Rush	9,093	8.8	5,475	*	1,188	1.2
Russell	11,045	2.8	5,889	-1.6	1,357	1.0
Saline	29,337	16.9	6,839	-4.6	1,862	1.3
Scott	3,976	27.4	1,987	-2.0	552	15.2
Sedgwick	136,330	47.8	16,095	6.6	3,865	9.8
Seward	8,075	29.8	2,201	-7.9	560	4.1
Shawnee	85,200	23.2	10,111	0.7	2,460	13.2
Sheridan	6,038	10.1	4,449	-2.7	1,050	0.1
Sherman	7,400	32.3	3,275	-2.3	839	4.4
Smith	13,545	-9.6	8,557	-8.0	2,323	1.0
Stafford	10,460	-9.5	5,647	-3.0	1,317	-3.1
Stanton	2,152	137.0	1,459	8.3	411	30.5
Stevens	4,655	18.1	2,471	-16.7	612	-3.5
Sumner	28,960	-0.9	12,069	-4.5	3,097	4.9
Thomas	7,334	32.9	3,773	4.0	1,000	6.4
Trego	6,470	10.0	4,354	-6.7	963	-1.7
Wabaunsee	10,830	-5.2	7,084	-2.4	1,770	8.7
Wallace	2,882	18.9	1,711	-3.4	440	7.3
Washington	17,112	-4.8	11,528	-1.4	2,830	1.3
Wichita	2,579	39.0	1,646	2.2	419	12.3
Wilson	18,646	-11.9	8,149	6.6	2,020	9.5
Woodson	8,526	-5.1	5,059	0.2	1,325	11.3
Wyandotte	141,211	15.5	6,967	12.4	1,678	12.2

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Table 8—POPULATION AND NUMBER OF FARMS IN 803 COUNTIES IN THE GREAT PLAINS REGION, 1920 TO 1935—Continued

State and County	Total Population 1930	Percent Increase or Decrease From 1920	Farm Population 1935	Percent Increase or Decrease From 1930	Number of Farms 1935	Percent Increase or Decrease From 1930
OKLAHOMA						
Total	2,396,040	18.1	1,015,562	-0.8	213,325	4.6
Adair	14,756	7.7	11,673	13.4	2,409	35.4
Alfalfa	15,228	-6.3	8,731	-4.3	2,164	-7.0
Atoka	14,533	-30.3	11,703	13.5	2,348	26.2
Beaver	11,452	-18.5	7,836	-9.3	2,080	1.6
Beckham	28,991	52.7	13,619	-14.4	3,135	-3.9
Blaine	20,452	28.8	12,143	-3.1	2,709	5.5
Bryan	32,277	-20.7	20,590	4.0	4,132	9.7
Caddo	50,779	48.4	27,963	-13.8	5,579	-6.4
Canadian	28,115	26.1	12,745	-13.7	2,704	-8.7
Carter	41,419	2.9	13,703	14.2	2,808	27.9
Cherokee	17,470	-12.1	13,779	4.1	2,793	15.0
Choctaw	24,142	-24.9	17,194	9.9	3,472	9.9
Cimarron	5,408	57.4	3,109	-10.5	975	9.9
Cleveland	24,948	28.7	10,701	0.1	2,221	10.4
Coal	11,521	-37.4	8,363	12.5	1,769	25.1
Comanche	34,317	28.9	13,648	-6.2	2,826	-3.0
Cotton	15,442	-7.4	9,752	-7.3	2,052	0.3
Craig	18,052	-5.8	10,535	4.9	2,482	11.9
Creek	64,115	2.6	19,394	5.5	3,782	6.4
Custer	27,517	46.9	12,528	-11.6	2,747	-8.1
Delaware	15,370	10.8	13,068	4.3	2,711	10.2
Dewey	13,250	6.6	9,789	*	2,280	0.4
Ellis	10,541	-9.7	6,843	-3.8	1,720	2.1
Garfield	45,588	21.6	12,359	1.7	3,056	-12.1
Garvin	31,401	-3.2	19,440	-1.0	3,824	5.9
Grady	47,638	40.3	23,347	-12.2	4,812	-1.6
Grant	14,150	-12.0	9,524	-1.8	2,609	-5.4
Greer	20,282	28.1	9,565	-19.2	1,985	-19.1
Harmon	13,834	22.8	8,345	-16.5	1,667	-7.3
Harper	7,761	1.8	4,684	-9.3	1,150	-4.5
Haskell	16,216	-16.4	12,093	1.2	2,433	9.7
Hughes	30,334	16.5	15,411	0.8	3,004	0.4
Jackson	28,910	30.6	12,907	-18.0	2,594	-9.0
Jefferson	17,392	-1.5	10,140	-4.3	1,994	-0.1
Johnston	13,082	-35.0	8,732	2.4	1,795	17.6
Kay	50,186	43.8	12,412	9.2	2,997	5.2
Kingfisher	15,960	1.8	11,081	4.9	2,623	7.3
Kiowa	29,630	28.3	15,048	-17.5	3,090	-12.5
Latimer	11,184	-19.3	7,030	9.3	1,386	13.5
Le Flore	42,896	0.3	26,083	9.8	4,971	14.0
Lincoln	33,738	1.0	21,372	-5.0	4,478	1.7
Logan	27,761	0.8	12,367	-1.3	2,681	-5.4
Love	9,639	-22.5	8,371	15.9	1,759	8.2
McClain	21,575	11.6	14,804	-5.3	2,872	-4.7
McCurtain	34,759	-8.3	25,055	15.6	5,092	20.6
McIntosh	24,924	-5.6	19,127	1.8	3,410	-3.0
Major	12,206	-1.8	9,357	3.4	2,131	1.8
Marshall	11,026	-24.9	7,532	3.2	1,476	9.7
Mayes	17,883	6.3	13,511	8.2	2,810	10.6
Murray	12,410	-5.4	5,744	3.0	1,165	14.4
Muskogee	66,424	7.6	23,428	-1.4	4,480	-0.2
Noble	15,139	11.6	8,019	3.2	1,977	-5.9
Nowata	13,611	-14.4	7,014	-5.0	1,605	5.4
Okfuskee	29,016	15.8	17,900	0.2	3,520	-0.7
Oklahoma	221,738	90.6	18,455	11.1	4,001	28.6
Okmulgee	56,558	2.7	18,021	5.5	3,534	4.3
Osage	47,334	29.6	13,312	8.4	2,644	12.3
Ottawa	38,542	-6.2	9,179	3.7	1,999	10.4
Pawnee	19,882	4.0	9,349	-0.8	2,269	-0.9
Payne	36,905	22.3	13,936	-0.5	3,034	3.6

Table B—POPULATION AND NUMBER OF FARMS IN 803 COUNTIES IN THE GREAT PLAINS REGION, 1920 TO 1935—Continued

State and County	Total Population 1930	Percent Increase or Decrease From 1920	Farm Population 1935	Percent Increase or Decrease From 1930	Number of Farms 1935	Percent Increase or Decrease From 1930
OKLAHOMA—Continued						
Pittsburg	50,778	-3.4	20,341	4.8	4,291	15.5
Pontotoc	32,469	4.9	16,226	8.0	3,038	13.7
Pottawatomie	66,572	44.6	20,935	-4.6	4,378	16.4
Pushmataha	14,744	-15.8	10,391	17.1	2,253	26.4
Roger Mills	14,164	33.1	10,029	-10.9	2,326	-1.1
Rogers	18,956	7.7	12,032	12.9	2,634	22.3
Seminole	79,621	234.4	17,105	-28.0	3,117	11.3
Sequoyah	19,505	-27.2	16,225	11.6	3,151	13.8
Stephens	33,069	33.9	15,084	-4.2	3,023	3.5
Texas	14,100	0.9	7,065	-11.8	2,135	5.7
Tillman	24,390	8.7	13,612	-4.4	2,420	-12.4
Tulsa	187,574	72.0	16,547	34.7	3,119	25.3
Wagoner	22,428	4.9	15,711	-3.1	3,252	3.1
Washington	27,777	2.9	7,024	14.1	1,559	40.8
Washita	29,435	32.4	17,870	-15.6	3,859	-14.4
Woods	17,005	6.7	8,125	0.6	2,112	4.0
Woodward	15,844	8.1	7,777	-2.9	1,833	2.7
TEXAS						
Total	1,208,468	51.9	436,429	-4.1	97,076	3.3
Andrews	736	110.3	412	-7.4	85	13.3
Archer	9,684	84.3	3,345	7.6	744	7.5
Armstrong	3,329	18.2	1,854	-11.4	456	-3.4
Bailey	5,186	903.1	3,994	-4.6	903	19.1
Baylor	7,418	5.6	4,642	8.4	920	6.1
Borden	1,505	56.0	1,265	-11.0	301	3.1
Brewster	6,624	37.4	898	-26.3	241	-16.0
Briscoe	5,590	89.6	2,695	-25.3	699	2.9
Callahan	12,785	7.9	7,218	1.1	1,623	11.9
Carson	7,745	151.6	2,065	-10.1	614	13.3
Castro	4,720	142.3	3,224	-6.9	1,068	42.2
Childress	16,044	46.7	6,277	-19.3	1,334	-1.0
Clay	14,545	-13.8	9,355	-2.7	1,978	-6.1
Cochran	1,963	2,829.9	2,109	48.9	456	60.0
Coke	5,253	15.3	3,470	-8.6	876	4.5
Coleman	23,669	25.9	11,517	-13.8	2,373	-8.1
Collingsworth	14,461	58.0	8,568	-12.9	1,817	-14.0
Concho	7,645	30.8	4,312	-22.5	891	-21.6
Cottle	9,395	36.1	4,781	-22.5	1,177	12.4
Crane	2,221	5,902.7	444	982.9	106	715.4
Crockett	2,590	72.7	1,033	84.5	184	37.3
Crosby	11,023	81.2	6,524	-14.2	1,389	-20.1
Culberson	1,228	34.6	114	-15.6	58	11.5
Dallam	7,830	72.9	2,315	-4.8	709	7.4
Dawson	13,573	215.0	8,072	-15.3	1,946	-12.3
Deaf Smith	5,979	59.6	2,769	-8.8	1,085	72.2
Dickens	8,601	46.4	5,175	-14.1	1,062	-13.5
Donley	10,262	27.7	5,114	-19.6	1,140	-16.4
Eastland	34,156	-41.6	10,997	19.7	2,420	21.6
Ector	3,958	420.8	379	0.5	102	47.8
El Paso	131,597	29.2	11,227	21.8	1,548	22.6
Fisher	13,563	23.2	9,585	-3.1	1,828	-12.5
Floyd	12,409	27.2	6,865	-8.1	1,743	4.3
Foard	6,315	33.0	3,814	0.3	830	15.3
Gaines	2,800	175.0	2,040	1.8	459	12.8
Garza	5,586	31.3	2,874	-11.9	608	-23.6
Glasscock	1,263	127.6	760	-4.2	169	35.2
Gray	22,090	373.7	3,985	32.7	1,109	58.2
Hale	20,189	99.8	7,760	-9.3	1,859	7.5
Hall	16,966	52.3	7,272	-23.8	1,521	-17.1

Table B—POPULATION AND NUMBER OF FARMS IN 803 COUNTIES IN THE GREAT PLAINS REGION, 1920 TO 1935—Continued

State and County	Total Population 1930	Percent Increase or Decrease From 1920	Farm Population 1935	Percent Increase or Decrease From 1930	Number of Farms 1935	Percent Increase or Decrease From 1930
TEXAS—Continued						
Hansford	3,548	162.0	1,414	0.1	470	9.3
Hardeman	14,532	16.4	7,199	*	1,408	1.4
Hartley	2,185	97.0	1,379	12.8	518	96.2
Haskell	16,669	17.4	11,038	-6.1	2,421	1.7
Hemphill	4,637	8.3	1,905	-13.8	401	-3.1
Hockley	9,298	6,686.9	7,044	4.7	1,482	10.3
Howard	22,888	228.8	5,082	-10.7	1,034	-13.4
Hudspeth	3,728	287.5	943	-57.4	159	-18.0
Hutchinson	14,848	1,959.4	784	-1.8	184	14.3
Irion	2,049	27.3	777	4.6	176	10.0
Jack	9,046	-8.3	5,926	11.1	1,490	28.3
Jeff Davis	1,800	24.6	547	12.1	110	11.1
Jones	24,233	8.6	13,483	-3.7	2,810	0.2
Kent	3,851	15.5	2,860	-3.1	619	5.3
King	1,193	82.1	812	-15.5	163	2.5
Knox	11,368	23.0	7,374	-0.4	1,268	-13.2
Lamb	17,452	1,385.3	11,191	-0.8	2,340	-1.7
Lipscomb	4,512	22.5	2,483	9.1	647	23.2
Loving	195	137.8	46	206.7	17	112.5
Lubbock	39,104	252.4	11,720	-7.3	2,652	6.3
Lynn	12,372	160.4	8,724	-4.9	2,001	-6.4
Martin	5,785	404.8	3,646	-12.7	805	3.7
Midland	8,005	226.9	2,112	17.0	520	44.0
Mitchell	14,183	88.4	6,411	-12.2	1,348	-9.0
Montague	19,159	-13.7	12,279	14.8	2,649	12.2
Moore	1,555	172.3	597	-18.0	287	64.9
Motley	6,812	65.9	3,220	-26.2	619	-32.0
Nolan	19,323	77.8	5,413	-9.7	1,133	-1.8
Ochiltree	5,224	124.1	1,994	-12.5	685	18.1
Oldham	1,404	98.0	634	10.6	220	60.6
Parmer	5,869	245.4	3,847	-8.0	901	10.1
Pecos	7,812	102.5	1,789	-2.1	374	-2.9
Potter	46,080	175.8	1,637	8.6	396	23.0
Presidio	10,154	-16.8	3,375	21.6	756	42.1
Randall	7,071	92.4	2,981	1.1	813	-3.6
Reagan	3,028	703.2	251	-14.6	90	23.3
Reeves	6,407	43.8	1,648	-3.3	376	15.0
Roberts	1,457	-0.8	517	-1.0	175	10.8
Runnels	21,821	27.8	11,494	-9.4	2,337	-8.1
Schleicher	3,166	71.0	1,572	0.3	341	13.7
Scurry	12,188	35.4	6,807	-9.2	1,603	2.5
Shackelford	6,695	35.0	2,372	0.3	498	7.8
Sherman	2,314	57.1	993	-12.0	412	38.3
Stephens	16,560	7.5	3,731	10.7	856	11.9
Sterling	1,431	35.9	513	-14.6	121	-11.0
Stonewall	5,667	38.7	4,498	1.1	1,052	24.6
Sutton	2,807	75.7	790	23.4	168	9.1
Swisher	7,343	67.3	4,107	-0.1	1,042	2.1
Taylor	41,023	70.4	10,133	-4.5	2,112	-5.4
Terrell	2,660	66.8	682	23.1	128	-9.2
Terry	8,883	297.3	6,812	2.6	1,486	1.9
Throckmorton	5,253	46.4	2,797	-3.7	745	21.9
Tom Green	36,033	136.9	6,384	10.4	1,523	23.4
Upton	5,968	2,258.9	361	70.3	100	177.8
Ward	4,599	75.9	1,095	-24.9	230	-24.1
Wheeler	15,555	110.3	8,284	-2.1	1,793	10.3
Wichita	74,416	2.1	8,146	1.6	1,773	23.8
Wilbarger	24,579	62.6	9,502	-6.8	1,699	-20.6
Winkler	6,784	8,275.3	316	a	68	142.9
Yoakum	1,263	150.6	1,123	-3.4	240	0.4
Young	20,128	50.4	7,716	10.8	1,801	18.5

Table 8—POPULATION AND NUMBER OF FARMS IN 803 COUNTIES IN THE GREAT PLAINS REGION, 1920 TO 1935—Continued

State and County	Total Population 1930	Percent Increase or Decrease From 1920	Farm Population 1935	Percent Increase or Decrease From 1930	Number of Farms 1935	Percent Increase or Decrease From 1930
MONTANA						
Total	537,554	-2.1	195,262	-4.6	50,564	6.5
Beaverhead	6,654	-9.7	2,272	-21.6	551	-5.2
Big Horn	8,543	21.8	4,973	-8.8	1,163	7.1
Blaine	9,006	-0.6	5,721	3.2	1,401	8.8
Broadwater	2,738	-15.5	1,245	-15.8	337	2.7
Carbon	12,571	-17.7	5,660	-3.9	1,216	3.9
Carter	4,136	4.1	3,251	-6.6	909	7.2
Cascade	41,146	5.9	5,825	-7.7	1,478	5.3
Chouteau	8,635	-21.9	5,531	-5.4	1,690	6.5
Custer	11,242	-7.8	2,682	-8.9	750	4.9
Daniels	5,553	-	3,120	-17.4	904	-0.2
Dawson	9,881	6.9	4,026	-10.7	1,017	-0.1
Deer Lodge	16,293	6.3	829	5.1	177	24.6
Fallon	4,568	0.4	2,725	-5.9	694	6.8
Fergus	16,531	-41.7	7,630	-7.7	1,999	-3.6
Flathead	19,200	-11.5	6,272	6.6	1,489	10.4
Gallatin	16,124	1.6	5,784	-3.4	1,381	3.4
Garfield	4,252	-20.8	3,482	-7.8	1,062	-1.4
Glacier	5,297	26.8	2,166	-6.3	668	46.8
Golden Valley	2,126	-	1,301	-17.1	348	-10.1
Granite	3,013	-27.7	993	-2.4	247	*
Hill	13,775	-1.3	5,645	1.8	1,525	7.2
Jefferson	4,133	-20.6	1,748	15.0	467	21.3
Judith Basin	5,238	-	2,808	-15.7	742	-4.4
Lake	9,541	-	7,035	36.8	1,696	41.7
Lewis and Clark	18,224	-2.3	2,538	-3.6	634	3.6
Liberty	2,198	-9.0	1,459	-6.6	467	16.2
Lincoln	7,089	-9.1	2,603	39.6	734	45.9
McCone	4,790	0.9	3,558	-12.1	946	-9.1
Madison	6,323	-15.6	3,329	-4.2	783	4.7
Meagher	2,272	-13.3	1,120	-11.2	305	10.5
Mineral	1,626	-30.1	441	16.7	127	32.3
Missoula	21,782	-9.4	3,649	11.7	876	27.3
Musselshell	7,242	-39.8	1,696	-21.5	453	-13.7
Park	10,922	-3.6	2,993	*	699	6.6
Petroleum	2,045	-	1,192	-19.3	373	2.8
Phillips	8,208	-11.8	5,165	-8.3	1,522	3.1
Pondera	6,964	21.3	4,037	1.1	1,020	11.0
Powder River	3,909	16.4	3,391	-5.4	945	5.5
Powell	6,202	-10.2	1,605	-8.9	375	9.3
Prairie	3,941	7.0	2,100	-16.9	539	-3.6
Ravalli	10,315	2.1	6,234	10.5	1,477	14.9
Richland	9,633	7.2	6,266	0.3	1,506	12.3
Roosevelt	10,672	3.1	4,864	-13.4	1,416	11.0
Rosebud	7,347	-8.2	3,731	-14.4	1,080	14.9
Sanders	5,692	16.1	3,118	20.9	847	27.8
Sheridan	9,869	-28.7	5,697	-15.1	1,496	0.3
Silver Bow	56,969	-5.5	799	-10.1	192	-9.4
Stillwater	6,253	-18.0	3,724	-9.9	947	-1.6
Sweet Grass	3,944	-19.9	2,119	-14.0	535	0.6
Teton	6,068	3.4	4,041	-0.4	1,072	4.8
Toole	6,714	80.3	2,240	-2.3	635	6.4
Treasure	1,661	-16.5	1,138	-10.1	256	-3.8
Valley	11,181	-3.1	5,396	-22.2	1,706	-6.9
Wheatland	3,751	-33.2	1,206	-12.4	297	-8.3
Wibaux	2,767	-11.1	2,021	-3.1	468	-0.2
Yellowstone	30,785	4.0	9,068	-1.0	1,925	10.1
WYOMING						
Total	203,952	16.5	65,965	1.0	15,575	8.6
Albany	12,041	29.7	2,012	-8.3	537	-2.0
Big Horn	11,222	-7.3	5,289	14.4	1,064	12.2

Table 8—POPULATION AND NUMBER OF FARMS IN 803 COUNTIES IN THE GREAT PLAINS REGION, 1920 TO 1935—Continued

State and County	Total Population 1930	Percent Increase or Decrease From 1920	Farm Population 1935	Percent Increase or Decrease From 1930	Number of Farms 1935	Percent Increase or Decrease From 1930
WYOMING—Continued						
Campbell	6,720	28.4	4,647	-7.5	1,277	-6.3
Carbon	11,391	19.6	2,219	-1.0	639	27.8
Converse	7,145	-9.2	3,209	-9.9	851	4.9
Crook	5,333	-3.5	3,932	-6.0	1,038	8.9
Fremont	10,490	-11.3	5,468	27.3	1,326	40.8
Goshen	11,754	45.8	7,791	5.6	1,538	3.4
Hot Springs	5,476	6.0	1,378	8.4	346	51.1
Johnson	4,816	4.3	2,217	-16.0	574	7.1
Laramie	26,845	29.7	4,389	6.6	1,106	11.0
Natrona	24,272	65.8	1,714	9.7	460	18.3
Niabrara	4,723	-25.3	2,704	-2.7	738	1.5
Park	8,207	12.5	3,908	5.1	889	29.2
Platte	9,695	30.6	4,563	-15.5	1,005	-12.5
Sheridan	16,875	-7.2	4,818	10.5	1,002	8.2
Sweetwater	18,165	33.2	1,039	-18.1	274	6.2
Washakie	4,109	32.3	2,280	7.9	350	7.4
Weston	4,673	0.9	2,388	-6.4	611	-0.8
COLORADO						
Total	923,608	11.2	223,395	-3.1	50,439	5.3
Adams	20,245	40.3	9,131	-0.8	2,088	9.2
Alamosa	8,602	-67.1	2,390	-1.0	490	-7.7
Arapahoe	22,647	64.5	5,965	22.9	1,535	25.3
Baca	10,570	21.2	7,014	-8.0	1,805	3.1
Bent	9,134	-5.9	3,784	-11.5	899	1.9
Boulder	32,456	1.9	6,705	-4.6	1,505	2.2
Chaffee	8,126	4.8	1,325	-8.4	324	5.5
Cheyenne	3,723	-0.6	2,655	2.8	671	7.4
Clear Creek	2,155	-25.5	144	50.0	41	20.6
Conejos	9,803	16.5	5,856	-0.7	1,053	-28.2
Costilla	5,779	14.8	3,083	6.9	574	-11.4
Crowley	5,934	-7.0	2,838	-17.1	606	-3.2
Custer	2,124	-2.2	1,536	12.9	407	0.2
Denver	287,861	12.2	1,165	10.5	279	8.6
Douglas	3,498	-0.5	2,035	0.6	474	8.2
Elbert	6,580	-5.7	4,952	-4.7	1,296	4.4
El Paso	49,570	12.6	5,627	-8.3	1,453	-0.7
Fremont	18,896	5.7	5,240	13.1	1,311	3.2
Gilpin	1,212	-11.1	171	40.2	45	32.4
Grand	2,108	-20.7	1,057	22.9	296	29.3
Hinsdale	449	-16.5	152	34.5	42	-4.5
Huerfano	17,062	1.1	4,502	8.3	851	12.0
Jackson	1,386	3.4	743	-4.9	244	20.2
Jefferson	21,810	51.5	8,299	2.7	2,048	12.7
Kiowa	3,786	0.8	2,434	-5.8	617	6.6
Kit Carson	9,725	9.1	7,009	3.9	1,730	6.1
Lake	4,899	-26.1	163	40.5	39	-11.4
Larimer	33,137	18.9	9,590	-6.4	2,047	11.4
Las Animas	36,008	-7.6	9,069	-1.6	1,900	8.1
Lincoln	7,850	-5.1	4,761	-7.4	1,268	2.9
Logan	19,946	8.2	9,186	-3.5	1,929	4.6
Mineral	640	-17.8	128	12.3	49	-2.0
Morgan	18,284	13.4	8,518	-10.6	1,612	2.7
Otero	24,390	7.8	6,852	-9.9	1,372	5.7
Park	2,052	3.8	1,510	30.7	483	22.6
Phillips	5,797	5.4	3,452	8.0	876	14.4
Prowers	14,762	6.6	6,331	-9.3	1,472	6.5
Pueblo	66,038	14.6	7,030	-1.3	1,589	7.9
Rio Grande	9,953	26.7	3,848	-11.2	737	1.0
Routt	9,352	4.5	3,569	11.1	1,094	17.9

Table B—POPULATION AND NUMBER OF FARMS IN 803 COUNTIES IN THE GREAT PLAINS REGION, 1920 TO 1935—Continued

State and County	Total Population 1930	Percent increase or Decrease From 1920	Farm Population 1935	Percent Increase or Decrease From 1930	Number of Farms 1935	Percent Increase or Decrease From 1930
COLORADO—Continued						
Saguache	6,250	34.8	2,620	-2.6	697	25.1
Sedgwick	5,580	32.4	3,194	12.7	646	15.4
Summit	987	-42.7	230	4.5	64	4.9
Teller	4,141	-38.2	913	54.2	265	11.3
Washington	9,591	-14.4	7,756	0.8	1,894	8.0
Weld	65,097	20.4	29,752	-12.6	5,546	1.6
Yuma	13,613	-2.0	9,111	-3.3	2,176	3.0
NEW MEXICO						
Total	423,317	17.5	189,358	19.4	41,369	31.7
Bernalillo	45,430	52.2	7,602	33.7	1,788	43.3
Catron	3,282	-	4,493	134.0	1,167	166.4
Chaves	19,549	61.9	6,616	26.1	1,339	51.6
Colfax	19,157	-11.1	4,524	0.4	884	10.8
Curry	15,809	40.7	5,882	4.3	1,436	13.7
De Baca	2,893	-9.5	1,589	10.7	397	12.8
Dona Ana	27,455	65.9	12,401	-5.5	1,993	-6.4
Eddy	15,842	73.8	5,486	-13.9	775	-26.5
Grant	19,050	-13.2	3,289	37.8	782	35.8
Guadalupe	7,027	-12.3	3,888	51.8	851	42.8
Harding	4,421	-	3,119	3.1	705	12.3
Hidalgo	5,023	15.8	1,702	34.4	441	31.6
Lea	6,144	73.3	2,622	-1.9	736	20.7
Lincoln	7,198	-8.0	3,205	4.6	716	25.8
Luna	6,247	-49.1	1,264	23.6	305	29.8
McKinley	20,643	50.3	7,089	5.2	1,626	63.3
Mora	10,322	-25.8	7,182	-1.5	1,489	13.0
Otero	9,779	23.8	2,937	29.6	757	41.0
Quay	10,828	3.7	5,464	6.6	1,312	11.6
Rio Arriba	21,381	9.4	16,458	28.9	3,437	37.9
Roosevelt	11,109	69.7	8,568	9.8	1,918	21.5
Sandoval	11,144	25.7	7,785	26.9	1,871	42.9
San Juan	14,701	76.4	8,831	1.3	1,669	17.4
San Miguel	23,636	3.4	11,417	48.9	2,350	40.7
Santa Fe	19,567	30.2	5,892	84.0	1,261	83.6
Sierra	5,184	12.2	2,090	-2.2	470	4.7
Socorro	9,611	-31.6	5,315	46.7	1,402	65.1
Taos	14,394	12.7	11,311	66.9	2,276	59.9
Torrance	9,269	-4.7	6,372	46.3	1,502	42.4
Union	11,036	-33.8	6,289	-6.8	1,512	4.0
Valencia	16,186	17.3	8,676	18.1	2,202	72.8

*Less than 0.05 percent.

[a]No farm population in 1930.

Sources: *Fifteenth Census of the United States: 1930* and *United States Census of Agriculture: 1935.*

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