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### The Economic Development of Gray County, Kansas

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*Fort Hays Kansas State College*

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The Economic Development of Gray County, Kansas

being

A Thesis presented to the Graduate Faculty  
of the Fort Hays Kansas State College in  
partial fulfillment of the requirements for  
the Degree of Master of Science

by

Marvin A. Hubert, B. S.

(Fort Hays Kansas State College)

Date May 16, 1939 Approved E. R. McCartney  
Major Professor

Acting F. B. Streeter  
Chr. Graduate Council



CIMARRON CROSSING  
OF THE  
OLD SANTA FE TRAIL

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## PREFACE

From the high school building on the hill, in the northeast outskirts of the little town of Ingalls in Gray County, Kansas, one can look across the face of the great western plain and discern elements of a colorful past. Relics and vestiges remain which foster memories of stories of trail blazing, dreams of empire building, and the failures and triumphs of those who came before us.

At the bottom of this hill, on which the school stands, lies the small village of Ingalls. Fifty years ago, this was a proud, growing town, the county seat of Gray County, located in a new, booming country, with a flourishing prairie trade. A county seat war in the early 'nineties with the neighboring town of Cimarron stripped Ingalls of those former glories. Now only the sites and a few ruins of the old flour mills and factories remain to remind one of that promising era.

To the south of the school grounds is an old abandoned irrigation ditch built half a century ago. Brain child of a shrewd New York multi-millionaire sportsman and manufacturer, A. T. Soule, it had given promise of

turning the adjoining prairies into an agricultural paradise. It was a gigantic project, forty-five feet wide, six feet deep, and ninety-six miles long.

A few hundred yards to the southeast is the site of the famous old Cimarron Crossing of the Arkansas River on the Santa Fe Trail. Here was one of the oldest outposts of civilization in Kansas. In the early days, a fully-equipped stage station had been maintained at this point where the stages and wagon trains crossed the Arkansas River into Mexico to take the short-cut to Santa Fe. The Spaniards named this place "Cimarron," which, in their language meant "wild", and many tragic scenes were enacted at this wild place. A short distance south of the Crossing is a clump of cottonwood trees which marks the place where a band of savage Plains Indians swooped down upon a wagon train, which was waiting for the swift current of the Arkansas to recede so that the crossing might be safely made. The Mexican drivers--almost a score of them--were brutally murdered and scalped.

Except during unusually heavy rains, the Arkansas River is now but a very narrow stream which winds about a mile-wide, sandy course. Before the big irrigation dam was constructed at Pueblo, this was a great river. In

the spring, dark, swirling waters rushed down from the melting snows of the Colorado Rockies. Then the river was navigable for many miles and was used as a natural highway for travellers and explorers in their travels to and from the Southwest.

To the south of the river is a low, sandy, rolling, treeless plain. The early Spanish explorers referred to it as the "Jornado" or waterless desert. This was the most feared portion of the short-cut or dry route of the Santa Fe Trail as no water could be found for more than a hundred miles.

On these hills, both north and south of the Cimarron Crossing, one can still see the wagon ruts of the old Santa Fe Trail. Seventy years ago, when the Trail was an important transcontinental artery of trade, it would have been hard to visualize the mile-long freight trains, the California Limited, and The Chief roaring down railroad tracks which followed this same route.

The north bank of the Arkansas Valley rises abruptly a hundred feet or more to a level plain. Stretching to the north as far as eye can see, are the high semi-arid plains of north Gray County. Today these plains are sparsely settled, but a half century ago nearly every quarter section was some pioneer's homestead. Many deep open wells



and abandoned home sites still mark the efforts of the early settlers, who were forced to abandon their homesteads by a cycle of dry years which followed the bounteous rainfall at the time of the county's settlement.

I, too, have seen these usually dark-brown plains change almost overnight to a verdant green following a heavy spring or summer rain. Soon the yellow prairie flowers would tint the landscape, the beautiful carpet being broken only here and there by lakes of sparkling rain water which filled the buffalo wallows. There were then no highways or fences to mar the country side. Herds of sleek cattle grazed over the nutritious buffalo grass.

The World War came and with it a big demand for wheat. The buffalo grass sod was turned under by the plow and the winding prairie trails disappeared. Gravelled roads bisected the prairies. Trucks must haul the golden wheat to market. Bumper crops followed and transformed the prairie country into large wheat farms with an occasional new house, hundreds of new tractors and combines, and shiny new automobiles and trucks everywhere.

Then quite abruptly this glowing picture changed. A drought cycle came without warning, a cycle far more severe and of longer duration than any before known or

imagined. This time there was no buffalo grass to hold the soil and the fierce black gales swept bare the countryside. Fall after fall, the hardy settlers sowed their wheat, only to have the very seed blown from the ground. The farm lands were desolate--the prairie grass had been destroyed, the cattle sold for lack of feed and water, and the people were in hopeless despair.

Eight years of my life have been spent in Gray County--the years of its greatest prosperity and development--and I have learned to love the high prairies. I have often pondered the question of what has been the net result of the years of ceaseless labor of those who have made their homes there. In an attempt to answer this question in part, I have dedicated this thesis.

For invaluable assistance in this endeavor, I am indebted to certain faculty members of Fort Hays Kansas State College. Thanks are due, first of all, to Dr. E. R. McCartney for pointing out significant phases of a problem which would at first seem to be purely of local interest. Recognition is also due to Dr. R. T. McGrath and Dr. F. B. Streeter, for their advice and ready help in locating material and sources of information.

July, 1938

Marvin A. Hubert

## CHAPTER I

### Introduction

This thesis is a study of the economic development of Gray County, Kansas from the time of the organization of the county in 1887 to the year 1938. Historical facts and economic trends which tend to show progress or retardation have been organized in an attempt to show significant phases of the problem. Even though the study is limited to a period of fifty years, important events in the history of the territory prior to this time are not ruled out insofar as they have a bearing on the future development of the county.

The plan of the thesis is to devote a chapter to each important division of the economic activity of the county. In the following chapter is outlined the physical characteristics of soil and climate and their effect on economic life. The settlement of the county is then discussed in some detail. Early settlements and factors tending to encourage settlement prior to 1887 are noted. A chapter on agriculture gives a statistical and graphic



study of the county's chief industry for the entire fifty year period. General trends are commented upon. Other minor industries and their relative importance in the economic scheme are analyzed. The evidences of social development as found in the towns, on the farms, and over the county in general are borne out in the next to the last chapter. In the final chapter an appraisal is made of past accomplishments, of current economic forces at work, and of possible future trends from past and present indications, which give promise of effecting the welfare of the population.

The author is quick to realize and express the limitations which immediately arise when a study of so large a scope is attempted. The only possibility of bringing the problem to a successful conclusion in the limited time available was to organize the important historical and economic events so that a logical presentation of the general trends of the problem could be made. The author is also aware that the same subject could have been approached from widely diverse angles with just as good or better results.



## CHAPTER II

### Natural Characteristics

#### Physiography and Geology

Gray County is a part of the high plains region which makes up approximately the western third of the state of Kansas. The western boundary of the county is eighty miles from the Colorado state line, and the southern boundary is forty miles from Oklahoma. The area of this county is 864 square miles, being thirty-six miles from north to south, and twenty-four miles wide, from east to west.

The surface features are, in general, those of a broad gently rolling plain, through which the Arkansas River has carved out a valley from one to one and a half miles in width and from 40 to 125 feet below the general level of the uplands. The flood plain is comparatively level, and gives rise to a first and a second bottom along most of its course. Most of the flood plain is on the north side of the present river channel.

The bluffs on the north side of the river rise rather

abruptly from the valley. These form the roughest and most broken part of the county. North of the river is a margin of rolling land from one-half to a mile in width, which merges into the bluffs at the edge of the valley. On the south side of the river the bluffs are comparatively gentle.

The surface north of the river is level or gently rolling. The prairies are dotted by many small depressions, but these have little influence upon the general character of the topography. In the extreme north of the northwest part of the county, as well as in the extreme northeast portion of the county, the surface is somewhat broken by an eroded area that forms a part of the drainage basin of the Pawnee River.

South of the Arkansas River are sand dunes. The height of these dunes varies from less than 5 feet to more than 60 feet. These dunes are larger and more numerous for the first two miles south of the river valley. The sand dunes are of recent origin. Dunes may now be seen that have recently been blown out of the river bed in the direction of the hills. The material of these dunes comes in part from the great body of sand that is gradually moving down the river. The present dunes were doubtless largely derived from the old channels of the river when


the river swung northward and left the old bed to the action of the drifting winds.<sup>1</sup>


South of the sand hill area are large level areas with no perceptible system of drainage. In the southeast corner of the county there are several square miles of somewhat eroded land which is the beginning of the north end of the drainage system of Crooked Creek which is a tributary of the Canadian River to the south.


### Soils

One of the most valuable resources of Gray County is the generally fertile soil found within its border. The generalized soil map<sup>2</sup> of the county which follows shows the approximate extent of the soil types.

Fig. 1 Generalized Soil Map of Gray County Kansas

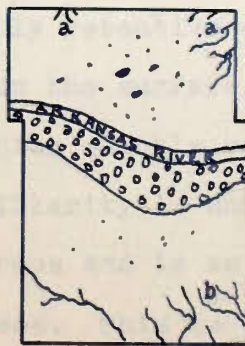
 Richfield Silt Loam

 Sand dunes and sandy soils

 Finney Clay

a. Pawnee River drainage basin

b. Crooked Creek drainage basin



1. U.S. Department of Agriculture, Bureau of Soils, Field Operations of the Bureau of Soils, 1904. (Sixth Report), p. 899-901

2. Southwestern Bell Telephone Company, Economic Survey of Kansas, p. 25-26



The soil north of the Arkansas River and south of the sand dunes is essentially of two principal classes: the wind blown soils which predominate north of the river, and the residual soils which predominate south of the river. The texture of both classes is largely that of a silt loam, which is excellently adapted to wheat growing.

The Richfield Silt Loam is an extremely uniform soil type. The soil is a dark or chocolate brown silty loam, in which is found from 15 to 20 per cent of very fine sand. The dark color usually extends to a depth of 16 to 18 inches, but the zone of weathering often reaches to 30 or 40 inches, depending upon the topography. The subsoil is a light-gray, very mealy, silty loam many feet in thickness. In north Gray County the Richfield Silt Loam forms almost the exclusive soil type, dotted here and there with small areas of the Finney clay, which has been derived from it.

The Richfield Silt Loam is highly retentive of moisture when a good mulch is kept on the surface, but because of its fine texture evaporation quickly relieves it of its moisture content when capillarity is unbroken. It is easily put in condition for crops and is an ideal soil for general agricultural purposes. This is the best soil in the county and doubtless the best in this part of



the state.<sup>3</sup> It is elevated approximately a hundred feet above the water table. Roots of plants growing on it extend to great depths, there being no hardpan or impenetrable layers to obstruct the downward movement of either roots or water.

The Dunesand, while almost a pure medium-to-fine sand, is sufficiently compact to hold itself in position, except in places where vegetation has been removed. The sand is of a tawny or yellowish color and is from a few feet to 60 feet deep. The most important use to which the Dunesand was put for many years was pasture land. It was generally covered with vegetation, consisting principally of sage brush, Spanish dagger (soap-weed), and bunch, and blue stem grasses. When the vegetation is removed, the dunes are practically uncontrollable.<sup>4</sup> The effect of pasturing too many head of cattle on these dunes is the same as that produced by the use of the plow.

The Finney clay is a dark tenacious soil, from two to six feet deep, overlying the heavy silt loam of great depth.<sup>5</sup> When the soil becomes dry large cracks, often two

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3. U. S. Department of Agriculture, Bureau of Soils, Field Operations of the Bureau of Soils, 1904. (Sixth Report), p. 905-906

4. Ibid, p. 903

5. Ibid, p. 909

inches or more in width, are formed. It is found almost wholly in the upland prairies north of the river, occupying small local depressions, known as "buffalo wallows" or "swales." It is surrounded on all sides by the Richfield Silt Loam. The Finney clay is of little agricultural value, and in a few places the presence of this stiff heavy clay soil presents some difficulty in the cultivation of the surrounding lighter soil. This type was formerly covered with a poor variety of swamp grass.

Rough stony land occupies the more precipitous bluff line north of the river<sup>6</sup> and is about one-half mile in width. The surface is very irregular and rough, so much so that it is unfit for agricultural purposes. Only an inferior and scant vegetation exists on it, except in some of the wider draws, where buffalo grass is found.

A phase of the Laurel loam occupies a portion of the first bottom on both sides of the river. The soil varies from a dark-gray heavy sandy loam to a heavy silt loam, with only a small percentage of sand. The depth of the loam varies from 12 to 36 inches. It is underlain by an inter-stratified fine sand and silt.<sup>7</sup> The soil is easily

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6. U. S. Department of Agriculture, Bureau of Soils, Field Operations of the Bureau of Soils, 1904. (Sixth Report), p. 909

7. Ibid, p. 909-910

and quickly saturated and as easily dried out. The second bottom phase is especially adapted to the growth of alfalfa and sugar beets.

### Elevation

The elevation at Cimarron, in the Arkansas River Valley, is 2,625 feet. At Dodge City, nineteen miles east, the elevation is 2,509 feet, and at Garden City, 33 miles west the elevation is 2,836 feet. The fall of the Arkansas River is approximately six and one-half feet per mile from Garden City to Dodge City. Elevation has pronounced effects on climatic conditions. The regular increase in elevation and decrease in rainfall from east to west in Kansas is reflected in a like change in humidity. Under these conditions, with the high dry winds, evaporation increases from east to west. This factor is important in judging rainfall requirements. The rainfall at Garden City averages more than one inch less per year than at Dodge City,<sup>8</sup> fifty miles east.

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8. U. S. Weather Bureau, Climatic Summary of the United States, Sec. 40 Western Kansas, p. 9, 10, and 11.



## Climate

While other characteristics have some influence on agriculture conditions, still they are of little value without rainfall, suitable temperature for plant growth, or a growing season long enough to mature crops. The inland position of western Kansas gives it a typical continental climate. It is far from any large water body. The supply of moisture comes principally from the Gulf of Mexico. This in itself limits the annual rainfall. The general levelness of the plains permits a wide direct sweep of the winds.

## Precipitation

Moisture is the chief limiting factor of crop growth in western Kansas. However, the distribution of precipitation through the year is favorable for crop growth. Approximately 77 per cent of the annual amount falls in the six months, April to September inclusive, when the growing season is at its height and moisture is most needed.<sup>9</sup> This average for the six-month period of the growing season

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9. U. S. Weather Bureau, Climatic Summary of the United States, p. 1.



is approximately the same as falls in the Dakotas and three-fourths of the average for Illinois, Indiana, and Ohio for the corresponding part of the year.

The average rainfall in Gray County compares favorably with other western Kansas counties. Table I which follows shows that the rainfall received at Cimarron has averaged almost as much as the averages at Dodge City, and Hays, and about two inches more per year than the average for the western third of the state.

Table I. Rainfall in Western Kansas

Period covered by averages	Dodge City	Garden City	Hays	Wallace	Cimarr- on	Western third of Ks.
1871-1880	--	--	25.84	17.63	--	---
1881-1890	21.81	12.10	21.71	16.33	--	---
1891-1900	21.71	17.95	22.34	14.79	--	19.25
1901-1910	19.33	20.27	24.94	17.28	21.13	19.78
1911-1920	18.87	20.07	21.51	15.13	20.83	19.26
1921-1930	24.56	20.16	20.73	17.03	22.10	19.97
1931-1936	15.48	14.26	21.30	14.15	14.30	15.12

a. For 1 year only

c. For 6 years only

b. For 5 years only

d. For 5 years only

e. At Sharon Springs

Compiled from Weather Bureau, Climatological Data,  
Topeka, Kansas station.

Investigations carried on by the United States Department of Agriculture in its work at the 'dry-land' experiment stations reveals that only 31 per cent of the low

crop yields in the Great Plains area were due to inadequate annual precipitation.<sup>10</sup> The majority of the low yields were due to inhibitory factors other than inadequate annual precipitation. Deficient annual rainfall, inopportune distribution thereof, hailstorms, high winds, hot winds, soil blowing, plant diseases, insects, and numerous other factors have a bearing on crop production in this area.

Table II on page 15 shows the precipitation at Cimarron, Kansas for the period, 1906-1936, by years and months with averages for the same. The averages for all the Weather Bureau stations in the western third of Kansas are also given for the period available. Most of this data is shown on graph form on page 15, as represented in Fig. 2.

Fig. 2 shows the great fluctuation in the rainfall from year to year. The last six years have been below normal in rainfall. Prior to the present drought period there has never been more than two years in succession in which the rainfall has been less than twenty inches, which is the 31 year average at Cimarron.

The torrential downpours is a factor why total pre-

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10. U.S. Dept. of Agriculture, Dry Land Experiment Stations, (1928), p. 32-39

cipitation and crop production are not relative to each other at all times. The hard loamy soils are unable to absorb moisture quickly and extensive run-off results. Sometimes one may find the paradox of crops in one part of a field drying up because of lack of moisture and drowning in the lower places because of too much water.

The question of whether there has been any progressive change in the amount of precipitation has been the subject of much popular discussion. Many people of this section have had the belief that "rainfall follows the plow." This contention is not borne out by reliable government precipitation records, some of which were begun more than sixty years ago.

#### Climatic Factors

The temperature is favorable to crops adapted to a temperate climate, except that the cold summer nights in this high altitude exclude the growing of crops, such as cotton and tobacco, which do not thrive under these conditions. The average annual temperature is in the neighborhood of the 54.3 as represented by records at Dodge City covering 60 years.<sup>11</sup> The range between the high

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11. U.S. Weather Bureau, Climatological Report--Kansas Section, 1936. p. 96.



temperatures of summer afternoons and the low points of nights is close to 30°. Average maximum temperatures are 66.7 and minimum are 41.7°. Highest temperatures ever reported at Cimarron was 110° in July, 1936. The lowest in the immediate area was -26° at Dodge City in February, 1899.

The general levelness of the topography permits a relatively high wind velocity, and when the direction changes from southerly to northerly, an extreme drop in temperature may result within a very short period. The average wind movement in this section of Kansas is among the highest found in any inland part of the country. The windiest months are March, April, and May, and the month of least wind is August. The wind velocity at the Dodge City station, which is representative of this part of the state, has averaged 12 miles per hour for the 33 years prior to 1906.<sup>12</sup> The most damaging winds are the hot winds that sweep from the south during a dry, heated period of summer while shade temperatures are ranging from 100 to 110 and which cause rapid desiccation of growing crops. High winds of early spring often cause much damage by blowing off the loose upper soil, especially if it happens to be dry. In such cases soil may be blown from the roots

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12. Yearbook of the Department of Agriculture, 1908, p. 294

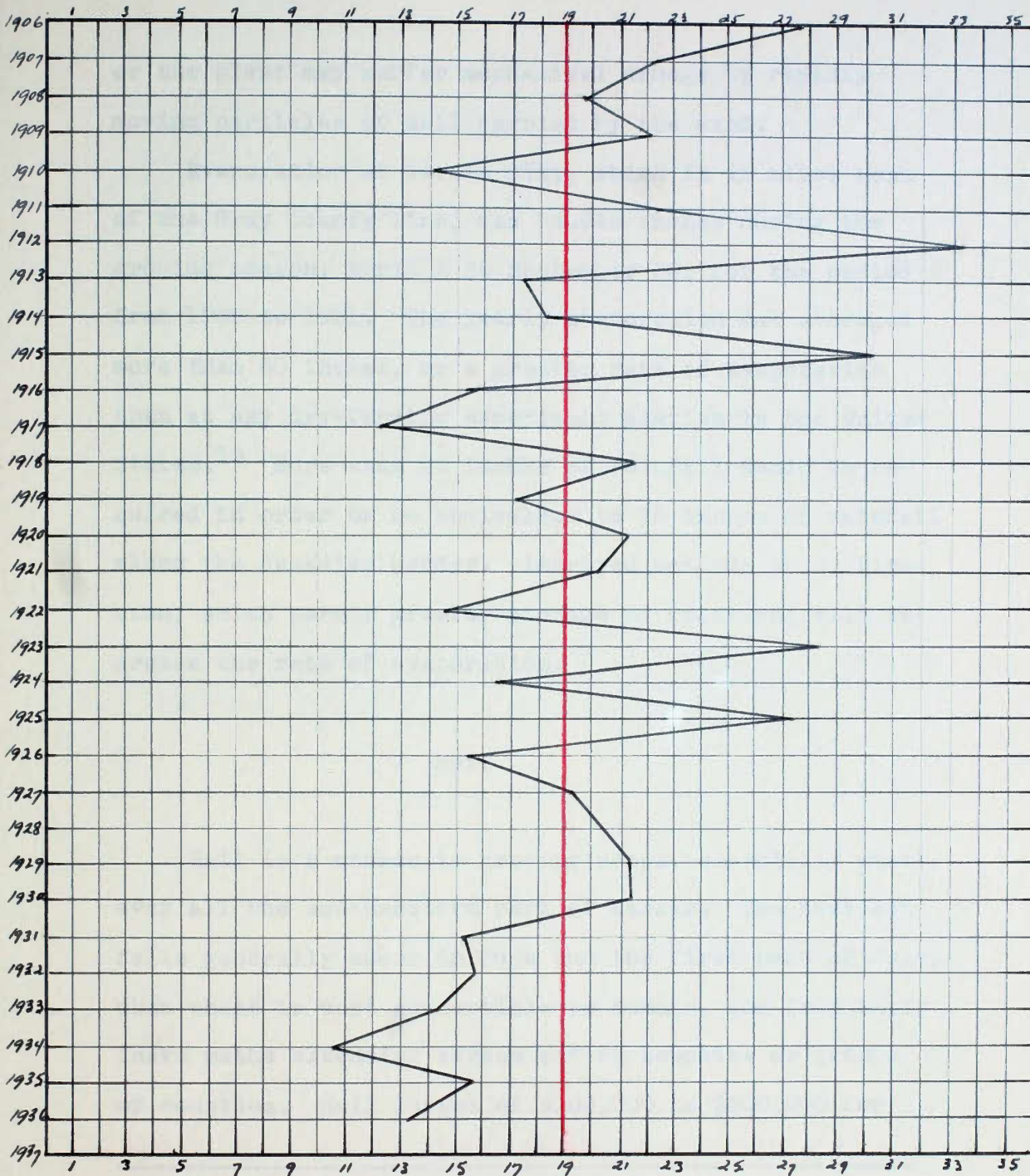


Table II. Precipitation At Cimarron, Gray County, Kansas  
(1906 to 1936)

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual	Western Kansas
0.35	0.97	1.15	2.24	0.72	2.66	5.23	4.42	5.78	2.67	0.98	0.57	27.74	
0.30	0.19	0.15	0.71	2.30	3.42	7.39	2.69	0.70	1.96	0.45	1.80	22.06	
T	0.56	T	1.89	0.76	7.77	2.85	1.24	1.17	1.52	1.95	T	19.71	
0.40	0.31	1.64	0.15	1.84	5.13	2.00	2.60	1.20	0.88	5.46	0.55	22.16	
0.40	0.30	T	1.07	1.43	1.42	2.27	5.60	0.01	1.25	0.10	0.15	14.00	
0.35	4.55	0.73	0.44	3.88	0.68	3.36	4.76	0.31	0.82	0.87	1.82	22.57	
0.23	2.39	1.18	3.28	1.54	6.84	4.89	9.84	2.59	0.35	0.25	0.05	33.43	
0.40	1.40	0.13	1.68	0.63	3.51	0.36	0.29	4.53	0.25	1.82	2.54	17.54	
0.15	0.19	0.21	2.27	5.44	5.17	1.13	2.11	0.33	0.74	0	0.51	18.25	
1.02	2.05	1.21	3.05	4.72	2.21	4.16	5.00	3.85	2.80	0.12	1.12	30.31	
0.45	0.04	0.65	2.50	0.40	4.00	0.60	2.50	1.55	1.79	0.08	0.37	14.93	
0.20	0	0.21	1.34	1.88	0.47	2.34	4.36	0.56	0.19	0.53	0.20	12.28	
0.35	0.43	2.25	1.14	2.66	1.29	2.90	0.47	2.92	2.46	0.31	3.49	20.67	
0.20	1.30	1.12	3.03	2.04	2.57	2.06	0.62	2.12	0.97	1.07	0.07	17.17	
0.04	0.15	0.23	1.21	2.45	2.46	5.61	1.69	2.46	3.67	0.76	0.51	21.24	
0.29	0.61	0.02	2.69	0.50	8.68	3.00	2.20	1.57	0.19	T	0.45	20.20	
0.24	1.05	1.40	2.67	2.81	0.65	1.32	2.93	0.51	T	1.28	T	14.86	
0.01	0.10	0.33	2.51	7.18	4.40	2.51	0.96	4.97	4.65	0.36	0.30	28.38	
0.10	1.00	3.00	2.30	1.00	0.90	1.87	2.03	2.30	1.65	T	0.44	16.59	
T	0.30	0.09	4.38	2.06	2.26	5.61	5.47	5.32	0.80	1.21	T	27.50	
0.11	0.67	1.44	0.57	1.81	2.13	2.86	1.49	3.17	0.16	0.79	0.37	15.57	
T	0.32	1.86	3.94	0.74	4.15	2.81	2.56	2.45	T	0.06	0.22	19.11	
T	1.21	0.87	2.71	4.01	8.40	6.82	2.77	1.75	3.27	3.23	0.29	35.33	
0.36	0.52	0.41	0.84	2.58	3.50	4.03	1.44	3.15	2.76	1.57	0	21.16	
0.11	0	T	1.37	4.52	1.40	2.77	1.37	2.12	5.38	2.07	0.22	21.33	22.9
T	0.68	1.73	2.05	3.84	0.27	1.93	2.19	0.18	0.66	1.65	0.25	15.43	15.6
1.27	0.15	0.82	1.58	1.81	5.85	1.07	1.93	0.42	0.70	0.18	0.06	15.84	17.0
0	0.40	0.19	1.58	4.13	1.50	0.56	2.70	0.45	1.34	0.79	0.52	14.16	17.90
0.17	1.47	0.46	0.95	1.11	1.24	0.86	0.40	1.80	0.81	0.81	T	10.68	11.1
0.49	0.38	0.89	T	5.69	2.88	T	2.10	2.68	0.72	0.75	0.02	16.60	15.2
0.31	0.03	0	1.43	4.98	0.88	1.20	1.54	1.34	0.44	0	0.95	13.10	13.7
0.27	0.77	0.79	1.86	2.63	3.18	2.79	2.65	2.07	1.48	0.95	0.54	20.00	16.2

Compiled from Climatological Data, U. S. Department of  
Agriculture, Weather Bureau, Kansas Section

rainfall in inches





or the plant may suffer mechanical damage by rapidly moving particles of soil carried by the wind.

Evaporation at Garden City, which is 15 miles west of the Gray County line, was 54.945 inches during the growing season, April 1 to September 30, for the period from 1908 to 1931. The yearly evaporation has averaged more than 60 inches, or a greater rate of evaporation than at any dry-farming experiment station in the United States.<sup>13</sup> More than 20 inches of rainfall would be required in order to be equivalent to 15 inches of rainfall along the Canadian border. Improved methods of cultivation, which permit greater storage of moisture, will decrease the rate of evaporation.

### Hail

Hail is a menace to growing crops, especially wheat, over all the southwestern part of Kansas. The heaviest falls generally occur in June and the first part of July, when wheat is most susceptible to damage, and frequently leave paths extending across entire counties or groups of counties. Hail losses of \$100,000 to \$500,000 for

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13. U. S. Dept. of Agriculture, Plant Industry Bulletin No. 171.172.178, 182.184-188, 190.191. 1910, p. 17



single storms are almost annual occurrences and several instances have been reported where the loss from a single storm area has amounted to from \$1,000,000 to \$3,000,000. On May 4, 1931 a damaging hail storm crossed parts of Stanton, Kearney, Finney, Haskell, and Gray Counties causing a loss of \$1,500,000 to the wheat crop.<sup>14</sup>

The actual frequency of damaging hail over a given area is not definitely known but figures compiled from extended experience of insurance companies indicate it may run as high as ten per cent per year. In 1929 the stock companies retired from hail underwriting in Gray County and asked for permission to charge a 12 per cent premium.

#### Frosts

Damage from late spring frost is not considered a serious matter in this part of Kansas. The growing season averages 169 days for the county.<sup>15</sup> The variation in the length of the growing season from year to year is

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14. Climatological Data, Kansas Section, Vol. XLV, Topeka, Kansas, Annual, 1931. No. 13 p. 97

15. Climatic Summary, Sec. 40 Western Kansas, p. 22 and 23.

great here, as few as 148 days having been recorded between the last killing spring frost to the first killing fall frost. The longest growing season was in 1919 with 238 days. The average for the past decade has been very high, with about 200 days average.

The average date of the first killing frost at Cimarron is the 15th of October, but killing frosts have occurred as early as the 23rd of September. Damage from these early fall frosts is rather frequent to the grain sorghum crops.

### Native Vegetation

Areas of sandy loose soil, which form about one-sixth of the total county area, support tall grass. The tight soils are unable to receive the rainfall rapidly enough to prevent run-off and evaporation. These soils support the short grass.

The short buffalo and grama grasses furnish excellent grazing land with a carrying capacity of 40 or 60 head of cattle, almost the year around, per section. The number of cattle that can be pastured varies with the rainfall received and other climatic conditions.

The phenomenal drought during the last six years

and the destructive action of dust storms in addition to close grazing for a number of years has killed practically all the permanent pastures, excepting in the valley of the Arkansas River. The native pasture cannot be easily restored once extensive areas have been destroyed. It is very difficult to secure seed and in all probability much of the fine native grass lands could never be replaced even if an attempt were made.

### Trees

The absence of tree growth was marked in the early days. Prairie fires in the past were the worst enemy of tree growth in western Kansas and, in part, account for the present limited stand. Early settlers remember when there was only one tree between Dodge City and Cimarron on the Arkansas.<sup>16</sup> At present trees are growing quite extensively in the river bottom. Most of these are cottonwoods and willows from seed washed down from the mountains in Colorado.

Much of Gray County was settled under provisions of the Timber Claim Act. The homesteader could secure title to a quarter-section of land by planting 10 acres to forest

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16. Egbert, J. H., Cimarron, Kansas Interview.



trees and maintaining this area for a period of eight years. The plan did not prove successful in this county in promoting an abundance of trees. Only a relatively small part of the trees planted survived. In many cases the homesteader planted the required 10 acres of trees merely as a formality. Many planted locust trees with a corn planter, or stuck cottonwood twigs in the soil expecting them to grow. Others planted trees which were not adapted to this part of the state. Some 20,409 acres of artificial forest had been planted in the county by 1886, of which only 252 acres survived the dry year of 1887.<sup>17</sup>

A limited number of trees are now growing in the county with probably about one-third of the farmsteads maintaining a few fruit and shade trees, which in many instances are more or less regularly irrigated from the windmill pump. Trees are also successfully grown without irrigation where varieties adapted to the climate have been planted, and efforts have been made to conserve the moisture by keeping down weeds and mulching the soil after rains.

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17. State Board of Agriculture, Biennial Report, 1887-88.

## Native Animal Life

Early settlers tell of the times when Gray County, and especially the Arkansas Valley, was a veritable paradise for wild animal life. Hunters and trappers and other ecological factors contingent upon civilization have eliminated much of the wild animal life, especially the mammals. Thousands of bison and antelope once grazed the prairies, deer, elk, and antelope as late as 1898, and wild horses were found by the early settlers, especially in the valley of the Arkansas.<sup>18</sup> Fur bearing animals were also found in much larger numbers than is generally known. Gray wolves, coyotes, kit-foxes, skunks, badgers, otter, beaver, muskrats, weasel, are some of the mammals that were quite plentiful in the early days. During the winter of 1873 more than 600 beaver were caught on the Arkansas between Dodge City and Garden City.<sup>19</sup>

Other mammals native to Gray County were the prairie dogs, single 'towns' sometimes covered hundreds of acres, jack rabbits, cottontails, and ground squirrels. Other animals that were numerous included the rattlesnake which

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18. Terrence Burns, Ingalls, Kansas, Interview.

19. 'Doc ' Barton, Ingalls, Kansas, Interview.

is only rarely found today. The prairie dogs were exterminated a score of years ago when the county offered a bounty on them. Jack rabbits became so numerous a few years ago that they became a menace to the wheat industry, and the ground squirrel (*Citellus tridecemlineatus*) and the pocket gopher (*Geomys bursarius*) are particularly obnoxious in fields of newly planted grain.

Before the Arkansas River was dammed near Pueblo, Colorado, there was a plentiful supply of bass, channel catfish, and river trout. The river, and, during years of heavy rainfall, the upland ponds and lakes were covered with wild ducks and geese. Prairie chickens were found in large numbers on the prairies until the recent drought and dust storms.

#### Water Supply

A natural resource of great importance is the plentiful underground supply of water which underlies as far as is known the whole of Gray County from 25 to 150 feet beneath the surface. Almost every farm has a windmill which pumps water to the surface for human use, for the livestock, and for irrigation of the family garden. During drought years, when dry land farming becomes extremely un-



profitable, there is always talk of tapping this extensive underground water reservoir. The high cost of installing satisfactory pumping units has prevented any of these plans from materializing. It is probable that one or two of these deep wells will be completed in the north part of the county within the next year and the results will be watched by many with keen interest.

Several pumping plants have been installed in the river valley where the underground water supply is available in practically inexhaustible quantities at a shallow depth. In 1920 there were almost two thousand acres under irrigation in the county.<sup>20</sup> There has been no increase since that time. There has been a decided lack of capital, probably because the present ventures are not proving very profitable. Market conditions do not at present justify any extensive irrigation development even in the river valley where water can be pumped cheaply, much less on the prairies where water must be pumped a hundred feet or more.

At the time of the settlement of western Kansas in the late 'eighties several plans for extensive irrigation projects were put into effect. Most of these planned to use the Arkansas River as their source of water supply, the

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20. State Board of Agriculture, Biennial Report, 1919-20

underflow not having been discovered at that time. In 1884 the Eureka Irrigating Canal Company constructed an irrigation canal in Gray County. Its intake from the Arkansas River was about a mile west of the present town of Ingalls and it was built along the top of a ridge north of the river and extended ninety-six miles down the valley. By 1888 more than 336 miles of irrigation ditches had been constructed along the upper valley of the Arkansas and were designed to irrigate 300,000 acres. Most of the ditches could not be operated successfully, as was the case with the Eureka Ditch, since the whole volume of the Arkansas River was but two-thirds of the western Kansas requirement, and Colorado farmers left much less than that.<sup>21</sup>

In 1919 another attempt was made to revive the Eureka Ditch, in Gray County. The ditch was repaired, a large hole or "sump" was dug in the river bottom near the intake of the old canal. The plan was to utilize the underflow and pump water therefrom into the canal. The venture did not prove very profitable and was abandoned when the "sump" was destroyed by a flood in 1923.

It is generally acknowledged that there is an existence of a large body of water under-ground sufficiently

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21. State Board of Agriculture, Seventh Biennial Report, 1887-1888.

abundant to irrigate from five to twenty acres on every quarter-section.<sup>22</sup> The opinion has been expressed by experts that if the farmer could irrigate five acres he could make a living during drought years and could become well-to-do if water for twenty acres were available. The farmer could live through the driest years, and in wet years the rest of his farm would produce, as we know, abundantly.

Extensive experiments in irrigation at the Garden City Experiment Station reveal the fact that milo and kafir can be grown very successfully under irrigation with tremendously increased yields over dry land farming. The low price of these grains makes large per acre incomes impossible.<sup>23</sup>

The experiments at Garden City show that yields of small grain crops such as wheat, oats, and barley are controlled to a greater extent by prevailing conditions than by available amounts of water, and no matter how much water is available good yields cannot be insured in years of adverse climatic conditions.

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22. State Board of Agriculture, Seventh Biennial Report, Robert Hay, Chief Geologist of the U.S. Artesian and Under-flow Investigation. p. 29

23. Agricultural Experiment Station, K.S.A.C, Manhattan, Kansas. Bulletin 228, June, 1922. "Relation of Crop Yields to Quantity of Irrigation Water in Southwestern Kansas."



The utilization of the under-ground water resources in Gray County will probably develop very slowly even in the river valley. High prices for food stuffs in the future might make badly needed capital available for the construction of pumping plants.

Most of the territory occupied by the present State of Kansas was ceded to the United States by Spain in 1803 as part of the Louisiana Purchase. At that time it was an unexplored wilderness, inhabited only by Indians. France had acquired the land in 1803 from Spain, who had claimed it by virtue of the explorations of Lewis and Clark. It was not until 1854 that Kansas was admitted to the Union as a free State.

The United States Government sent a military expedition into the new Territory. In 1854 an expedition led by General W. H. Taylor crossed Kansas from west to east, passing up the Rocky Mountains. Taylor led a party of United States Government troops, and with them a party of Indian scouts. They followed the Arkansas River and traversed the Territory which is now Gray County. The Arkansas River was the eastern boundary of the Territory.

### CHAPTER III

#### Settlement of County

Most of the territory occupied by the present state of Kansas was ceded to the United States by France in 1803 as part of the Louisiana Purchase. At that time it was an unexplored wilderness, inhabited only by Indians. France had acquired the land in 1800 from Spain, who had claimed it by virtue of the explorations of Coronado, believed to have led an expedition into Kansas about 1541 in search of the fabled cities of Cibola.

The United States Government sent out several exploring expeditions into the new territory. In 1806 an expedition led by Zebulon M. Pike crossed Kansas from east to west, reaching as far as the Rocky Mountains. Major Long led a party of United States Government topographical engineers up the Arkansas Valley through Kansas in 1819 and 1820.<sup>1</sup> Both expeditions followed the Arkansas River and traversed the territory which is now Gray County. The Arkansas River was the natural gateway which many

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1. Kansas Historical Collections, Vol. 8, Morehouse, G.P.

early explorers, travelers, and traders used in their journeys to and from the Southwest.

In October of 1806 Pike described the Arkansas,<sup>2</sup> which his party ascended, as about five hundred yards wide, banks not more than four feet high and thinly covered with cottonwoods. On the north side was a low prairie, and on the south a sandy, sterile desert. Reports of the few travelers and traders who, subsequent to Pike's expedition, traversed the sandy country found along the Upper Arkansas, but strengthened the belief in a Great American Sahara.

### The Santa Fe Trail

It is true that there was no Santa Fe Trail till white man made it, however, the old Indian traditions and other proofs clearly establish that along parts of its course, there was a prehistoric, well-marked and used highway to and from the Southwest.<sup>3</sup>

Starting about 1822, traders began to cross Kansas to reach Santa Fe, the principal trading point in north-western Mexico. The Santa Fe Trail, following the valley

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2. Kansas Historical Collections, Vol. 6.

3. Morehouse, G. P., Kansas Historical Collections, Vol. 8, p. 141.



of the Arkansas River, was established, and travel rapidly increased over it. It became a great road more than 700 miles long, a hard, smooth thorofare from 60 to 100 feet wide. It had not a bridge in its whole length, and was the best natural road of its length ever known in the world. It was along the Santa Fe Trail that General Stephen W. Kearny's army<sup>4</sup> marched in 1845 on its way to the conquest of New Mexico. In 1848 gold was discovered in California, and in the ensuing rush of people<sup>5</sup> westward it is estimated that some ninety thousand people passed through Kansas over the Santa Fe Trail on their way to California.

The old route of the trail passed directly through what is now Gray County from east to west following the north bank of the Arkansas River. The various crossings which were used west of Fort Dodge in the short-cut to the Cimarron River also crossed the south part of what is now Gray County. D.W. "Doc" Barton, pioneer western Kansas cattleman has pointed out the famous Cimarron Crossing at Ingalls in Gray County<sup>6</sup> and an Upper Cimarron Crossing as being about three and one-half miles west of

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4. Bradley, The Story of the Santa Fe, p. 18.

5. Inman, The Old Santa Fe Trail, p. 144-148 and 443.

6. Kelly, E.E., The Topeka Daily Capital, Feb. 18, 1934.

Ingalls.

Kansas was organized as a territory in 1854. The Kansas-Nebraska Bill was passed by the Congress of the United States on May 30 of that year. Immediately settlers began to flock into eastern Kansas. The first people who came to live in what is now Gray County came as a result of the development of transportation services on the Santa Fe Trail.

The government started the overland mail service as early as 1849.<sup>7</sup> In May of the same year, the first stage line, a monthly service, was established between Independence and Santa Fe. In the early 'sixties daily stages were run from both ends of the route. The horses were changed every twenty miles and later every ten. Later the company built stations at intervals varying from ten miles to fifty or more.

R. M. Wright, early Dodge City pioneer, bought a ranch in 1867 on the Santa Fe Trail,<sup>8</sup> approximately half way between the present towns of Cimarron and Ingalls. It was known as the Cimarron Ranch and supplied hay for the horses and oxen of the caravans and stage coaches and

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7. Bradley, The Story of the Santa Fe, p. 46.

8. Kansas Historical Collections, Vol 7, p. 55, 60, and 62.

for the livestock of the immigrants. The ranch had been operated by a company prior to 1867, and they were very eager to sell; two of their men had been brutally murdered by Indians while putting up hay. The government had ten men and a sergeant stationed at the ranch on escort duty with the United States mail.

In 1867 there was a well-equipped stage station<sup>9</sup> at the Cimarron Crossing owned by the Overland Stage Company. There were adobe houses and a large corral in which stage coaches or trains could find shelter in case of an attack by Indians.

### Indians

The Indian tribes, the Cheyennes and Arapahoes, who inhabited western Kansas and eastern Colorado, were moved to Oklahoma in 1867 with the privilege of hunting as far north as the Arkansas. Wandering tribes continued to rove the plains<sup>10</sup> of western Kansas for many years, and preyed on the trade of the Santa Fe Trail. When the railroad was completed in 1872 trade on the Santa Fe Trail al-

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9. Kansas Historical Collections, Vol. 16, p. 336.

10. Andreas, History of Kansas, Vol. 2, p. 74.



most ceased, and the Indians caused little more trouble,<sup>11</sup> although Indian bands were quite numerous in this territory until 1878. The last Indian raid in Kansas passed directly through Gray County from north to south. This was the band of Northern Cheyennes under Chief Dull Knife who in September, 1873 moved in a general northerly direction across the western part of Kansas, attacking the settlers, pillaging and destroying property,<sup>12</sup> and murdering thirty-two persons.

#### Buffalo Hunting

Hunters flocked to southwestern Kansas to kill buffalo as soon as the railroad was completed. R.M. Wright, in partnership with Charles Rath, shipped over 200,000 buffalo hides the first winter the railroad reached Dodge City. A good hunter, it was said, could make \$100 a day.<sup>13</sup> The exportation of millions of hides to eastern and foreign markets between 1850 and 1883 took place. Thousands of buffaloes were killed solely for their hides, and in a few years the Arkansas Valley was lined with skeletons . Bone

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11. Barton, D.W., Interview.

12. Kansas Historical Collections, Vol. 8.

13. Kansas Historical Collections, Vol. 7, p. 75, 78.

picking was a regular industrial pursuit in 1874. Ten to twenty tons of buffalo bones were shipped over the Atchison, Topeka and Santa Fe Railroad every day. The bones brought \$5.00 per ton at the stations.<sup>14</sup>

#### Railroad and Homestead Land

The railroad construction during this period was financed chiefly by land grants from the public domain. The Atchison, Topeka and Santa Fe was granted alternate sections, ten miles on each side of the right of way in Gray County.<sup>15</sup> There were 25.63 miles of railroad in the county and this gave the railroad 164,032 acres, which equaled 30 per cent of the county's total acreage. The remainder of the county was subject to entry under the Homestead and Timber Claim Acts.

Each settler could secure from 240 to 320 acres of land, by using his homestead and tree claim rights, at a cost of only about twenty cents per acre. The cost to file on a government claim was \$14 outside of the twenty mile railroad zone; in the railroad land limits it was \$18.

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14. State Board of Agriculture, Third Annual Report, p. 54-55.

15. Bradley, The Story of the Santa Fe, p. 107.

In May, 1881 the Santa Fe commenced the appraisalment of their lands on the north side of the river from Ford County to the western State line. The south side was to be appraised immediately following.<sup>16</sup> A large increase in population could be looked for as a result of the Santa Fe making a drive to sell their lands. The major portion of the railroad grant in Gray County and western Kansas was sold from 1884 to 1886. By 1886 the land grant had been virtually exhausted.<sup>17</sup>

The Atchison, Topeka and Santa Fe Railroad land prices ranged from \$2 to \$10 per acre. (\$3.25 in Gray County) The railroad officials soon after completion of the railroad began a big advertising campaign which brought thousands of inquiring letters. Good land salesmen and colonization agents were secured in the older states farther east. Local sales agencies were also established in all important towns along the line from Florence westward. The young railroad was rather short on cash, and for remuneration the salesmen had to depend upon their commissions from sales actually made.<sup>18</sup> Four

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16. The New West, May 14, 1881, Vol. 2, p. 39.

17. Bradley, The Story of the Santa Fe, p. 135-136.

18. Ibid, p. 112-113.



installments were provided for the purchaser, if cash was paid one-third discount on the price was allowed. Santa Fe officials estimated that after deducting advertising expenses and free services to immigrants that the railroad probably cleared only about \$1.00 per acre. The sacrifice was necessary to build up the country and trade from which the railroad must later prosper.<sup>19</sup>

### The Boom of the 'Eighties

In 1878 there were only about 20 settlers in old Gray County, then an unorganized county. The postoffice at Cimarron was established in April of that year. The railroad station and section house had been there since 1874. The first store was opened on May 20, 1878. The first government claim was taken February 13, 1878.<sup>20</sup>

According to the U.S. Census of 1880, Foote County, which two years later became the major part of the newly created Gray County, had a population of 411. In 1882 the population of unorganized Gray County was estimated at 500.<sup>21</sup> Only a very small portion of the county was

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19. Richardson, The Greater Southwest, p. 345.

20. Andreas, History of Kansas, Vol. 1, p. 1616.

21. Kansas Historical Collections, (R.M. Wright), Vol. 7.

settled, and the people were interested in raising livestock.

During the period from 1883 to 1886 western Kansas had abundant rainfall. The farmers from eastern Kansas, from Illinois, Indiana, Iowa, and other states settled on the short grass country almost to the foothills of the Rockies. It was the last major movement of the westward advance of the American pioneer which had been going on for more than a century and a half. The slope of the prairies was so slight as to be imperceptible to the eye, and the settlers thought the productivity was the same at the foot of the Rockies as near the Missouri River. There were no weather records to reveal the treachery of the rainfall.<sup>22</sup>

There were many encounters between the cattlemen and the "grangers" as the pioneer farmers were called.<sup>23</sup> All the vast territory of western Kansas and westward to the Rockies was regarded as free range by the cattlemen. They did not like to see the land settled on. In the winter the wild range cattle by the thousands would drift south from Nebraska, Wyoming, Colorado and the Dakotas and swoop

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22. Weather Bureau, Climatological Data, Dodge City.  
( start in 1874)

23. Jacksonian, Nov. 14, 1931, Mrs. C.B. Erskine,  
"Historical Pageant."

down upon the homesteaders' scanty hay supply, trample everything underfoot, and the herd, often including the farmer's stock, would continue before the storm. The cattlemen argued that the country wasn't meant for farming. The farmers maintained that the land had been given them by the Government to do with as they liked, and that they didn't have to prove that it was fit for farming.

### Blizzard of 1886

The Great Blizzard of 1886, which is generally regarded as the worst in the history of this area, removed the cattlemen from competition with the farmers for many years. The blizzard struck terror in the hearts of the settlers, many of whom froze to death being so unfortunate as to be caught in the storm.

"When the wind died after the Big Blizzard of 1886, many of the east-and-west fences and arroyos or draws were stopping places for acres of cattle, frozen rigid....Some were found standing frozen upright in the drifts, their hoofs having pierced the crust."<sup>24</sup> As soon as the weather moderated enough for the settlers to venture forth, they

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24. Peterson, Elmer T., Trumpets West, p. 182.



began to skin the cattle, leaving the carcasses where they were. The owner paid a dollar or two for each hide and sold it at a slight advance to a hovering speculator.

Cattlemen were desolate. The Barton Bros. Ranch, famous through Gray County, lost more than twelve thousand cattle,<sup>25</sup> among them 800 that were registered. After the Great Blizzard the remnants of their herd were gathered from as far south as Texas; they were thin, starved, and worthless. The great tide of incoming homesteaders in the spring of 1886 forever ended the large scale cattle industry and marked the end of the open-range method of turning animals loose at branding time in the fall.

#### Asa T. Soule--Gray County's Benefactor

All of western Kansas was being blessed by favorable rains during the late 'eighties. Gray County received additional blessings in that it had a multi-millionaire 'public benefactor,' in the person of Asa T. Soule. His efforts added greatly to the circulating medium and raised the local per capita distribution to an abnormal figure.

Asa T. Soule came from Rochester, New York where he

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25. Kansas Historical Collection, Vol. 12, p. 105-106.

had accumulated ten million dollars from the manufacture of patent medicine, known as 'hopbitters.' He had come west at the insistence of his friends and former neighbors, John and George Gilbert, to take a look at the magnificent country beyond Dodge City. Soule came and was impressed with what he saw.

The Eureka Irrigating Canal Company was organized in 1883. The source of water supply for the canal was the Arkansas River at Ingalls, and its lower end was Coon Creek, some forty-five miles east of Spearville. A ditch 45 feet wide and 6 feet deep was constructed. Its total length was 96 miles, and it was built along the top of a ridge north of the river and the A. T. & S. F. Railroad track. The company issued stock to the amount of \$1,000,000 and Soule took it all, furnishing the money for the construction of the ditch, which cost in the neighborhood of \$250,000. He bonded it for a million and sold the bonds in London at par. It was claimed that the only time the ditch was full of water was while he was working off this deal. Soule cleared up a cool half million in profit in this "investment."<sup>26</sup>

Soule had some other schemes up his sleeve. He plan-

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26. Kansas Historical Collection, Vol. X. p. 465.

ned to build a city at the intake of the canal and make it the county seat of Gray County. Cimarron, six miles east, which had been founded several years before, was already a town of several hundred population and believed that it was the rightful place for the county seat.

Gray County had been permanently organized in July, 1887. Cimarron was named the temporary county seat. The permanent county seat was to be decided upon by an election in October. Soule was determined to have this prize for his city of Ingalls. In order to attract people to Ingalls he promised to build a sugar mill there, drill for natural gas, artesian water and coal, or anything else that the community might desire.<sup>28</sup> The city was to be absolutely tax free.

Montezuma, another ambitious young town located twenty miles south of Ingalls, also aspired to become county seat. Soule promised Montezuma and its neighbor, Ensign, a railroad outright if they would vote for Ingalls. Cimarron did not have the money to combat this 'bribery.' The activities of Soule were resented deeply by Cimarron. To off-set Soule's extravagance at Ingalls, Cimarron offered

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28. Sat. Evening Post, June 4, 1927, Vol. 199, "The Battles of Phantom Cities," by Peterson, p. 47.



to build a courthouse free.<sup>29</sup>

The election for permanent county seat on October 31, 1887 ended in dispute. Each side accused the other of fraud. Soule had hired a bunch of gunmen from Ravanna and Dodge City to see that Ingalls got 'a square deal' at the polls. Cimarron factions gave a \$10,000 bond as a bribe to "The Foote Township Equalization Society" for the promise that the seventy-two eligible voters would cast their vote for Cimarron.<sup>30</sup> The joke was on the farmers, however; the bond was later repudiated and found to be a forgery.

The Supreme Court awarded the county seat to Ingalls by a two to one decision. Cimarron, according to the law, had been guilty of fraud, while Soule at Ingalls, had violated no legal rules, although moral right was no doubt on the other side.<sup>31</sup>

The early spring of 1888 found the county records at Ingalls, as the district judge had issued a mandamus ordering the change made. On March 14 of the same year, the Supreme Court issued an alternative writ of mandamus removing the county offices to Cimarron.<sup>32</sup>

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29. Sat Evening Post, June 4, 1927, Vol. 199, "The Battles of Phantom Cities," by Peterson, p. 47.

30. Ibid., p. 213.

31. Ibid., p. 47.

32. Ibid., p. 217.

Bitterness between the two factions increased. On the morning of January 12, 1889, J. H. Reynolds, an Ingalls man, and the sheriff-elect, deputized some men, including a number of Dodge city 'toughs' for the 'amiable' errand of removing the county archives to Ingalls. A street battle ensued between the Ingalls 'Hessians' and the citizens of Cimarron.<sup>33</sup> An inoffensive Cimarron citizen was killed by a stray bullet. About six other men, some on each side, were wounded. Ingalls got the records.

General Murray Meyers of Wichita was instructed by the Governor to send a company of national guardsmen to Cimarron, but not to take part in the disposal of county records.

Asa T. Soule died a year after the Cimarron-Ingalls fight. A period of national hard times came and the people in general became dispirited. The Soule irrigation ditch did not work satisfactorily. The Soule railroad to Montezuma was taken up and junked for lack of business. The sugar factory did not materialize. Ingalls shrank to half a dozen houses. The county commissioners called an election<sup>34</sup> for February 13, 1893, resulting in a vote

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33. Sat. Evening Post, June 4, 1927, Vol. 199, "The Battles of Phantom Cities," by Peterson, p. 217.

34. Ibid., p. 218.

of 304 to 269 in favor of Cimarron. The county records were transferred in an orderly way to Cimarron on February 19.

### Newspapers

The newspapers of Gray County had an important part in advertising the county as well as the respective towns in which they were located.

The Jacksonian, one of the Cimarron newspapers, in 1886 was active in letting the world in on the secret that Cimarron was the logical place to establish a great inland metropolis.<sup>35</sup> "Its crowning day will be the securing of the capital of Gray County," said the editor.

The two Ingalls papers the Messenger and the Union hailed Soule as 'the People's Friend.' In January, 1890 the Union boldly proclaimed, "Large sugar mill, cheese factory and flour mill to be built at cost of \$200,000 in spring."<sup>36</sup>

The same issue of the paper carried the news that the bonds for a large sugar mill had carried. The cost

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35. Sat Evening Post, June 4, 1927, Vol. 199, "The Battles of Phantom Cities," by Peterson, p. 45.

36. Ingalls Union, Jan. 2, 1890.



of the sugar mill was to be \$40,000 and was to have a capacity of 100 tons per day. A flour mill and cheese factory were already contracted for and would be constructed immediately.

In May, 1890, the Union <sup>37</sup> was still running the same advertisement which had been in the paper each week since 1887, proclaiming to the world as follows: "Promise of \$100,000 in public improvements for next year for Ingalls; not a single dollar of indebtedness; is attracting more attention than any town in state."

Conditions as they actually were belied the optimism of the Union, however. More than half the people had left the county because of the drought. The A.T. & S.F. Railroad had little business. Soule was dead. There was no one who could donate the \$100,000 of which the paper continued to tell.

Phenomenal wheat yields were received in 1892. The first good crop since 1886. The Union immediately seized upon this opportunity and advertised, "Come to Gray County, you can soon get rich by raising wheat! Land prices are on the upward trend."<sup>38</sup> The Union believed that the land would soon fill up with a better class of settlers than

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37. Ingalls Union, May 1, 1890

38. Ibid., July 21, 1892.

those who first came, a class of homeseekers, not speculators.

The Gray County Republican, another Ingalls newspaper, had this to say about Ingalls early in 1888, "The capital of the Arkansas Valley.<sup>39</sup> The Pride of Southwestern Kansas. The County Seat of Gray County is, and will remain, Ingalls. No town of this size along the line of the road has as large a trade as does Ingalls."

On May 31, 1888, the Republican printed the following concerning Ingalls and the surrounding country: "Sorghum Region of the Arkansas Valley.<sup>40</sup> Factory to be erected. Come by Atchison, Topeka & Santa Fe, at reduced rates for next three months."

The Montezuma Chief lauded Montezuma and the surrounding country. Quoting from the August 6, 1886 issue,<sup>41</sup> "The farmer plants 40 to 60 acres of sod corn the first year he settles, and gets 30 bushels per acre for his labor. The rainfall for three years has been abundant, while the showers have followed the plow."

The following is from an advertisement by a real estate company in the Montezuma Chief in the summer of

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39. Gray County Republican, Allen B. Sayles, Editor, Vol. 1, No. 2, Jan. 12, 1888

40. Ibid., May 31, 1888

41. Montezuma Chief, J. H. Hebard, Editor, Vol. 1, No. 1 August 7, 1886.

1887,<sup>42</sup> "The Extension of Chicago, Rock Island, and Pacific Railroad from Montezuma to Garden City, and of a railroad line southwest from Montezuma as well as west are certainties for 1888.....Montezuma is the Coming Health Resort of the State! Best of Curative Waters. Health Assured.....5,000 shade trees growing along its Avenues.... July Prices of 1886: Land \$3 to \$6 per acre. Residence Lots \$30 to \$50. Business Lots \$100 to \$200. June Prices of 1887: Land \$6 to \$15. Residence lots \$100 to \$150. Business Lots \$400 to \$600."

The assessor found 105 persons living in this remarkable 'city' of Montezuma<sup>43</sup> that year.

The Ensign Razzoop was another newspaper which looked for great things for Gray County. In the county seat squabble, the Razzoop sided with Ingalls. And for good reason. It shouted: "Hurrah for A. T. Soule and the Railroad!"<sup>44</sup>

The extended drought, after a time, stilled even the optimism of the newspapers. The Montezuma railroad was junked in 1893 because of lack of business. Ensign and Montezuma disappeared from the map. Ingalls had dwindled to a mere hamlet of 67 population. The feeling of the

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42. Montezuma Chief, NO. 1, Vol. 1, Aug. 20, 1886.

43. State Board of Agriculture, Biennial Report, 1887-88.

44. Sat. Eve. Post, June 4, 1927, p. 47.



times is well stated by these lines as taken from the June 7, 1894 issue of the Ingalls Union: "Owing to repeated failure of crops and the apprehended depopulation of the county there is some talk of the county being disorganized; which would be the best thing that ever happened for those who have the taxes to pay."<sup>45</sup> That the times did not instill optimism is attested to by the fact that, in 1894, the Board of County Commissioners fixed the assessed value of the bottom lands at \$4, uplands at \$1.50 and sand hill lands at \$1.00 per acre.

The Ingalls Union was discontinued in December, 1894. Only the Jacksonian at Cimarron remained to boost Gray County during the following twenty years when the county slowly 'came back.' The Montezuma Chief was the name of the newspaper which was established in the new Montezuma in 1914; The Copeland Chronicle was printed in Copeland from 1916 to 1937 when it was purchased by the Jacksonian and combined with that paper at Cimarron.

#### Drought of 1887 to 1899

The drought which had already set in when Gray County

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45. Ingalls Union (1894), Vol. 7, No. 25, June 7, 1894.

was organized in 1887 continued unabated, except for the year 1892, for more than a dozen years. Weather records in this area show that in reality the 'drought' was merely a cycle of the normal drier years.

Elmer T. Peterson, formerly publisher of the Cimarron Jacksonian, and author of the book Trumpets West, which had its setting in Gray County, ably describes this period.

"In April came another hot wind, and the dust came up in murky clouds and hid the sun, for the settlers all over southwestern Kansas were stirring the soil. This wind was more bitter and blew much of the wheat out by the roots...

"June came and what was left of the wheat ripened rapidly in the dessicating sun. The stalks were short and of a dead straw color, and the heads were shriveled. Little of it was heavy enough to warrant harvesting....

"The corn and sorghums struggled along, half alive, until one day about the middle of July. Then came a phenomenon that seared its way into the brains of the settlers from Indiana, Iowa, Missouri, and Illinois as relentlessly as the scourge of the blizzard.....

"Ten o'clock and the wind became warmer..

"At three o'clock in the afternoon it was a blast from a furnace and it carried a smell of cooked leaves and

cornstalks. It was a breath-taking wind, coming pitilessly from off the sun-beaten plains of the Panhandle to the south....The air was full of grit, and the air at six o'clock threw a sickly, glaring whiteness on the blasted land....The crops were withered and gone."<sup>46</sup>

During the late summer of 1887 many of the settlers moved back East. Most of the others were ready to move. In the latter part of September there came a sudden change in temperature, and rain. And so the weather fluctuated for two years,<sup>47</sup> with capricious and tantalizing flurries of rain and long periods of drought. The crops were poor, but there were enough shreds of hope to keep the settlers from leaving the country in concert. The farmers who stayed lived a thin, hard-scraped existence, excepting the year 1892. In that year came a history-making wheat crop. The rains in the autumn of 1891 came at the right time. In the spring came more rains, and the yield was that of the best in Illinois or Indiana. This served again to attract a few hardy ones to the West, and it afforded a new grasp of hope for those who stayed.

Cimarron went so far as to install a system of water-works and build a substantial brick schoolhouse.

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46. Peterson, Elmer, Trumpets West, p. 183-184.

47. Ibid., p. 184-186.



Then came the financial panic of 1893 and more hard years for farmers everywhere. In 1895, forced by the stringency of the times, the few farmers left in Gray County went out and gathered the bones of the cattle which had died in the Big Blizzard of 1886 from the prairies where they had been bleaching for years, and sold them for \$5 a ton to traders who shipped them to factories in the East. But there came a day when even these were gone. The people lived in very stringent circumstances. Some of them wore old sacks for clothes and made moccasins out of cow-hides. For fuel they picked up dried cow-dung, and they had jack-rabbits, prairie-chickens and sometimes prairie-dogs to eat when other supplies ran low.<sup>48</sup> Cattle-men ventured back into the country again and ran their herds over the deserted farms that had gone back to sod. Barbwire fences had a way of 'disappearing', making the grazing easier. Only about a thousand people were there in 1898.

#### Return of Better Times

From Fig. 2 on the following page it will be noted that, beginning in 1899 the trend of population has been

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48. Peterson, Elmer, Trumpets West, p. 200-203.

Fig. 5

# Gray County Population March 1 of Each Year, 1887-1936



Compiled from Biennial Reports of State Board of Agriculture



generally upward. There has been a slight decline in population during the latter years of the recent drought period, from 1933 to 1936. The resettlement of the county was slow until 1905 at which time the population totaled only 1,746. The new land boom began in 1906,<sup>49</sup> with about 500 moving to the county that year and 600 more the next. By 1909 the population aggregated 3,033. Fair crops during the four or five years preceding had brought about a more optimistic attitude on the part of the farmers.

Some of the reasons for a return of confidence in agriculture was the development and subsequent use of summer fallowing. It was found that some crops were more drought-resistant than others. Sorghums were grown more extensively and were found to be useful crops. The underflow of the Arkansas River was discovered and it was used on a limited scale for irrigation.

The boosters of the county--the real estate men and the newspapers--had an important role in the resettlement of the county. With each good crop year people were induced to come to western Kansas and buy land. Land values rose. With every crop failure some of the farmers became discouraged and left. Each fair crop brought unbounding

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49. Harry Brice, Cimarron, Kansas, Interview.



hopes and new settlers. The resilient optimism of the western Kansas farmer is a remarkable thing.

During the period of 1914-17 the war prosperity was coming on rapidly. More than 1,700 people moved to Gray County. Farmers were swarming westward again to buy the flat western Kansas land. They were all beginning to see potential riches in wheat at possibly two, three, or four dollars to the bushel.

From 1920 to 1930 more than 1,400 people were added to the total population, and by March 1, 1932 it stood at 5,682, the highest figure in history. The extensive use of the automobile brought in land buyers from far and near. The price of land for wheat raising went higher and higher. Land north of the river that had sold for \$2 and \$3 per acre some fifteen years previously was selling at from \$25 to \$40 in 1928 and 1929. In Montezuma Township wheat land sold as high as \$60 per acre.<sup>50</sup> Bumper crops and the fact that our export markets continued good after the war--France and England were still buying beef and wheat for their armies which were still mobilized--brought returns to western Kansas farmers which were almost fabulous.

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50. Bert Cessna, Federal Land Bank Agent, Ingalls, Kansas, Interview.

The coming of the tractor had revolutionized farming in western Kansas. The huge gang and disc plows and the harvester-thresher combines had not only made more extensive farming possible, but had improved the system of soil culture. It had brought in an era of village farmers, also, and they kept stores, engaged in the professions, or sold real estate during most of the year, and spent but a month or two planting and harvesting wheat.

The drought period of 1932- 1936 has caused no extensive exodus of farmers. Obvious reasons are the aid from the Government in the form of seed loans, AAA wheat allotment checks, and public works jobs for the needy and unemployed. Also the nation-wide depression closed opportunities elsewhere. Another important reason for the farmers stay in western Kansas during the recent drought is the fever of speculation which has gripped the farmers since the days of the big profits which came from the crops of 1928, 1929, and 1930. A repetition of the bumper crops and high prices is fervently hoped for when each year's crop is sown. The optimism of the farm people is apparent from the fact that in the fall of 1936 after five consecutive crop failures the biggest wheat acreage in Gray County history, 331,000 acres was planted in anticipation of the 1937 harvest.<sup>51</sup>

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51. State Board of Agriculture, Report on Wheat Condition, April 1, 1937.

## Distribution of Population

Fig. 4 on the following page shows the distribution of population on March 1 of four pivotal years in Gray County history. It is to be regretted that the official records do not show the population of the unincorporated towns.

The year 1888 is the first one for which population figures for the county are available. In 1898 the population hit a low mark, 1915 is midway in the thirty year period characterized by the steady population growth, and 1930 is near its peak.

The figures as shown on Fig. 4 obviously do not give a clear picture of the distribution of farm and town population. However by taking into consideration the available information as to the population of the several unincorporated towns during various stages in the county's development, fairly accurate deductions as to population distribution can be formulated.

On July 20, 1887, the date of the organization of the county, the population was found to be 4,896. By March 1, 1888, the date of the first regular annual census by the assessor, the population had declined by 937 to 3,959. Figures, if available, showing the population



# LOGAN

(1888) 365 - 3.0  
(1898) 105 - 0.9  
(1915) 206 - 1.7  
(1930) 354 - 3.0

# FOOTE

(1888) 434 - 3.62  
(1898) 90 - 0.8  
(1915) 220 - 1.8  
(1930) 422 - 3.5

AR K A N S A S

(1888)  
(1898)  
INGALLS (1915)  
(1930) - 172

(1888) -  
CIMARRON  
(1898) 278  
(1915) 559  
(1930) 747

# INGALLS

(1915) 610 - 4.62  
(1930) 703 - 4.02

# CIMARRON

(1915) 1017 - 4.77  
(1930) 1288 - 5.64

INGALLS  
(1888) 519 - 0.84  
(1898) 131 - 0.84

CIMARRON  
(1888) 1009 - 1.82  
(1898) 522 - 2.82

COPELAND (1915) -  
(1930) 314

COPELAND  
(1915) 254 - 2.82  
(1930) 652 - 3.76

MONTEZUMA  
(1888) 710 - 4.93  
(1898) 136 - 0.96

# MONTEZUMA

(1915) 459 - 5.01  
(1930) 1066 - 7.17

MONTEZUMA  
(1888) 431  
(1915) -  
(1930) 431

# WEST HESS

(1930) 528 - 4.66

WEST HESS  
(1888) 227 - 6.38  
(1898) 908 - 6.31  
(1915) 227 - 6.38

# EAST HESS

(1930) 451 - 4.17

ENSIGN  
(1888) -  
(1915) -  
(1930) 222

## TOWNSHIP AREAS:

	SQUARE MILES
LOGAN - 120	" "
FOOTE - 120	" "
INGALLS - 132	" "
INGALLS - 168	" "
CIMARRON - 96	" "
CIMARRON - 168	" "

	SQUARE MILES
COPELAND - 90	" "
MONTEZUMA - 90	" "
MONTEZUMA - 144	" "
WEST HESS - 108	" "
EAST HESS - 108	" "
HESS - 144	" "

losses by towns and townships from 1887 to 1888 would be extremely interesting.

In 1888 the most populated farm area was in the southeastern part of the county as represented by Hess Township, with 6.38 persons per square mile. The unincorporated town of Ensign in Hess Township had less than one hundred population.<sup>52</sup> Montezuma Township in the southwestern part of the county, and which with Hess completed the south one-third of the county, ranked second in density of farm population. The population of the unincorporated town of Montezuma was small at that date.<sup>53</sup>

The townships of Ingalls and Cimarron in the middle one-third of the county contained the least densely populated farm territory in 1888. This deduction is arrived at after making allowance for the probable populations of the towns of Ingalls and Cimarron which were approximately 150 and 500 respectively.<sup>54</sup> The comparatively low per square mile density in this part of the county is accounted for by the large sandhill area much of which is undesirable for farming.

The two townships north of the river, Logan and Foote,

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52. J. H. Egbert, Interview.

53. Ibid.

54. Harry Brice, Cimarron, Kansas, Interview.

which have always been entirely rural, had a density of 3.0 and 3.62 per square mile respectively in 1888. This average was somewhat in excess of the rural area of the middle townships and considerably less than the two south townships. Logan and Foote townships are made up entirely of good farming lands and were extensively settled upon in the late 'eighties as is evidenced by the many abandoned home sites there. Since the 1888 population figures are so low for these townships, it is very likely that the most extensive exodus of farmers during 1887 and the early part of 1888 was from the high and dry prairies of north Gray County.

The year 1898 marked the low point in population for the entire county. Much of the county had been practically abandoned; farmers often lived five to ten miles from their nearest neighbors.<sup>55</sup> Hess and Cimarron Townships in the southeastern part of the county had the greatest population at this date with a density per square mile of 1.58 and 2.62 respectively. The density of population for the rest of the county was less than 1.00 and for the whole county that year was only 1.25 per square mile. By deducting the population of Cimarron, which was

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55. Egbert, J.H., Mayor of Cimarron, Kansas, Interview.



278, and that of Ingalls which was 67 in 1895 and probably slightly less in 1898,<sup>56</sup> and were the only towns in the county at that time, the per capita farm population would be only .85 per square mile.

The 1890 U.S. Census showed an average of 4.00 persons per family for Gray County. There was, then, in 1898, an average of approximately twenty quarter sections of land for every farm family in the county.

In 1915 the townships south of the river had the most thickly settled farm areas. Copeland Township in the extreme southwest was an exception. It still had several large cattle ranches and was more generally identified in its stage of development with the territory to the west in Haskell County. Good crops south of the Arkansas River were responsible for the more extensive settlement there in comparison to north of the river. Another factor was the construction in 1912 of the branch of the Atchison, Topeka, and Santa Fe Railroad through the south part of the county. The towns of Ensign, Montezuma, and Copeland were established.

A colony of Mennonites, a German-speaking religious sect, from central Kansas, was induced by the railroad and

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56. State Board of Agriculture, Biennial Report.

real estate men to settle in Montezuma and Copeland Townships, soon after the branch railroad was finished.<sup>57</sup> This accounts, in part, for the density of the population in Montezuma Township, first because the Mennonites farmed intensively and settled in compact groups, and second because of the relatively large families which characterize these people. About 50 per cent of the population of Montezuma Township are Mennonites. There are also considerable numbers of Mennonites in every other township in the county with the possible exception of East Hess. In 1930 there were in the neighborhood of one thousand Mennonites in the county,<sup>58</sup> or approximately 20 per cent of the total county population.

The census of 1930 revealed large population increases throughout the county. At this date, as in 1915, the land south of the Arkansas River supported the largest population. Crops have generally been better in that part of the county, and although no records are available to prove it, the general opinion is that, as a rule, rainfall has been less from the southeast to the northwest. Crops have been poorest in the northwestern part of Logan Township.

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57. Schmidt, J. D. H., Montezuma, Kansas, Interview.

58. Ibid.

According to the 1930 census, only 3.4 per cent of the county population was foreign born. The Mennonites, however, are essentially a foreign people in language and customs, though most of them were born in the United States. Their intense religious beliefs have tended to keep them in colonies, or settlements, and have preserved their language and many of their customs. The Mennonites brought winter wheat to Kansas in 1885 from the Ukraine in south Russia,<sup>59</sup> and their knowledge of the culture of wheat has been a factor in the agricultural development of this area.

Gray County has depended almost entirely in its economic development upon its agricultural enterprises. Indeed, according to the U. S. Census all of Gray County's population is classified as rural, since there are no incorporated cities with 2,500 inhabitants or more. In 1930, out of a total population of 6,211, there were 3,819 living on farms. This was more than 60 per cent of the total population. Cimarron, the county seat, was the largest town with a population of 747.

Since agriculture is the chief industry of the area, most of the next chapter is a description of the county's agricultural situation over the fifty year period of the thesis.

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59. Schmidt, J. H. D., Interview.



Year	Cimarron City	Cimarron Township	Copeland City	Copeland Township	Footes Township	Hess Township	East Hess Township	Ensign City	West Hess Township	Ingalls City	Ingalls Township	Logan Township	Montezuma City	Montezuma Township	Richland Township	Salem Township	Gray County Total
1888		1009			434	920					519	367		710			3959
1889		739			354	589					500	215		494			2891
1890	304	209			298	373					425	275		365	159		2408
1891		392			187	184					254	228		162	148	218	1773
1892		439			332	164					384	194		234	288	216	2251
1893		448			254	220			149		136	209		266	153	215	2050
1894	375	125			193	92					211			224	125	158	1503
1895	224	117			170	145			67		88	128		124	89	104	1256
1896		343			130	162					172	142		120	90	90	1249
1897	222	108			93	168					160	142		71	72	69	1105
1898	278	104			90	165					131	105		71	62	67	1073
1899	217	150			104	165					119	125		90	85	73	1128
1900	237	157			94	288					79	138		159			1152
1901	264	169			112	291					124	118		153			1231
1902	212	197			148	317					115	123		190			1302
1903	314	212			159	394					140	128		196			1543
1904	288	238			162	445					229	114		164			1640
1905	269	270			177	446					260	131		193			1746
1906	423	316			182	519					394	168		234			2236
1907	419	344			230	624					565	222		429			2833
1908	504	335			268	617					674	217		353			2968
1909	427	408			221	653					699	216		409			3033
1910	500	330			205	615					659	192		349			2850
1911	556	399			183	697					673	214		316			3038
1912	542	386			195	702					642	204		356			3027
1913	565	369			227	708					500	206		493			3068
1914	573	399			226	803					558	214		638			3411
1915	559	458		254	220	908					610	206		459			3674

Population of Minor Civil Divisions  
Townships and Incorporated Towns

Table II,

Year	Cimarron City	Cimarron Township	Copeland City	Copeland Township	Footo Township	Hess Township	East Hess Township	Ensign City	West Hess Township	Ingalls City	Ingalls Township	Logan Township	Montezuma City	Montezuma Township	Richland Township	Salem Township	Gray County Total
1916	714	507		386	261	1030					587	261		640			4386
1917	672	562		412	321		472		667		698	248	199	521			4772
1918	597	428		403	328		850		467		610	328	122	459			4592
1919	503	429		410	327		576		449		636	274	115	494			4213
1920	419	424		433	321		601		481		633	300	119	520			4251
1921	602	436		483	325		633		489		657	290	175	550			4640
1922	635	282		503	342		640		660		667	251	164	523			4667
1923	692	439		519	393		643		441		689	339	195	569			4919
1924	631	443		454	378		575		434		705	313	155	588			4676
1925	740	494		559	400		621		489		661	342	200	619			5125
1926	767	482		551	405		505		598		700	274	268	558			5108
1927	705	538	201	301	380		581		484		695	319	269	661			5134
1928	752	501	210	355	410		605		495		717	334	261	642			5282
1929	757	510	230	319	404		659		473		704	321	317	699			5393
1930	747	541	314	338	422		451	222	503	172	531	354	421	645			5661
1931	747	371	332	330	413		449	208	515	212	553	365	397	623			5515
1932	745	441	386	356	370		489	287	509	198	543	350	335	675			5682
1933	712	411	344	409	408		500	231	499	204	513	380	359	677			5647
1934	699	383	325	390	420		490	251	468	203	513	310	311	677			5440
1935	915	406	304	387	403		446	240	452	213	467	299	333	651			5516
1936	913	287	273	385	355		438	221	442	211	453	263	304	644			5189

Table II, Continued



## CHAPTER IV

### Agriculture

Six consecutive years of drought and crop failures are responsible for the present deplorable state of agriculture in Gray County. The county is in the heart of the 'Dust Bowl' area and the high winds and dust storms have swept bare the farm lands and have made living conditions almost unbearable. The dark and hopeless situation of the present is in marked contrast to the period of highly prosperous years immediately preceding. In fact there is nothing in the entire past agricultural history of the county nor in the available climatological data which would have enabled anyone to foresee the dire calamity of the present.

Only once in the fourteen years preceding 1932 had there been a general wheat failure, and during this period, with the exception of 1923, more than a million dollars worth of wheat was produced in the county each year. In the two banner years alone, combined, 1928 and 1929, more than \$9,000,000 worth of wheat was produced on less than 250,000 acres.



The livestock industry, too, had been quite profitable and was the backbone of the genuine, though modest, prosperity which had gained momentum in the county's agricultural industry ever since 1898. During the years when prices were stimulated by the War, 1915-1923, returns from livestock to the county's farmers approximated one and one-half million per annum. Since 1931 the livestock industry has sunk to unprecedented levels. The value of livestock produced in 1936 totaled only \$185,000 and one had to go back in the statistics to the 'nineties, when the majority of the settlers were deserting their farms, to find another year which returned so low an income from livestock.<sup>1</sup>

By 1934 less than 15 per cent of the county's total area remained out of cultivation, and most of the native buffalo grass on even this limited acreage had been killed by drought, dust storms, and over-grazing. Almost every available acre had been subjected to the plow and the once prosperous livestock business had as a result been relegated to a minor position. And it is no wonder that practically all the crop land was sown to wheat after the large profits from the bumper crops in 1928 and 1929.

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1. Kansas State Board of Agriculture, Biennial Reports.  
( All references were from these reports, except when marked otherwise.)

During each of these years the average income per farm exceeded \$7,000, and considering the low investment in land, the net income during this period was no doubt as high as that of any similar group of farmers in the entire country. As a result of these almost fabulous returns the price of the once cheap lands was driven skyward.

Since 1931, during the present drought, the average annual gross return per acre on the county's highly developed wheat acreage has been less than \$1.60 per acre. Out of these meager returns and the benefit payments from the Federal Government, which totaled more than two and one-half million dollars from 1933 to 1936, the farmer has had to defray the costs of preparing land, buying seed, maintaining the high-priced power machinery, paying taxes, and meeting interest payments on mortgages which are in many cases higher than the present market value of the land.

After six consecutive years of crop failures, the present situation is becoming more and more hopeless and often very serious in many of its economic implications. Year after year the huge wheat acreage is sown, always in the hope that the current year will bring a bumper crop. Many people believe that a rapid recovery will come

when a cycle of more plentiful rainfall arrives; others predict that irreparable harm has been done by the destruction of the native buffalo grasses and that years of careful planning and work will be required to restore a rational agriculture to the county.

### Income From Farm Products

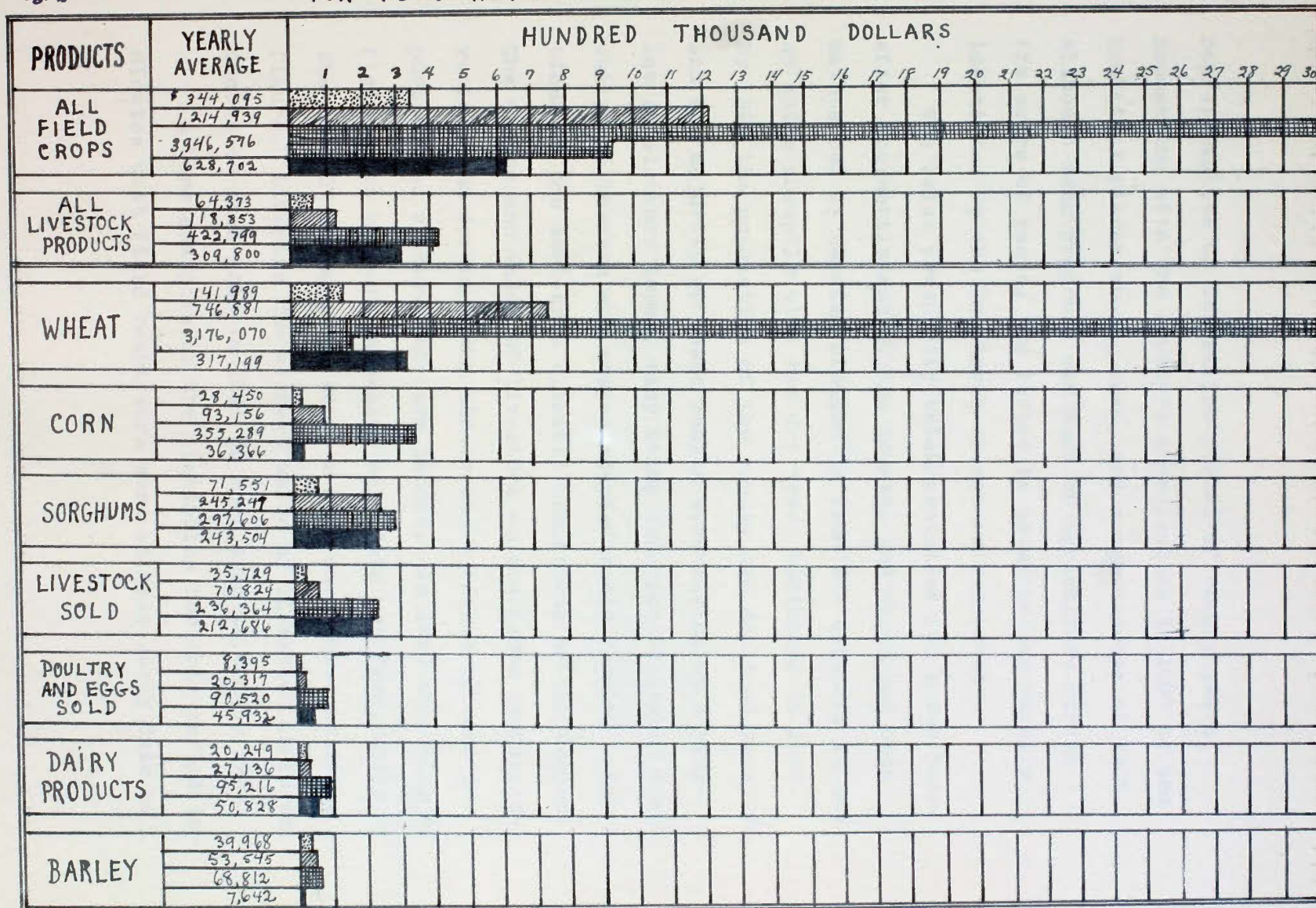
Statistics of gross income from farm products tend to reflect the general prosperity of the farmer and of the business man who is dependent on the farm trade. Gross value figures of principal farm products as shown by Fig. 2 on the following page are, of course, not as reliable as net income data, if available. For instance, a large percentage of the gross value of sorghums produced is reflected in income from sale of livestock, poultry, and eggs, and dairy products. A rather clear picture of the relative importance of field crops, livestock products, and the leading farm products, during the agricultural history of Gray County is presented. Each of the four five-year periods selected can upon analysis be assigned to one of the four rather distinct eras which characterize the county's agricultural development.

The figures for the five-year period of 1903-07 are



Fig. 2

VALUE OF PRINCIPAL FARM PRODUCTS, GRAY COUNTY, KANSAS  
FOR FOUR REPRESENTATIVE FIVE-YEAR PERIODS



1903-07



1912-16



1926-30



1932-36



representative of the entire period of twenty years commencing with the county's organization in 1887 to the bountiful winter wheat, corn, and sorghum crops of 1907. Although much progress was made in agriculture during the score of years, the period is nevertheless readily identified by the low level of economic activity.

The false prosperity which prevailed for a few years after the settlement of the county, and which had been maintained by capital brought in from the outside, folded up quite abruptly with the dry years beginning in 1887. By 1898 the population of the county had declined to 1,073, and the majority of these people were living at a very low subsistence level, many being too poor to leave. Gradually the farmers who stayed adapted their farming practices to the semi-arid climatic conditions of the region. The number and value of livestock on the farms increased rapidly and sorghums and winter wheat became of some importance as a source of farm income. In 1890 the value of field crops produced averaged only \$165 per farm, while the 1903-07 average was \$600, a much more substantial figure. Likewise the average value of livestock on farms increased from \$333 in 1890 to more than \$1,000 by 1904.

A bare analysis of the statistics for this period indicates that field crops were even at this early date of



more importance than the livestock industry. The statistics show that more than five times as much of the gross farm income was derived from field crops as from livestock. Actually the picture resulting is probably somewhat distorted. In the first place much of the natural increase of the livestock was kept on the farms to build up the herds. Secondly, because of the very low subsistence level at which the people existed the major part of their daily food requirements was made up of livestock products.

The five-year period from 1912 to 1916 is representative of the second era in the county's agricultural development. This period is characterized by the first wave of genuine prosperity, a rise in land values, a large increase in population, a doubling of the wheat acreage and some bumper wheat crops, and increased values of all farm products. In this period, due to the increasing success of wheat growing, the tendencies were born which a few years later stimulated the wheat industry to large-scale proportions.

During this period the gross value of field crops produced was 91 per cent of the total farm income. The average value per farm for field crops was \$1625 as compared to the 1903-07 average of only \$165. Most of the



principal farm products contributed much the same percentage to the total gross farm income in the 1912-16 five-year period as in the 1903-07 period. The most phenomenal gain was made by winter wheat which was valued at 56 per cent of the total gross income for the latter five-year period. This was an increase of 21 per cent in relation to the total farm income. Sorghums ranked second in value with 18.3 per cent of the total; corn third with 6.98 per cent; barley fourth at 4.10 per cent of the total. Alfalfa was the only crop which had a lower total value in the latter period.

Average income from all livestock sources increased from \$64,373 per year during 1903-07 to \$118,853 during 1912-16, even though its percentage of the total income decreased from 15.74 per cent to 8.93 per cent. Actually the livestock industry assumed far greater importance than the direct income from the sale and slaughter thereof would lead one to believe. The assessed value of all livestock on farms as of March 1, 1916 was \$1,805,122. Much of this value was found in horses and mules, of which there were about 7,000 head, and which were used to a large extent to furnish the power for production of field crops. Also with the increase in the price of livestock the farmers increased their herds in anticipation of the

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continuance of good prices. The number of cattle on the farms in 1916 were doubled over 1907.

The five-year period from 1926-30 was the peak of the third era of Gray County agricultural development which covered the post-war years up to the present drought beginning in 1932. Good prices for wheat and other products were the rule throughout most of this period. Winter wheat crops, with the exception of the failure of 1923, were generally good. Each year saw hundreds of acres of native pastures plowed under and sowed to wheat. Tractors and other power machinery became more numerous and the numbers of horses and mules declined. Acreage formerly used for growing feed for work animals was liberated and used for the production of wheat. Winter wheat practically monopolized the agricultural picture. Of the total gross farm income, 72.6 per cent was attributed to this crop. Only two other field crops figured to any extent in the total situation. Corn produced 8.13 per cent and sorghums 6.83 per cent of the gross farm income. A considerable portion of the county's sandhill area which is unsuited to large-scale wheat production was planted to corn and sorghums, also these crops were planted in the spring as substitutes when some of the winter wheat had to be abandoned.

The average value of livestock and livestock products



Product	1903-1907		1912-1916		1926-1930		1932-1936	
	Ave. Value	%	Ave. Value	%	Ave. Value	%	Ave. Value	%
Winter Wheat	\$141,989	34.70	746,881	55.99	3,176,070	72.67	317,199	33.79
Spring Wheat	2,752	.67	1,857	.14	3,237	.08	177	.02
Corn	28,450	6.95	93,156	6.98	355,289	8.15	36,366	3.87
Oats	5,694	1.39	30,189	2.26	9,813	.23	6,155	.66
Rye	6,681	1.63	3,765	.28	1,086	.03	167	.02
Barley	39,968	9.77	53,545	4.01	68,812	1.57	7,642	.81
Millet	3,469	.85	3,431	.26	1,407	.03	34	.00
Sugar Beets	1,600	.39	0	0	0	0	6,673	.71
Broom Corn	718	.17	4,040	.30	1,069	.02	357	.04
Sorghums	71,551	17.50	245,247	18.38	297,606	6.83	240,654	25.64
Sudan Grass	0	0	1,243	.09	17,637	.40	8,866	.94
Alfalfa	30,286	7.40	21,144	1.59	8,861	.20	2,493	.27
Sweet Clover	0	0	0	0	881	.02	0	0
Prairie Hay	7,968	1.95	8,107	.62	4,196	.09	937	.10
All Other	2,969	.90	2,334	.17	612	.02	981	.11
Total Field	344,095	84.10	1,214,939	91.07	3,946,576	90.32	628,701	66.98
Livestock	35,729	8.73	70,824	5.34	236,364	5.40	212,686	22.66
Poultry-Eggs	8,395	2.05	20,317	1.52	90,520	2.08	45,932	4.89
Wool Clip	0	0	576	.04	699	.02	354	.04
Dairy Products	20,249	4.95	27,136	2.03	95,216	2.18	50,828	5.43
Total Livestock	64,373	15.74	118,853	8.93	422,799	9.68	309,800	33.02
Total Farm Income	409,257	100.00	1,334,183	100.00	4,369,841	100.00	938,501	100.00

Fig. 3.

Income From Farm Products



sold and consumed by the farmer was \$422,799 per year for the 1926-30 period. This was in contrast to an average of only \$118,853 produced in the 1912-16 period. Much of the increase in gross income from livestock sold, no doubt, came from sale of stock when pastures were plowed under to make way for additional wheat acreage. There was a sharp decline in the number of cattle and horses and mules on the farms for the entire decade following 1920.

Poultry and eggs and dairy products sold during this period attained some importance--the yearly average being \$186,435 or an additional average income of \$225 per farm from this source. Higher prices and favorable rainfall for pasture and feed crops were some of the factors in diversification along this time.

The present period of unprecedented drought is a significant phase of the county's agricultural history. It is the first major break in a long trend of increasing activity which characterized the entire period since 1898.

During the five-year period of 1932-36 sub-normal rainfall has occurred and general failure of crops throughout the period has been the result. The low prices for farm products have further reduced the farmer's income. A glance at Fig. 2, at the same time keeping in mind that

450,000 acres of the county's area is under cultivation, reflects the seriousness of the present situation. A gross value of less than \$1.50 per acre for field crops grown is indicated.

Livestock sold and sorghums grown for hay and grain were the only major classifications of farm production which compared favorably with previous periods. The value of livestock sold or slaughtered amounted to \$212,686 per annum for the five years, 1932-36. Much of the sale of livestock during this period was forced by creditors, because of feed and pasture shortage, and for purposes of securing capital with which to maintain farm operations and defray living expenses.

It can be said, and without fear of contradiction that the present drought years have caused the Gray County farmer to suffer tremendous losses in depletion of natural resources from wind erosion, in depreciation of buildings and machinery because of a lack of adequate finances to keep them up, and from the forced sale of livestock and equipment. One can only conjecture as to what would be the present state of affairs if the subsidy payments of the Federal Government had not come into being during this time. The figures on the next page show the great importance of the subsidy payments during this period.

# Value Of Farm Products And Subsidy Payments

1933 to 1936

Product	Value 1933	%	Value 1934	%	Value 1935	%	Value 1936	%
Field crops grown	\$517,618	37.4	488,111	35.3	552,173	31.7	1,101,356	50.7
Livestock	307,852	23.1	279,615	21.9	351,612	20.2	279,480	12.9
Subsidy payments	506,222	38.0	506,222*	39.8	840,232	49.1	789,770	36.4
Total farm income	1,331,692	100%	1,273,948	100%	1,744,017	100%	2,170,606	100%

\* Have used 50 per cent of totals for the two years.

Considering the fact that much of the values of farm products could not readily be converted into cash and that practically all of the wheat produced was required for reseeding, the great importance and value of the Federal Farm Program during this period is at once apparent. The farmer would have had a difficult time, indeed, to remain in residence in the county and sow a large percentage of his land to wheat each fall without the finances obtained by participation in the Federal Farm Program.

Due to the relatively limited acreage under cultivation which prevailed in Gray County as against the more highly developed agriculture of central and eastern Kansas, Gray County did not attain a high rank in comparison of all counties in respect to total farm income until the late 'twenties. Gray County as a rule ranked ahead of the



counties to the west and below most of the counties to the east in total gross income as well as average income per farm.

According to the United States Department of Agriculture, the yearly average of estimated cash income from farm sales from 1922 to 1925 for Gray County was \$2580 per farm.<sup>2</sup> This income figure exceeded all counties which are as far west as Gray except Meade County to the south with \$2970 and five counties in the northwestern part of the state.

In 1928 and 1929, when Gray County produced more than \$9,000,000 worth of wheat, and was fourth ranking county in the state in wheat production, her farmers attained a unique place in Kansas agriculture. The average gross income per farm was \$7,118.10,\* which placed Gray County at the top of all the counties in this respect. This was more than \$900 per farm more than Ford County's farmers received and more than twice as much as Harvey County and other leading agricultural counties of central and eastern Kansas.

The above mentioned two years marked the limits of Gray County's brilliant place in Kansas agriculture, al-

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2. United States Census of Agriculture, 1925.

\* Per year for 1928 and 1929 only.

though it has always ranked toward the top in its own section.

The proportion of land in farms, in crop land, and in crop land harvested, reflects the development of agriculture as well as prosperity trends for the county as a whole. The important trends can readily be found from the following table.

Percentages of Land Utilization<sup>3</sup>

Year	Land in farms	Crop land	Crop land harvested	Pasture
1890	19.8	6.3	2.9*	13.6
1900	31.1	5.8	3.9*	25.4
1910	42.4	19.8	22.4*	22.6
1920	77.1	41.6	36.7	35.5
1925	83.2	48.0	45.8	35.2x
1930	89.2	64.0	58.3	25.1**
1935xx	93.4	72.2	17.9	18.6

\* Grass land fenced in shown in official records has been deducted.

x 1924 figures.

\*\* 1929 figures.

xx Calendar year 1934.

The approximate land area is 548,480.

It will be noted that the total land area in farms in Gray County has grown considerably during each decade. The largest gain was between 1910 and 1920 when there was a 34.7 per cent increase. By 1935 the land in farms was 93.4 per cent of the total county area and the county com-

pared favorably with the best agricultural counties in the state in land utilization.

The crop land and the crop land harvested, more than any of the other statistics, tend to reveal the success of the farming operations. The acreage in crop land has increased steadily since before 1910, the greatest increase coming during the score of years following 1910 when 44 per cent of the county area was added to the crop land. The percentage of the crop land harvested varies greatly from year to year.

The percentage of land in pasture is of interest mainly in comparison with the crop land. Thus in 1900 there was more than four and one-half times as much pasture land in farms as there was land in crops. Also much of the grass land not in farms was available for and was used for grazing purposes.

From 1920 to 1924 more than 35 per cent of the total county acreage was being used for pastures. There was a rapid decline in the years following and by 1934 only 18.6 per cent of the county area, of which 13 per cent was plowable, had not been turned under by the plow for crop production purposes.



## Value of Farm Property

The economic status of the farmer is indicated in a general way by the average value of all farm property per farm. On this basis the average value per farm is high in the western part of Kansas, where the large size of farms necessitates a large capital outlay for land. Also, the use of farm machinery has greatly increased since 1925, particularly for wheat growing. The use of the tractor and the combine have greatly increased the farmer's investment in machinery equipment.

Fig. 5 on page 82\* shows that the average value of all farm property per farm was only \$1,506 in 1890 and consisted mostly of land values. Livestock was valued at around \$300 per farm and machinery at less than \$50. These figures reflect the general poverty of the early settler and his general lack of necessary capital for the purchase of livestock and machinery on a scale sufficient for successful farming operations on the semi-arid plains.

By 1900 the number of farms had decreased from the 571 in 1890 to only 237 in 1900. Land and building values

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\* Census of the United States.

were higher than a decade before. The size of farms had increased. Value of implements and machinery per farm had increased to \$200 per farm or almost four times that of 1890. Value of livestock on farms had more than doubled. The general trend indicated by these increasing values was an adjustment to the larger scale farming program so necessary for success in coping with the climatic conditions of the region. The average value per farm at this period was still very low and tends to show that the early settler progressed slowly from the meager fruits of his own labor, and without the aid of outside capital.

By 1910 the average value of farm property had increased to \$8,527, being almost four times as great as in 1900. There had been large increases in values in all classes of farm properties, notably in land values, which averaged \$14.84 per acre in 1910 as against only \$3.63 in 1900. Incidentally there were almost the exact number of farms in 1910 as there had been 20 years earlier in 1890; 574 and 571 respectively. Great strides had been made in building up the material wealth of the farms from \$860,000 to almost \$5,000,000. The value of buildings, implements, machinery, and livestock alone were almost twice that of the total value of farm property, including land, some 20 years earlier. The rise in land values indicate the in-

Year	Land	Buildings	<sup>1</sup> Implements and Machinery	Livestock on farms	<sup>4</sup> Total value of farms	Number of farms	<sup>3</sup> Av. Value of all farm property per square mile	Av. Value of farm property per farm
1890	640,840 <sup>2</sup>		28,200	190,151	860,191	571	1,003.70	1,506.46
1900	620,400	162,330	45,390	432,383	1,260,503	237	1,470.80	5,318.50
1910	3,455,097	408,850	136,995	894,022	4,694,964	574	5,711.70	8,527.80
1920	10,514,370	1,302,255	736,048	1,817,358	14,370,031	733	16,767.00	19,604.00
1925	9,475,751	1,768,539	1,067,380	819,804	13,131,474	795	15,322.00	16,517.00
1930	16,610,582	1,881,350	2,049,708	528,884	21,070,524	828	24,586.00	25,447.00
1935	12,356,991 <sup>2</sup>			409,421		935		

Fig. 5 Value of Farm Property

1 State Census of Board of Agriculture

2 Land and buildings

3 857 Square miles

4 Includes all farm property



creasing success of the farm program in its gradual adaptation to the climatic conditions.

By 1920 and 1925 the average value of farm property per farm compared favorably with other counties in the state. In 1925 this figure was \$16,641 for Gray County. This compared favorably with most of the counties and was much higher than the southeastern Kansas counties. Gray County's average total values for farms had trebled since 1900 and their favorable standing with other counties in Kansas indicates that the farmers had in a fair measure solved the agricultural problems confronted in this region of limited rainfall.

Gray County reached its height of prosperity with the bumper wheat crops of 1928 and 1929. Land values rose until farms sold for as much as \$40 to \$60 an acre.<sup>4</sup> The average value of all land in farms according to the 1930 U.S. Census was \$37.79. The total value of all farm property was more than \$21,000,000 or \$24,586 per square mile. Most of these values were represented by land values, which had skyrocketed because of the large income from wheat during these favorable years. This period of prosperity saw a tremendous increase in the capital in-

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4. Cessna, B. D., Ingalls, Kansas, Interview.

vested in implements and machinery. In 1928 Gray County had 534 tractors, which was more than any other county as far west as Gray with the exception of Rawlins and Meade.

The investments in buildings totaled more than \$2,000 per farm in 1930 and although this figure is not large, it is in line with improvements found in the newer agricultural areas.

The figures for the year 1935 reflect the effects of the drought since 1931. Total values of farm property have decreased sharply and there is practically no market for land. Many farmers would, no doubt, sell if they could realize a sum somewhat in excess of the heavy mortgages existing against a majority of the farms.

There has been a sharp increase in the number of farms, from 828 in 1925 to 935 in 1930. This increase does not reflect an increase in prosperity. It does reflect the results of the nation-wide depression which has halted the absorption of a considerable per cent of the rural population into other lines of work and has returned some of the unemployed back to the farms.

## Tenancy

According to the 1925 Agricultural Census in the majority of Kansas counties from 40 to 50 per cent of farms are operated by tenants. Gray County was up toward the top of this group with 49.8 per cent, ranking eleventh in the state in this respect.

The following table gives a comparison of the per cent tenancy in Gray County as against the State of Kansas as a whole and the entire United States.

	Per Cent of Farms Operated By Tenants						
	1890	1900	1910	1920	1925	1930	1935
Gray County	1.58	12.24	14.29	42.79	49.8	41.8	48.6
Kansas	31.03	35.20	36.80	40.4	42.2	42.4	44.0
U.S.	28.4	35.30	37.00	38.1	38.6	42.4	42.1

Tenancy has increased in Kansas for several decades. The outstanding increase in recent years has been in the southwestern part of the state where invading farmers have taken over land formerly in ranches for crop farming. It is probable that many of these farmers will in time acquire ownership of the land they now farm on a tenant basis. This tendency is already apparent from the 1930 figures which show a decrease of 8 per cent in tenancy in



Gray County over the five year period preceding.

### Size of Farms

The natural conditions in western Kansas necessitate a large acreage per farm to assure success. The pioneer settlers of western Kansas who had been farming on a small acreage farther east at first were not aware of this requirement. The following figures show the changes since 1890 as reported by the Census of Agriculture.

#### Average Acreage Per Farm<sup>5</sup>

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Year	Gray County	Kansas
1890	191	181
1900	722	241
1910	406	244
1920	577	275
1925	575	263
1930	591	283
1935	548	275

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As indicated above, there was an adjustment to larger farms soon after many of the early settlers abandoned their homesteads because they could not make a living. But although the acreage per farm increased to 721 by 1900, there was a decline to 406 by 1910. However,

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5. Compiled from the Census of the United States.

because of the immense amount of unfenced free range available to almost every farmer at this date, the figures do not imply that there was any basic change in total land requirements per farm at this period.

Since 1920 there has been no drastic change in the size of farms in Gray County. There was an increase from 575 to 591 acres from 1925 to 1930. This reflects the tendency of an increase under normal conditions in farm acreages because of the advantages of large scale power farming.

The decrease by 1935 to an average of 548 acres per farm shows the results of the present nation-wide depression which has deprived many people of their jobs, many having returned to the farms near relatives or friends. Should normal times return an adjustment towards larger farms in line with power-farming tendencies would probably again gain momentum.

The counties with per farm acreages of more than 500 acres are located west of a general line which may be drawn from Barber County in south-central Kansas to Rawlins County,<sup>5</sup> which is only one county removed from the west state boundary in northwest Kansas.

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5. Southwestern Bell Telephone Company, Economic Survey of Kansas, p. 92.

In 1930<sup>6</sup> there was only one farm in Gray County with an acreage of over 5,000 acres. Ninety farms exceeded 1,000 acres; 284 farms were classified as 500 to 999 acres; 314 farms as 260 to 499 acres; 28 farms as 175 to 259 acres; and only 85 farms, of which 55 were cash grain farms exceeding 50 acres, had an acreage below 175 acres.

### Wheat Growing In Gray County

Wheat is the outstanding crop produced in Kansas. Kansas is the leading wheat producing state of the United States.

The trend in wheat acreage in Kansas over a period of years has been generally upward. The increase in wheat acreage has been the result of both the replacement of acreage formerly in other crops, and the cultivation of new land formerly in native sod. In recent years the increase due to new land being put under cultivation in western Kansas has been the chief means of expansion.

The broad, rolling prairie plains of western Kansas have been conducive to the large scale power methods of

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6. Fifteenth Census of the United States.



farming which have helped to make the Great Plains one of the leading wheat growing sections of the world. The soil, which is predominantly of a silt loam texture and retentive of moisture, is generally excellent for wheat growing. Most important of all is the relatively dry climate, which, with improved methods of dry farming, is favorable to high yields and good quality of wheat, except in years of unusual drought.

Fig. 6 presents a good outline of the development of the winter wheat industry in Gray County.<sup>7</sup> It will be noted that wheat was grown for a quarter of a century on a limited scale before extensive expansion of the acreage was begun. The acreage sown to wheat increased steadily from 1915 on, with occasional reductions affecting, as a rule, the acreage sown following a poor harvest.

In 1914 Gray County had a bumper wheat crop--the county average being nineteen bushels per acre. A million and a hundred and fifty thousand bushels of wheat was produced, which was more than twice as large as the previous record year, 1912. In 1915 followed another good year with a county average of 13 bushels. That fall 98,000 acres was sown to winter wheat, being an increase of 60

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7. Compiled from Kansas State Board of Agriculture, Biennial Reports.

per cent in the two years. The wheat acreage continued to increase during the War in spite of crop failures and low yields. In 1918 only 12 per cent of the acreage sown was harvested and the yield was only three bushels per acre. The exorbitant prices for wheat, the low prices at which available prairie land could be purchased, and the comparatively high yields of wheat from first-year sod land, even during the dry years, caused additional acres of buffalo grass to be broken up and placed in cultivation. In 1919 the average yield per acre was only seven bushels, but because of high wheat prices the gross return per acre totaled \$14.35, which in many cases exceeded the purchase price of much of Gray County's level prairie land.

It was not until 1921 that Gray County produced her second crop of more than a million bushels--one and one-fourth million. The acreage required was twice as much as for the great crop of 1914. In 1924 another bumper crop occurred--2,420,000 bushels were produced. In 1926, 1928, 1929, and 1931 bumper wheat crops were produced, and as a result the acreage sown to wheat in 1931 was almost 300,000 acres as compared to only 140,000 seven years before.

The wheat crops of 1928 and 1929 totaled more than



GRAY COUNTY WINTER WHEAT ACREAGE  
1887 - 1937

Fig. 6





nine million bushels and a good price averaging about \$1.00 per bushel was received. In 1930 more than 3,000,000 bushels was produced for a good county average of 12 bushels per acre. The following harvest, 1931, resulted in an all time record of 5,235,876 bushels--an 18 bushel average for more than 290,000 acres harvested. The low prices of less than thirty cents a bushel of that year, prevented the Gray County farmer from really coming into his own.

As a rule Gray County has ranked next to Ford County in wheat production in far southwestern Kansas. It was not until the year 1921 and the decade following that Gray County attained a place among the leading counties of the state. In 1926 Gray County grew three million bushels and ranked eighteenth from the top. In 1928 when more than four and a half million bushels was harvested, only Barton, Ford, Pawnee, Reno, and Rush ranked ahead of Gray in wheat production. Her neighbor to the east, Ford County, a much larger county, ranked first in the state that year with seven and a quarter million bushels. All the other counties ranking ahead of Gray are in central Kansas, which is the state's leading wheat area. The 1931 production of more than five and a quarter million bushels placed Gray County fourth from the top in the entire state.

Since 1931, the wheat yields have been very low, abandonment of acreage sown ranging from 50 to 90 per cent, and yields harvested, on the average, being four to eight bushels. Prices, too, have been very low during this period, resulting in a net loss to the wheat farmer for each of the last six years of operations.

The benefit payments from the Federal Government for crop reduction and soil conservation have been a boon to the Gray County farmer. In the four years from 1933 to 1936 the payments from the AAA amounted to more than \$2,500,000. These payments have afforded the necessary capital for maintaining a large wheat acreage throughout the present drought period. In the fall of 1936, after five years of crop failure, 331,000 acres, the largest acreage in the history of the county, was sown.

With almost all of his capital resources exhausted, pastures not already plowed under, ruined by drought and dust storms, and mortgages on farms exceeding present market value in many instances, the only hope of the western Kansas farmer lies in some good wheat crops with favorable prices. With his future destiny resting in elements beyond his control, the farmer does the wisest thing he knows, under the circumstances, and continues to sow wheat.

## Improved Methods of Wheat Farming

The effect of the present serious drought and resultant crop failures has apparently substantiated opinions frequently held that farming does not pay in this area over a period of years--that losses sustained in the dry years more than offset profits made during the less frequent good years.

It should be remembered, however, before any undue pessimism is given ear to, that it took the western Kansas farmer many years to learn that the best method of crop insurance is to conserve subsoil moisture. The development of power machinery made it possible for the farmer to cultivate a larger portion of his land at a time when conditions were most favorable.

The big wheat crops of 1928 and 1929 were produced during a period when rainfall was only slightly above average. The great crops of 1924, 1926, and 1931 were all produced in years when annual rainfall was far below normal, but each of these bumper harvests followed a year when rainfall had been above normal and the subsoil was well filled with moisture.

Extensive experiments at the Government Experiment Stations in the Great Plains area have established the



fact that the most important factor in successful wheat growing in this semi-arid climate is a good amount of moisture in the subsoil at the time of seeding.

Since 1931 the annual rainfall has been from ten to sixteen inches, being far below normal throughout. The year 1934 was the driest at the Cimarron weather station since records were begun in 1906. As a result of the successive dry years, the subsoil moisture has long been depleted. The present drought period is unequalled, in intensity as well as in duration, in the weather records of western Kansas.

Important as was the development of the tractor and combine, which advanced the date of plowing for winter wheat from September to late July or earlier and thus prepared to catch and hold the relatively heavy late summer rains, some of the new scientific methods of farming conceived from the present extensive drought may prove to be the solution to dry-land farming in this area.

One of the lessons learned by a few of the wiser farmers is to take measures to prevent soil erosion before it gets started. One of Gray County's prominent farmers, Robert Werner of Ingalls, who won state-wide recognition<sup>8</sup>

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8. Garden City Daily Telegram, June 28, 1938.

by raising wheat each year during the drought period, says: "The trouble with many of our Plains farmers is that they are too optimistic. They hope it will snow, or that the winds won't blow and strip listing won't be necessary. Then when they discover erosion has started, it is too late to prevent its spreading. The best policy is to expect the worst, because you'll likely reap the best if you do."

Another progressive Gray County farmer, Guy D. Josserand of the southwestern part of the county, has won renown because of his success in the application of practical farming methods during the drought period. In 1937 he was elected as one of Kansas' master farmers,<sup>9</sup> later receiving additional recognition and honors by being chosen President of the Kansas Board of Agriculture.

These and other progressive farmers have demonstrated that by the ready adoption of practical methods of cultivation to conform with existing conditions that wheat can be produced in western Kansas under almost any conditions and that profits can be realized in spite of occasional failures.

The present work of the Federal Government in its

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9. The Jacksonian, May 15, 1938.

soil erosion and conservation programs will be of immense educational value to the large mass of farmers who are not endowed with the necessary initiative and foresight to deviate from old practices and strike out anew in an attempt to surmount the existing obstacles and achieve greater rewards.

### Markets for Gray County Wheat

Shipping points are available to all Gray County farmers at distances not in excess of fifteen miles. The main line of the Atchison, Topeka, and Santa Fe Railroad follows the Arkansas River Valley, which runs through the northern part of the county approximately twelve to fifteen miles from the north county line. The shipping points along this railroad are located advantageously as are the county roads, which are gravelled and kept in good repair, and over which motor truck travel throughout the year is generally feasible. The level character of the topography and absence of excessive rainfall in most years makes possible the use of trucks in hauling the wheat direct to market from the combines, thus eliminating the necessity of granaries.

Outside of Dodge City, which is the principal concen-



trating and milling center of southwestern Kansas and which is within easy range of trucks from Gray County farms, Gray County has more available storage in elevators along its railroads than any other county in western Kansas. The gross storage space of the county aggregates nearly a million bushels, the largest elevator being at Copeland in southwestern Gray County near the Haskell County line on the branch of the Atchison, Topeka, and Santa Fe which passes through the southern part of the county and gives it an outlet to the east through Dodge City. Other shipping points on this branch of the Santa Fe are, from west to east, Montezuma, Haggard, and Ensign. On the main line of the Santa Fe through the northern part of the county are, from east to west, Cimarron, Ingalls, and Charleston. Just across the west county line is Pierceville, in Finney County, with three grain companies and to the east of Cimarron is Howell, in Ford County, with elevator service.

All of the principal concentrating and milling companies of Kansas except Salina, are connected with the Gray County territory by the Atchison, Topeka, and Santa Fe Railroad. Dodge City, Hutchinson, Wichita, and Kansas City markets afford Gray County farmers a direct and speedy outlet. Some of the wheat is also routed west-

ward over the Santa Fe for delivery to the millers of the Pacific Coast who also buy Kansas wheat to mix with the softer varieties grown locally.

In spite of these marketing facilities the Gray County farmer is confronted with a farm storage problem in the event that he wishes to hold grain for higher prices. This lack of farm storage space was very apparent during the bumper crop years of the late 'twenties and especially in 1931 when thousands of bushels of the five and one-fourth million bushel crop were dumped on the ground in huge piles, where it was comparatively protected from the weather for a time, but eventually because of danger of deterioration and the pressing demands of creditors, the wheat had to be sold, and was sold, much of it, at a price as low as twenty-four cents a bushel.

More adequate farm storage will no doubt be constructed as soon as the wheat industry again returns better yields and the farms' owners attain experience in marketing, provided, of course, that the present trend towards easier agricultural credit continues to develop.

## Future Production of Wheat

The trend of wheat production has been generally upward during the fifty-year period covered by this report. In the fall of 1936 sixty per cent, or 331,000 acres of the entire land area of Gray County was sown to wheat, and several thousands of acres more were being fallowed to conserve moisture for fall planting the following year. When it is considered that only a little more than 400,000 of the entire county area is level enough to be tilled with power machinery, one can readily see that the county's agriculture has rapidly developed into a one-crop system.

The unusual profits derived from wheat growing in the late 'twenties resulted in the plowing under of most of the native buffalo grass, and farms which formerly featured livestock, wheat, and sorghums turned toward the higher profits promised by utilizing the entire farm acreage for wheat production with power machinery.

Even though winter wheat is the most popular crop in this section, it is not a sure crop and hence should not be the only one grown. In the last twenty-six years wheat has failed almost completely in seven of the years, namely in 1911, 1917, 1918, 1923, 1933, 1934, and 1935. Yields were very low and acreage was abandoned in large amounts



in 1913, 1919, 1925, 1927, 1932, and 1936 and most farmers did not show a profit. In the past twenty-six years, then, it may be said, wheat has produced profitable yields only one-half of the time.

Agriculture in southwestern Kansas cannot be put on a substantial basis until a rational system of farming is adopted. This involves not only growing crops adapted to the climate and soil, but also their relation to one another and to agriculture as a whole. It has been pointed out that winter wheat, grain sorghums, and sorghos and sudan grass for feed and pasture are the most dependable crops for this area. Obviously, then, these crops should receive major consideration.

It should also be recognized that any permanent system must provide for some livestock. This may consist of dairy cows, beef animals, hogs, or poultry. Some beef or dairy animals are almost essential to utilize the feed and roughage that is always produced on every well-managed farm and which is otherwise wasted.

In the future the production of wheat will, no doubt, continue to hold the center of the stage in Gray County, but other types of agriculture should receive more emphasis in both the planned government soil conservation plan and in the practical common sense agricultural program which

will evolve from the permanent farmers of the region in their efforts to solve the soil erosion problem during dry years and the dangers of economic distress often resulting from an unbalanced crop system should be alleviated.

### Sorghums

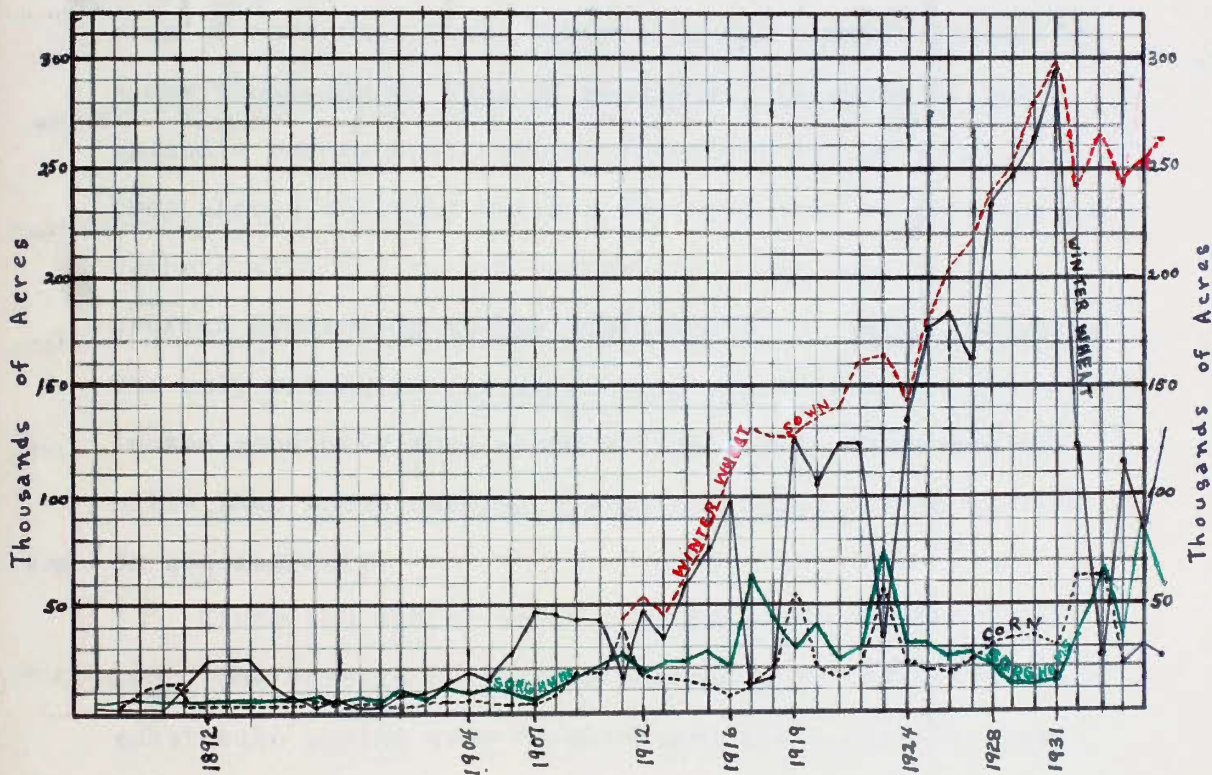
Sorghums which rank second to wheat among the field crops in Gray County were not grown on any considerable scale during the early history of the county. It was not until 1903 that more than ten thousand acres were planted. The period from 1907 to 1917 saw the sorghum acreage increased from around ten thousand acres to sixty-four thousand acres. During the same period came the spectacular development of crop production of all kinds. From 1917 on, however, the sorghum acreage did not increase and the acreage sown to wheat increased by leaps and bounds.

Fig. 4 shows the production, in thousands of acres, of Gray County's three leading farm crops, winter wheat, sorghums, and corn. It will be noted that sorghum acreages practically double during years when winter wheat fails, thus indicating that approximately 50 per cent of the sorghum acreage is in the nature of a substitute crop.

Fig. 4

# Production of Principal Crops

1887-1936



Compiled from Kansas State Board of Agriculture, Biennial Reports



Before the extensive use of power machinery and the development of the large scale wheat industry, every farmer planted on the average of from twenty to forty acres or more of sorghums for feed for work horses and livestock.

By 1929 the sorghum acreage had fallen to the low figure of 14,708 acres. This acreage yielded a bountiful crop of more than forty bushels to the acre in grain, besides thousands of tons of roughage. In spite of this splendid record most farmers abandoned the growing of this crop almost entirely because it could not, at this period, compete with the highly mechanized wheat industry in profits derived or in the small amount of labor required. The only extensive fields of sorghums at this period were in the sand hill area south of the river, which was so hilly that wheat farming operations could not be carried on successfully.

Since the winter wheat crop failures, beginning in 1932, the acreage planted to sorghums, in many cases as a substitute spring crop on abandoned wheat acreage, has been considerable. Because of unfavorable growing conditions the yields have been generally poor.

Under normal conditions the sorghums have proven the most productive feed crop grown in western Kansas. They are better adapted to the droughty conditions and hot winds

of this part of the state than any other field crop. It has also been found that the yields of the grain sorghums are nearly always better than corn yields in the western part of the state, and the forage yield, especially with the sorgos or sweet sorghums, is much larger in dry seasons.

A more permanent increase in the sorghum acreage may be expected in the near future in line with the trend, chiefly government sponsored, towards a more diversified and rational type of agriculture, featuring soil conservation.

#### Feed Crops for Livestock

Corn and the sorghums have both been important sources of feed for livestock in Gray County. Corn has been grown quite successfully in the sandhill area and it generally produces some fodder even though failing to produce grain. The surest dry-land crops are the sorghums which can be depended upon to produce some feed for livestock practically every year.

Sudan grass, which belongs to the sorghum family, is undoubtedly the most satisfactory hay and pasture crop for the region. It has produced an average of approximately

two and one-half tons of hay to the acre for a number of years at the Garden City Branch Experiment Station under climatic and soil conditions similar to those of Gray County. The hay is of excellent quality when cut at the bloom stage.

Although sudan grass has been grown only on a very limited scale in Gray County, we can expect a large increase in acreages sown to this crop now that a substitute will have to be found for the native buffalo grasses destroyed by the drought. Sudan grass is readily eaten by all classes of livestock and is an excellent pasture crop for both cattle and hogs.

In past years the answer for the lack of a large feed crop acreage to support a considerable livestock industry was found in the comparatively mild winters and absence of heavy snows which made it possible for the buffalo grass, which in normal years cures on the ground, to be utilized for pasture throughout the year. When occasional snows covered the grass the farmers resorted for their livestock feed to wheat straw stacks and a limited amount of 'swale grass' and sorghums which had been put up for feed.

Now that the native grasses are gone, a large increase in the feed acreage can be expected, especially if the livestock industry again attains a more favorable



position.

Alfalfa cannot be grown successfully in Gray County except in the Arkansas River Valley. Even here the acreage is limited, largely because of the limited development of irrigation in the valley. About 2,000 acres of alfalfa was grown without irrigation on favorable bottom lands prior to 1923 and proved very profitable. However, most of the acreage has been abandoned and plowed under partly because of plant diseases and unfavorable seasons and to decreasing profits.

Acreage of alfalfa would probably increase in the Arkansas Valley in the event that an increasing demand developed in the markets so that pump irrigation would be justified.

#### Small Grains

For the most part the spring small grains are not profitable crops to grow in Gray County. Spring wheat was grown in small acreages during the early years and occasionally a few acres have been sown in recent years. The largest acreage was in 1907 when 1,792 acres were harvested. The early settlers soon learned that winter wheat as a rule out yields spring wheat two to one.

Oats have produced somewhat higher yields than spring wheat, but when considered from a money value standpoint were no more profitable. The average return per acre on this crop has also been less than \$5.00 per acre, and the acreage sown has been small. A better yield of oats is produced on summer-fallowed ground, but the added expense is not justified. High temperatures preceding harvest are especially damaging to oats.

Barley has produced a slightly larger number of bushels per acre than oats, and has been grown more extensively, being especially popular as a substitute crop when wheat failed. The acreage harvested has never been large, the record being in 1922 with 24,748 acres. The annual acreage has decreased since horses have generally been displaced by power machinery. The return per acre has been considerably less than for winter wheat.

Rye has been grown on a very small scale only in Gray County. The largest acreage harvested was 3,778 in 1920. Farmers often sow a few acres late in the summer or early fall to provide pasture for stock. The cash return per acre is much less than for wheat.

Flax is sometimes mentioned as a crop for southwestern Kansas. Attempts to grow it in Gray County and elsewhere in this part of the state, have invariably ended in failure.

## Broom Corn

Broom corn has been successfully and profitably grown in southwestern Kansas. In far southwestern Kansas and across the line into Colorado thousands of tons have been grown. The return per acre for this crop is often in excess of that produced by wheat.

Although a considerable area of Gray County, especially the sandy soils, is well adapted for broom corn, this crop has been grown on only a few acres and in many years not at all.

Broom corn requires much disagreeable hand labor at harvest time and for this and other reasons has never appealed to the Gray County farmer, nor gained a place in his farm program.

## Corn

Except for the sandy soils in the sand hill area, corn is not very well adapted to Gray County. On the sandy soils it has produced fair yields, but on the heavier soils north of the river and south of the sand hills the yields of corn are generally so low even with the best possible cultural treatment that there seems to be little



excuse for growing it there.

Gray County, however, occupies a unique position for corn production. During the five-year period, 1924 to 1928, Gray County produced a total of 2,691,000 bushels which placed it in a class by itself in southwestern Kansas as well as in a wide area to the east, to the northeast and northwest. Only Stafford County and the two northern tiers of counties produced more than a million bushels average in western Kansas. Logan, Gove, and Trego in the third tier of counties in northwestern Kansas, and Kiowa, Pratt, and Barber in south-central Kansas, and Gray County in southwestern Kansas produced an average of more than one-half million and less than one million per annum. All other counties in the western half of Kansas produced an average of less than one-half million per annum for the five-year period from 1924 to 1928.<sup>11</sup>

The chief reason for Gray County's large corn production is the large sand hill area south of the Arkansas River which comprises approximately one-sixth of the total county area, amounting to around ninety thousand acres. Corn has also occasionally made a good crop on the hard uplands and each year most of the farmers plant a few acres.

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11. Kansas State Board of Agriculture, Biennial Reports.

During the recent wheat boom of the late 'twenties, when almost every suitable acre was planted to that crop, the county corn acreage settled at around thirty thousand acres. This was mostly of the rougher sand hill land not well suited to power machinery. In recent years, preceding the present drought, the average value of corn production was around \$12.00 per acre, which was a good return per acre for the type of land under cultivation. In 1919 the return per acre amounted to \$20.75 and in 1928 to \$17.50. The 1928 corn crop was the record crop at 803,950 bushels, being grown on 32,000 acres. The selling price was approximately seventy cents per bushel.

The first twenty years after the organization of the county in 1887 proved quite unsuccessful, as a whole, for corn growing. The early settlers, most of whom came from the mid-western corn states, planted corn on the hard soils, where the crop generally met with failure except in exceptionally favorable years.

From Fig. 2 it will be seen that corn exceeded sorghums in value for the 1926-1930 period. The average value of corn per annum was \$355,289 to \$297,606 for sorghums. During the 1932-1936 period of drought, however, the value of sorghums has been more than six times as great as corn. Neither crop has produced much grain during the period and

the sorghums have proven a far more valuable feed crop.

In the future a considerable acreage of corn will probably and should be grown on the sandy soils south of the river and in the Arkansas River Valley. An increase in corn acreage is not likely since sorghums have been grown more successfully on the hard upland soils and its popularity has gained there during the drought period as against corn, which has generally burned so badly that it failed to make even fodder.

#### Fruit and Truck Crops

The quantity of fruit and truck crops now grown or ever grown in Gray County is negligible. Apples, Irish potatoes, sweet potatoes, and a few other crops have been grown in the Arkansas Valley on a small scale in commercial quantities. All were sold, as a rule, to the farmers in the nearby uplands and to persons in the nearby towns.

Family gardens, and sometimes fruit trees, grown under windmill irrigation have been of great importance in furnishing vegetables and fruits for the family table. Especially has this been the case during the recent drought when the family budget had been depleted.



## Sugar Beets

In 1933 the value of sugar beets sold by Gray County growers was \$16,038.00 which were produced on 324 acres. The 1936 product was only \$2,250.00 from the small acreage of 45 acres.

The Arkansas River Valley in Gray County has several thousand acres of fertile bottom land, underlain by a water strata only a few feet below the surface, which is suitable for sugar beet production.

Sugar beet production under irrigation is assuming some importance in the western part of the state. The principal counties in point of acreage are Finney, Kearny, Pawnee, and Hamilton. Conditions are well suited to growing sugar beets in Gray County, being near the Garden City sugar factory, but the future trends of production will depend largely on irrigation problems and market conditions, both of which may prove a handicap to rapid development.

## Livestock

Until the last few years Gray County possessed natural conditions that were generally favorable to livestock

raising. It had abundant pasture land, covered for the most part with the nutritious buffalo grass of the western plains. Conditions are also well suited to growing adaptable feed crops to supplement pasture.

The territory now comprising Gray County was utilized by the cattlemen from shortly before the completion of the Santa Fe Railroad to Dodge City in 1874 until the Blizzard of 1886. The owners identified their cattle by brands and allowed them to graze over the open range of western Kansas, which amounted to hundreds of square miles. The Barton Brothers drove the first herds of Texas longhorns up from Texas toward the prospective new rail head at Dodge City in 1872, establishing their headquarters in the Arkansas River Valley at the place where Pierceville is now located,<sup>12</sup> and utilizing most of the area now Gray County.

The settlers who came west from 1884 to 1886 took over much of the land also occupied by the ranchers. The ranchers were driven farther and farther westward, and a feeling of bitterness arose against the farmers because of encroachment on the range lands. The Big Blizzard of 1886, which came early in January of that year, swept out of the

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12. Barton, D.W., "Doc", Ingalls, Kansas, Interview.

north and froze almost every living thing which was exposed to its icy blasts. The cattlemen were ruined; the homesteaders could use the land as they pleased.

Fig. 5 presents a striking view of the utter ruin of the livestock industry in Gray County in the years immediately following the settlement of the land by the homesteaders and the devastating blizzard in 1886. For a decade following very little livestock was found on Gray County farms, reflecting the utter destitution of the 'Corn-Belt' farmers on these drought-stricken plains.

From 1887 to 1904 there was a tremendous increase in the number of stock cattle. On March 1, 1904 there were more than 18,000 cattle on Gray County farms. The trend in stock cattle was downward from 1905 until 1914, while the number of horses and milk cows were on the upward trend from year to year. The trends in livestock during this period reflect the development of a more diversified type of agriculture, with increases in the number of horses for farm labor, and in the number of dairy cows, hogs, and poultry.

The trend in cattle and horses was sharply upwards from 1914 to 1923. The high prices created by the War made livestock raising very profitable. The price of beef skyrocketed and horses and mules were bought by the thou-



sands at fancy prices by the government. The peak year for number of cattle on farms as of March 1, was in 1920, with more than 18,000 head. In 1923 there were more than 9,000 horses and mules on the farms, but from that time on, the number of these animals declined rapidly, reaching the very low figure of around 1,000 in 1936. This decline has been going on for fifteen years, but should be halted soon and an equilibrium established in conformity with power-farming requirements.

The number of stock cattle declined sharply from 16,000 in 1923 to 6,500 in 1928. This downward trend was necessary because ever increasing acreages of pasture land were being broken up and sown to wheat. The number of swine and dairy cattle was upward until 1934 during the recent drought years, indicating in a general way, the attempt of the farmer to supplement a curtailed income. Since 1934 there has been a further decline probably made necessary because of almost complete depletion of native pastures.

During the drought period, income from livestock and livestock products has made up a greater percentage of the total farm income than at any other time during the fifty-year history of the county. The five-year average income for this period from livestock was \$306,622.

1000 If the present trends towards diversification develop, and favorable crop years come, Gray County may witness an era of livestock production exceeding by far any previous development along this line in the history of the county.

### Dairying

Dairying has been a welcome source of income in Gray County during the recent drought period. The 1932 to 1936 five-year average was more than \$50,000.

The greatest number of milk cows on the farms was in the 1912-16 period, however, the average annual value of dairy products during this period was only \$27,136. Six thousand milk cows were reported in 1916. In comparison (see Fig. 5) the 1926-30 period, when only about 2,500 cows were milked, gave an annual income of \$95,216. Several factors had a bearing on the greatly increased income from this source. Not the least important was the greatly improved market facilities. Cream buying stations were established by the large city creameries in almost every town. The plant of Swift & Company had also been built during this period in nearby Garden City, where cream, poultry, and eggs were purchased and prepared for both the

local and distant markets.

The extremely unfavorable conditions during the drought have caused a further decline in the number of milk cows kept on the farms. During more favorable years dairying should make a rapid recovery and attain a place of some importance among the secondary activities on Gray County farms.

### Sheep

According to Fig. 5 sheep raising has never been of importance in Gray County. A few hundred sheep were to be found on farms from 1902 to 1911, and then for some years none at all were listed by the assessor.

The 1933 and 1934 agricultural censuses list 330 and 320 sheep respectively for Gray County. Projects carried on by the boys' and girls' 4-H Clubs tend to show that sheep can be produced at a profit in Gray County. As a result of these activities a somewhat greater interest in sheep raising possibilities has developed.

### Poultry

Poultry raising, like dairying, is most important in



the regions of diversified farming. Poultry raising in Gray County is nearly always a secondary enterprise conducted in conjunction with diversified wheat farming.

The following figures show the average value of poultry and eggs sold for representative five-year periods.

Average Value of Poultry and Eggs Sold

1903-07	1912-16	1926-30	1932-36
\$8,395	\$20,317	\$90,520	\$45,932

Poultry was rapidly becoming more popular during the 1926-30 period, and rightly so, considering the climate and the plentiful supply of sorghum grain which was available and is generally recognized as among the best poultry feeds produced anywhere. During drought years the feed crops are curtailed and profitable poultry production can seldom be carried on.

When normal years occur and a considerable amount of sorghum grain is again produced, poultry raising should make some rapid strides and the result will be added economic stability for the farmer.

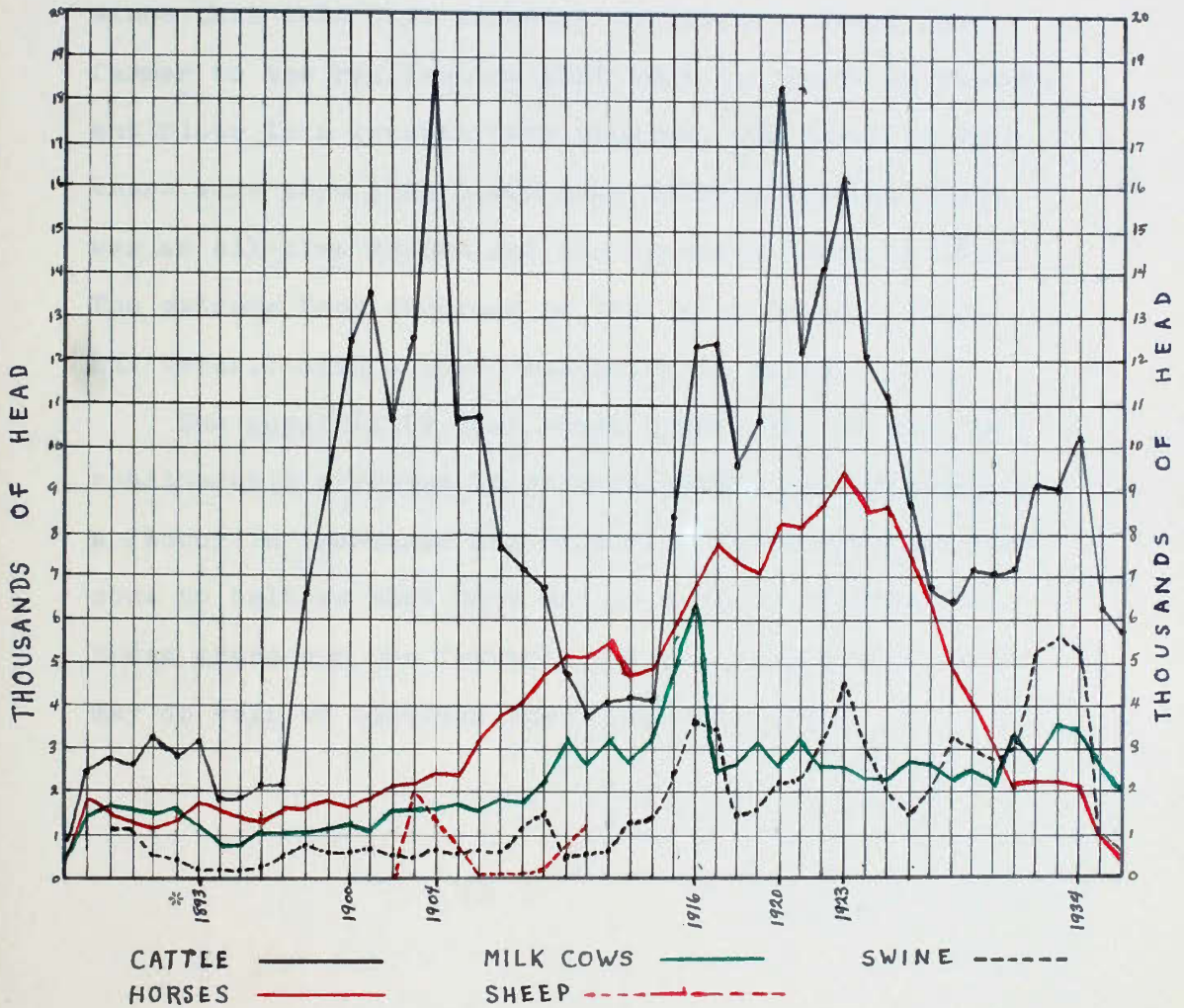
Swine

Fig. 5 shows that the number of swine in Gray County has never been great. Since 1914, however, the number of

Fig. 5

Trend in Number of Livestock

1887-1936



\* March 1 of each year.

hogs on farms has been considerably more than in the past. This upward trend in hogs was accompanied by a like trend in the corn and sorghum acreage.

The low grain prices of 1931 and the crop failures since that date have awakened the western Wheat Belt farmer to the realization that hogs can serve an important place in a general farm program. On March 1, 1932 there were more than 5,000 hogs in Gray County. This was an all-time record and was exceeded again in 1933. The extreme feed shortage of the later drought years has necessitated a sharp reduction in swine.

The possibility that Sudan grass will be sown in considerable acreages to replace native pastures may be a factor in increased hog raising. There are good reasons to believe that hogs may be cheaply produced on Sudan grass and the forward-looking, progressive farmer may do well to consider these possibilities.



## CHAPTER V

### Other Industries

### Mineral Resources

Geologic conditions have concentrated the greater part of the minerals in Kansas in the eastern part of the state. It is only in recent years with the discovery of major oil and gas deposits in western Kansas that attention has been directed to the possibility of important mineral resources to be found in Gray County and adjoining territory.

Gas wells were brought in in Seward and Stevens Counties in southwestern Kansas in 1922 and 1924. Also the western outpost of oil production in Kansas was again pushed westward with the discovery of oil in southern Scott County in January, 1935.

No deep tests for oil or gas have been drilled as yet in Gray County.<sup>1</sup> It lies midway between the Morrison oil and gas field of Clark County and the Shallow Water oil

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1. Landes, Kenneth K., Mineral Resources of Kansas Counties, p. 39.

field of Scott County. The eastern edge of the Hugoton Gas Field in southwestern Kansas has not yet been outlined by dry holes. At the present time the nearest gas well is in southwestern Haskell County, about 18 miles from the southwestern corner of Gray County.

That oil men are impressed by the geologic structures in Gray County is attested to by the fact that in 1935 oil royalties paid Gray County land owners totaled approximately \$20,000. Late in 1936, a block of 10,000 acres was being assembled southeast of Montezuma by some Tulsa oil men, with an assurance of drilling operations within the next few months.<sup>2</sup> It was also rumored that northwest of Cimarron several miles a test well will be put down some time in 1937. The north part of Gray County has been thoroughly core drilled within the past few years and the leases are being kept up on a good part of the acreage.

In the event that oil and gas is ever discovered in large commercial quantities in Gray County the economic development would naturally be accelerated for a number of years. The discovery of oil and gas results in the influx of a large number of people who find their occupations in the fields, such as surveyors, drillers, geologists, contractors, lease scouts, machinists, roustabouts, and the

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2. The Jacksonian, Dec. 23, 1936.

like. Such activities as oil well supply houses, foundries, and machine shops that service the oil well operations, are directly dependent on the industry and locate near producing fields.

### Stone, Sand, and Gravel

With the exception of the alluvium of the Arkansas River, which crosses northern Gray County from west to east, and a belt of sand dunes south of the river, practically all of Gray County is covered with rocks of Tertiary Age, buried at an average depth of one hundred feet. A small amount of stone was quarried from the Tertiary from the bluffs on the north bank of the Arkansas during 1935 and used as rubble.

A series of sand and gravel deposits occur along the Arkansas River in north central Gray County. Additional deposits are found to the northeast where local streams have reworked the Tertiary sediments.<sup>3</sup>

### Other Minerals

The Kansas salt deposits underlie several thousand

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3. Landes, Kenneth K., Mineral Resources of Kansas Counties, p. 39.



square miles in the central and southwestern portions of the state<sup>4</sup> including, as far as is known, all of Gray County. Some of the beds are more than 300 feet in thickness. These deposits are deeply buried in southwestern Kansas and market demands do not warrant the prediction that this salt will ever be utilized.

From time to time there has been some conjecture as to whether valuable minerals might be deposited in the bluffs and sands along the Arkansas River. The Census of 1895 listed one person as being engaged in mining.

For a number of years in the early 'twenties an old miner tunnelled into some of the bluffs about one and one-half miles west of the town of Ingalls on the Arkansas River. There were indications in the rocks of copper and some other metals but 'Old Sam', as the miner was known throughout that territory, was generally considered as being somewhat unbalanced mentally and no further attention has been given to the possibility of precious metals there.

#### Manufacturing

Kansas is primarily an agricultural state, and manufacturing has so far contributed only a small part to its

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4. Southwestern Bell Telephone Co., Economic Survey of Kansas, p. 105.

economic development. The chief manufactures developed in Kansas have been those that process raw materials, (such as flour-milling, meat-packing, cement milling, and zinc smelting) and industries of the population-serving type.

Of the industries of the major type, those that process raw materials, few are found in western Kansas and none at all in Gray County. Those industries that are population-serving are found in almost every sizeable population center. This class includes bakeries, laundries, ice plants, and the great number of printing establishments.

Gray County's agricultural resources help furnish raw materials for industries both within and outside of Kansas. Livestock products are sold to the meat packers, hard winter wheat to the flour millers, and dairy products for the production of manufactured dairy products such as butter, cheese, condensed milk, and ice cream. Mainly because of the lack of fuel and power, and nearby markets, none of the manufacturing industries of any consequence are now found within the county.

The local markets in Gray County are supplied with manufactured products shipped in from outside the county by retailers almost entirely. Even the products of population-serving industries such as bakeries, laundries,

and ice plants are supplied by distributors from Dodge City, Garden City, and Liberal, which are all strategically located on connecting highways with the markets in Gray County.

Flour milling, which is the second ranking industry in Kansas, once was widely distributed in Kansas--mills being located in almost every sizeable town. Two small flour mills were operated for a few years at Ingalls, in Gray County. A fire in 1888 destroyed the mills and also a cheese factory and a number of the other buildings in the business block. Because of the low level of agricultural activity at this time no need was felt for these industries and the factories, as well as the business establishments, were never rebuilt. The mill at Cimarron was discontinued shortly after 1900.<sup>5</sup>

At the present time there are only two flour mills in southwestern Kansas, one at Liberal and one at Dodge City.<sup>6</sup> Inasmuch as the industry is laboring under an over-built condition at present, it is not likely that any mills will be built in the smaller centers.

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5. The Jacksonian, Feb. 24, 1901.

6. Southwestern Bell Telephone Company, Economic Survey of Kansas, p. 86.



## Other Manufacturing Industries

According to the 1930 U. S. Census, the printing and publishing industries employed eight wage earners in Gray County. These were engaged in printing the weekly newspapers at Cimarron, Copeland, and Montezuma. Printing is preeminently a population following activity and is important where a concentration of people and industry provide a market for its products or services. Since the population of Gray County is relatively small and almost entirely rural no increase in printing establishments or in number of employees can be looked for. Early in 1937 the Copeland Chronicle was consolidated with the Jacksonian at Cimarron, thus reducing the number of newspapers in the county to only two. Fifty years ago, during the first settlement of the county, there were three newspapers at Cimarron, two at Ingalls, and one each at Ensign and Montezuma. By 1898 only the newspaper at Cimarron remained. The Montezuma Chief was reestablished in 1912 along with the now defunct Copeland Chronicle.

The manufacture of bread and other bakery products is an important population serving industry in Kansas. This industry is carried on in almost every town of any size in the state. However, most of the Gray County mar-

ket is supplied daily by trucks from the nearby larger centers which have large bakeries that sell their products on a wholesale basis. A small bakery at Cimarron has operated since 1929.<sup>7</sup>

At present practically all of the manufactured goods consumed in Gray County are imported from without, and as agriculture will undoubtedly remain the only sizeable industry, this condition will probably continue to prevail.

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7. Harris, Jack, City Clerk, Cimarron, Kansas, Interview.

In any county the majority of the small institutions maintained by the people thereof are located in the town or trading centers. In the towns and villages are found the business establishments which supply the necessities of life. The larger schools and churches are usually located there. Entertainment and recreation centers are also found. All the affairs of the county are transacted from the county offices in the county seat town. The various law enforcement of commercial and service institutions of the county within a county reflect the nature of commerce and industry.

## CHAPTER VI

### Social Development

The social development attained by any designated group of people more than any other accomplishments, signifies their relative economic status. Social institutions become more numerous as well as more serviceable to the general welfare as long as a surplus of material wealth is available over and above the expenditures for maintaining the family in its immediate home environment.

In any county the majority of the social institutions maintained by the people thereof are located in the towns or trading centers. In the towns and villages are found the business establishments which are population serving. The larger schools and churches are usually located there. Entertainment and recreation places are maintained. And the affairs of the county are directed from the county offices in the county seat town. The growth and development of commercial and service facilities of the towns within a county reflect the degree of success or failure



of the economic activity of the county as a whole.

The county government is housed in the court house, which, in many of the western Kansas counties where new ones have been built, is a source of great local pride. Here the citizens of the county transact their official business, the county officials are at their service, and it is the place of county wide meetings of farmers and other groups where plans are formulated which add to the social wealth of the county.

The town governments also attain an important place in their contributions to the social well-being of their constituents and of the population of their entire trading territory. City lights, water systems, streets, parks, swimming pools, libraries, and other municipally sponsored projects which are beneficial to all concerned are maintained by the incorporated towns.

The schools, churches, roads and highways, railroads, telephones, telegraph, other public utilities, and the public service institutions previously mentioned are the substance of the social heritage of the people of Gray County.

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1. Historical Collections (Kansas), Vol. 7, p. 5-62.
  2. Ibid., Vol. 16, p. 330.
  3. Andrew, A. T., History of Kansas, Vol. 2, p. 344.

## Early Social Development

Early commercial enterprises contributing to the social development of the territory now Gray County began soon after the government mail service was begun over the Santa Fe Trail route. As early as 1867, and possibly before, the government had ten men and a sergeant stationed at the Cimarron Ranch on escort duty with the United States mail.<sup>1</sup> The Cimarron Ranch was located on the Arkansas River approximately half way between the present towns of Cimarron and Ingalls.

In 1867 there was at the Cimarron Crossing, the site of the present town of Ingalls, a well-equipped stage station,<sup>2</sup> consisting of adobe houses and a large corral in which stage coaches or trains could find shelter in case of an attack by Indians. At the northeast and southwest corners were large towers provided with portholes. The station was owned by the Overland Stage Company which carried the transcontinental mail.

In October, 1868 the building of the Atchison, Topeka, and Santa Fe Railroad was begun at Topeka and completed to Dodge City on August 12, 1872.<sup>3</sup> By December 23 of the

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1. Historical Collections (Kansas), Vol. 7, p. 55-62.

2. Ibid., Vol. 16, p. 336.

3. Andreas, A.T., History of Kansas, Vol. 2, p. 244.

same year, the road, following for much of the distance, the Santa Fe Trail along the Valley of the Arkansas, had been built to the western State line.

The first commercial activity as a result of the completion of the railroad was the slaughter of the buffalo and the shipment of hides to the East. Then came the cattle industry. The emigration of farmers westward also set in strongly during the construction of the railroad. The Government Land Grant made to the railroad company comprised very nearly three million acres. In what is now Gray County the grant covered alternate sections ten miles in width on both sides of the road.

In Gray County the railroad received 164,032 acres which was surveyed and sold to the settlers between 1884 and 1886. Shortly after the completion of the railroad in 1872, however, shipping stations were established in Gray County. Daily mail and telegraph services as well as other advantages of older settled communities were at once available to the settlers as a result of the completion of the railroad and associated enterprises.

### Towns and Villages

At the time of the permanent organization of Gray County on July 20, 1887, there were only four towns of any



consequence within the county. These were Cimarron, Ingalls, Ensign, and Montezuma. Cimarron was a sizeable town with a population in the neighborhood of eight hundred; Ingalls had a population of about three hundred; and Ensign and Montezuma were much smaller. Ensign and Montezuma were abandoned when the railroad was taken up in 1895 but were revived along with the new town of Copeland when the Atchison, Topeka, and Santa Fe built its branch through the south part of the county.

According to the U.S. Census of 1930 there were five incorporated towns in Gray County. These and their respective populations were as follows: Cimarron, 1035; Copeland, 423; Ensign, 244; Ingalls, 273; and Montezuma, 424. Other shipping points were Charleston on the main line of the Santa Fe and Haggard on the branch line between Ensign and Montezuma.

Following is a discussion of the development of the several towns and the social institutions of each.

### Cimarron

Cimarron, the county seat of Gray County and the oldest town in the county, has a leading place in the annals of southwestern Kansas. In Gray County it has always been

the most important trading center.

In the spring of 1877 the Santa Fe Railroad built a section house at the present site of the city. Mr. George Andrew Day was the first settler,<sup>4</sup> having been sent there as a section boss. A small village soon grew up around the section house and Mr. Day was appointed temporary postmaster on April 3, 1878 when the government post office of Cimarron was officially established.

L. E. McGarry, a young man of twenty-seven, and a graduate of Northwestern University, came to Cimarron in March, 1878. McGarry became one of the leaders in the early development of the territory. He was appointed postmaster of the Cimarron post office and with a Mr. Shoup was in the real estate firm which had 200,000 acres of land belonging to the Atchison, Topeka, and Santa Fe Railroad for sale. In 1878, according to McGarry, there were only about twenty settlers in the county. The first store had been opened May 20, 1878. The first government claim was taken February 13, 1878.<sup>5</sup>

According to the Nov. 1, 1879 edition of the New West, two hotels were operating in Cimarron, the Cimarron House and the Illinois House. There was also a drug store, a store handling hardware and groceries, two livery stables, a real estate office, a blacksmith shop, two coal and lum-

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4. Egbert, J. H., Cimarron, Kansas, May, 1937, Interview.

5. Andreas, A. T., History of Kansas, Vol. 1, p. 1616.

ber yards, two saloons, an attorney, and the weekly newspaper, New West.

In May, 1881, when the A. T. & S. F. Railroad commenced the appraisement of its land on the north side of the river, the merchants of Cimarron were jubilant since they could now look for a large increase in population since these lands were being placed on the market.<sup>6</sup> And it is no wonder that the merchants of Cimarron were full of optimism for they had a vast territory in southwest Kansas, it being fifty-four miles to the Oklahoma line and ninety miles north to the Union Pacific Railroad. Dodge City, nineteen miles east of Cimarron, was the only major trading point in southwestern Kansas and Pierceville, twenty miles away, was the first point to the west.

The westward stream of settlers first hit eastern Gray County in 1884 and 1885 and engulfed the entire county in 1886. According to the Topeka Commonwealth of October 6, 1885, the town of Cimarron had grown in four months from a station on the Santa Fe to a city of importance.<sup>7</sup> Twenty-five business houses had been erected. There was a free bridge across the Arkansas River and a good natural highway through the sandhills. The town was incorporated

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6. The New West, May 21, 1881.

7. Jacksonian, Mrs. C. B. Erskine, Nov. 14, 1931.



late in 1885 or early the following year.

On July 20, 1887 Gray County was proclaimed organized and Cimarron was named the temporary county seat. The registration on location of county seat on April 12 resulted as follows: Cimarron, 746; Ingalls, 102; and Montezuma, 596. The election for permanent county seat was called for October 31, 1887.

Cimarron, which was a well-established city long before the other towns were started, felt that she was the logical county seat of the new county. She boasted a two-story school house, a two-story depot, two newspapers, two banks, a drug store and about twenty merchantile establishments.<sup>8</sup>

The two newspapers did a good job of publicizing Cimarron to the outside world letting it in on the secret that Cimarron was the logical place to establish a second Kansas City.<sup>9</sup> Said the Jacksonian of Cimarron, "Its crowning day will be the securing of the capital of Gray County."

Cimarron, however, met with unexpected opposition in the county seat election. Asa T. Soule, of Rochester, New York, a millionaire manufacturer, had established the town

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8. Blackmar, Frank W., Kansas, Vol. 1, p. 782.

9. Saturday Evening Post, Elmer T. Peterson, p. 45.

of Ingalls six miles up the river from Cimarron. Soule was contemplating a number of promotional schemes centering around his town of Ingalls and one of these was to secure the county seat for it, thus assuring rapid growth for his town and high prices for his town lots.

For their pledge to vote for Ingalls as county seat, Soule promised to give Montezuma and its neighbor, Ensign, a railroad outright. And he planned to cleave the Cimarron allegiance by running a ninety mile irrigation canal from its intake at Ingalls, through the town of Cimarron, holding out the bait of water rights to thirsty farmers along the way. There would be no taxes for Ingalls.<sup>10</sup> He gave Dodge City a bank and a college, for valuable help could be secured there.

Montezuma withdrew from the county seat race and it was said that farmers in the adjoining county of Ford invaded Gray County and voted for Ingalls out of gratitude for Soule College at Dodge City.<sup>11</sup> The Soule contingent, including the Gilbert brothers, and a number of Dodge City toughs--supposedly including Bat Masterson, Bill Tilghman, Eat-'em-Up Jake and Ben Daniels, held forth in the Merchants' Hotel at Cimarron during the election.

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10. Sat. Eve. Post, June 4, 1927, Vol. 199, p. 47.

11. Ibid., p. 47.

When the votes were counted, both towns claimed to have won. The result of the vote depended upon the vote cast by the Cimarron and Ingalls precincts.<sup>12</sup> Both sides claimed that the vote of the other precinct was fraudulent. It was claimed that the election board had waited at Cimarron until the results of the election at Ingalls had been announced and then had stuffed the ballot box with enough votes to swing the election for Cimarron.

When the case came before the Kansas Supreme Court, more than 3,000 pages of testimony reeking with fraud were presented.<sup>13</sup> In the decision of the case, Judge Horton, in a dissenting opinion, held for Cimarron and Judges Johnston and Valentine decided for Ingalls. A few years ago Judge Johnston told a Gray County newspaper editor, "Judge Valentine and I decided that there was a little more fraud committed by the Cimarron side than by the Ingalls side."

In the early spring of 1888 the county records were at Ingalls,<sup>14</sup> as Judge Strang had issued a mandamus ordering the change made. On March 14, the Supreme Court issued an alternative writ of mandamus giving the county offices to Cimarron. The location of the county seat seemed to de-

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12. Sat. Eve. Post, June 4, 1927, Vol. 199, p. 213.

13. Kansas Reports, Vol. 142.

14. Sat. Eve. Post, June 4, 1927, Vol. 199, p. 213.



pend upon the sympathies of the several county officers, and at times it seemed as if there were two county seats. On November 8 and 9, 1899, an election had been held and both towns claimed to have elected their respective tickets. The Supreme Court held that N.F. Watson, an Ingalls man, was elected county clerk and J. H. Reynolds, of Ingalls, sheriff. Ingalls partisans were convinced that the Cimarron partisans intended to hold the county clerk's records regardless of the election of Watson.

About noon January 12, 1889, occurred the historic battle on the streets of Cimarron.<sup>15</sup> J. H. Reynolds, the sheriff-elect, had deputized a number of men including some of the famous Dodge City characters, for the amiable errand of removing the county archives to Ingalls. Just as the Ingalls contingent was loading up the last of the county books the good citizens of Cimarron began firing on them. In a few minutes charges of buck-shot and rifle and revolver bullets were spitting against the store fronts. A man named J.W. English, an inoffensive Cimarron citizen, was shot squarely in the forehead and died instantly. Happy Jack and Ed. Fairhurst, both Cimarron men, were wounded severely. Brooks and Brown of Dodge City, and

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15. Sat. Eve. Post, June 4, 1927, Vol. 199, p. 217.

Bolds and Reichelderfer, of Ingalls, received serious injuries.

An appeal to the Supreme Court was pending even while this bloody fight was going on. The positions of the three justices were the same in ruling upon the motion for a rehearing as upon the main issue. The county seat remained at Ingalls. Ingalls did not, however, profit much from her hard-won victory. Asa T. Soule died a year after the Cimarron-Ingalls fight. A period of hard times came and the people became discouraged. Soule's irrigation ditch did not work satisfactorily. The sugar factory was never started. Ingalls dwindled to half a dozen houses.

The people of Cimarron, however, had built up an amazing loyalty and hardihood. Some two hundred people stayed on through the hard times and drought, when many western Kansas towns were completely depopulated. In the 'nineties Cimarron was noted as being the fightingest town in western Kansas.<sup>16</sup> Even Dodge City had to look to its laurels.

The county commissioners had called an election for February 13, 1893, which resulted in a vote of 304 to 269 in favor of Cimarron. The county records were transferred

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16. Sat. Eve. Post, June 4, 1927, Vol. 199, p. 216.

in an orderly way to Cimarron on February 19, although the Supreme Court verdict in favor of Ingalls remained in effect. In 1928 the new Gray County courthouse was built at Cimarron. The levy was made and no opposition appeared.

In 1900 general business conditions in Cimarron were at a low ebb as is evidenced by a lack of advertising in the local newspaper.<sup>17</sup> Among the business establishments having space in the paper was the Cimarron State Bank, a reorganization of the privately owned Cimarron Bank, which was capitalized at \$15,000 and was the only bank in the county. The Cimarron Roller Mills advertised a high grade flour.

In 1902 the population of Cimarron was only 212; it was 228 in 1904; 423 in 1906; and by 1910 there were 587 inhabitants. In 1910 Cimarron was the only town of any size in the county. Some of the most important establishments were<sup>18</sup> the post office, express and telegraph office, two banks, the newspaper, telephone exchange, a hotel, four churches, the grade and high school, and the Farmers' Cooperative Union Elevator.

From 1910 until 1932 Cimarron experienced a continuous

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17. The Jacksonian, June 22, 1900, Vol. 55.

18. Kansas, Vol. 1, p. 349.



growth and development. The population in 1930 reached 1,005.

The most outstanding improvements came during and since the boom days of the late 'twenties. A modern sewer system was installed in 1928 at a cost of \$31,000.<sup>19</sup> The Cimarron school building was completed as a PWA project in 1933 at a cost of \$130,000. In 1932 ten blocks were paved on U. S. Highway 50 South through Cimarron from east to west. In 1936 four blocks of gutter pavement was completed on Main Street by the federal, state, and city governments as a PWA project at a total cost of \$53,000. The cost to the city was \$8,500.

The Farmers' Elevator,<sup>20</sup> with 110,000 bushels storage capacity, was built at a cost of \$47,000 in 1930. The entire construction cost was paid from accumulated surplus. The company, with some one hundred fifty farmers as stockholders was first organized in 1915.

The Cimarron Farmers' Cooperative Oil Company, which was organized in May, 1930, had 165 members and \$10,000 Capital Stock,<sup>21</sup> and did \$40,000 business in 1936. It paid eight per cent dividend on the 71 per cent stockholder business. In addition to this company there were two service stations in Cimarron in 1937, eleven filling stations,

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19. City Clerk, Cimarron, Kansas, Interview.

20. Egbert, J. H., Cimarron, Kansas, Interview.

21. Manager of Cimarron Farmers' Coop. Oil Co., Interview.

and ten trucks available for serving customers in the trading territory.

The Cimarron Water Works System was built in 1887<sup>22</sup> and abandoned until 1912. The same plant has been improved from time to time and is now worth \$100,000. In 1937 there were about 350 customers to whom water is supplied at the very cheap rate of ten cents per thousand cubic feet in the summer time. Although shallow water is available in unlimited quantities, the water for the city system is pumped from wells more than 200 feet deep. By actual test by the State Department of Health, the Cimarron city water was found to rank second in purity in tests covering cities in the state. The municipal swimming pool, which was constructed more than a score of years ago, and is free to the public, is regularly supplied from the city water.

The completion of pipe lines of the Argus Pipe Line Company, from the Hugoton Gas Field in southwestern Kansas, in 1929 made natural gas available to the residents of the city of Cimarron. The properties of the pipe line have also added materially to the public service property valuation of the county. The pipe line company is the second

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22. Harris, Jack, City Clerk, Cimarron, Kansas, Interview.

largest tax payer in the county, being exceeded only by the railroad company.<sup>23</sup>

A noteworthy building in Cimarron is the Methodist Church, which was completed in 1930. It is a handsome brick edifice of which the fifty-year old church organization may be justly proud.

The drought years and low prices during the depression have been a severe handicap to the progress of the city. The population had declined to around 913 in 1936. The city property assessment in 1936 was placed at \$625,220, of which \$83,089, or 13 per cent, was public service property.<sup>24</sup>

The Chamber of Commerce, which is an outgrowth of the old Commercial Club which was organized in the early days, and the weekly newspaper, The Jacksonian, now more than fifty years old, have been instrumental in an active promotion of the best interests of the city.

### Ingalls

The town of Ingalls has such a remarkable history that the present is almost insignificant in comparison.

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23. County Treasurer, Gray County, Interview.

24. State Board of Agriculture, Biennial Reports.



The famous Cimarron Crossing on the old Santa Fe Trail was at Ingalls and old timers have pointed out the exact place,<sup>25</sup> where they have seen many of the caravans cross the Arkansas River. When the transcontinental mail service was established the Overland Stage Company maintained a station there.

In 1883, J. W. and G. G. Gilbert<sup>26</sup> of Dodge City, and formerly of Rochester, New York, interested Asa T. Soule their old fellow citizen in a land and irrigation scheme which they were promoting. Soule had become wealthy in the manufacture of a patent medicine known as "Hop Bitters," and was reputedly worth from \$8,000,000 to \$10,000,000<sup>27</sup> when he became interested in the irrigation scheme in 1883.

The Eureka Irrigating Canal Company was incorporated in 1883 and for the source of a water supply for the proposed canal, Soule picked a location six miles up the Arkansas River from Cimarron.<sup>28</sup> To divert the water into the canal a wing dam of tiles was built into the river, extending up stream 2,000 feet, at a cost of about \$30,000. The canal at its source was 48 feet wide and 6 feet deep, gradually decreasing to a width of 45 feet and a depth of 5 feet, with a fall of about 2 feet to the mile. Its total

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25. Jacksonian, Mrs. C. B. Erskine, Nov. 14, 1931.

26. Sat. Eve. Post, June 4, 1927, Vol. 199, p. 45.

27. Kansas Reports, Vol. 42.

28. Kansas Historical Collection, Vol. 10, p. 464.

length was 96 miles, and it was built along the top of a ridge north of the river and the A. T. & S. F. Railroad track.

The company issued \$1,000,000 in stock and Soule took it all, furnishing the money for the construction of the ditch, which cost approximately \$250,000. He bonded it for a million and sold the bonds in London at par. It was claimed that the only time the ditch was full of water was while he was working off this deal.

It is said that when Soule located the intake of his ditch, he decided he ought to have a town there, so in 1884 he laid out one, planned it for the county seat, and named it Ingalls in honor of the well-known Kansas senator-author. As a matter of fact, the post office there had first been called Soule, for A. T. Soule, but was soon changed to conform to the name of the railway station.<sup>29</sup>

The city plot was planned by Soule and Ed Artt and was divided into 788 lots.<sup>30</sup> They erected a two-story hotel, a store, a bank building and an office. A Union Church was also built by Soule.

Soule made every possible effort to bring Ingalls' bid for county seat to a successful conclusion. He stated

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29. Kansas Historical Collection, Vol. 10, p. 464.

30. Barton, D. W., "Doc", Ingalls, Kansas, Interview.

that he would spend \$100,000 on public improvements.<sup>31</sup>

He talked of a project to establish a sugar factory there, and also announced the purchase of machinery and the selection of an expert on boring wells for artesian water, for coal, and for gas. The city of Ingalls was to be tax free.

In the October election of 1887 for county seat, Soule was charged with having spent about \$30,000. The outcome was disputed by both sides. On November 23, 1887, the Supreme Court held that Ingalls was the county seat. The final decision was handed down on October 5, 1889, in favor of Ingalls, and the town remained the county seat until 1892.<sup>32</sup>

During this period Ingalls had considerable business development. In 1890 bonds were voted for a large sugar mill which was to cost \$40,000 and have a capacity of 100 tons per day.<sup>33</sup> A flour mill costing \$8,000 and a cheese factory were built that year. Two weekly newspapers were published in Ingalls.

The failure of the irrigation ditch and the death of Soule in 1890, together with the repeated crop failures

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31. Kansas Historical Collection, Vol. 10, p. 464.

32. Ibid., p. 464.

33. Ingalls Union, Jan. 2, 1890, Vol. 3, No. 24.



soon caused a depopulation of the town. Ingalls shrank to half a dozen houses. An election called in 1893 gave the county seat to Cimarron. A fire destroyed most of the business district and the flour mills and cheese factory were torn down and moved away. The weekly newspaper was discontinued late in 1894.

Ingalls continued to be a trading and shipping point for a considerable area of the sparsely settled neighboring farm territory. Among business establishments which survived the depopulation of the town were a general store, a lumber yard, and a blacksmith shop. The post office and two rural routes were maintained. The Atchison, Topeka, and Santa Fe Railroad had an agent at the station and a number of houses for Mexican section hands.

The development of the wheat industry and the building of schools and churches have been factors in the development of Ingalls as a trading center in recent years. In 1932 the population reached 280, but has declined to 211 in 1936. The real and personal property assessment totals \$116,293 of which \$35,629 or 31 per cent was public service property.

Three grain elevators with a combined capacity of 56,000 bushels are located at Ingalls. The largest one, with 30,000 bushels capacity, was built in 1931.<sup>34</sup> Three

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34. Burns, Joseph H., Ingalls, Kansas, Interview.

private oil companies serve the neighboring farm territory by truck. The Farmers Oil Company, which had been organized in 1927, went bankrupt during the drought. There are also a grocery and dry goods store, a bank, telephone office, a restaurant, and a pool hall operating in Ingalls at present.

The bank at Ingalls was established in 1904 and at present has a large clientele throughout the county and adjacent areas. It is one of only three banks in the county, three others having closed their doors within recent years.

Ingalls has been incorporated as a fourth class city since 1928, but has no municipal projects of any consequence. Achorn Park, south of the river bridge, was given to the city a few years ago. The extensive groves of cottonwoods make this an ideal place for camping, picnicking, or outdoor gatherings.

The city has electric lights and power and is connected with the Kansas Power & Light Company's line. There were fifty-eight users of electricity in 1937. The town has no municipal water plant and the residents secure water from shallow wells which are pumped by hand or by windmill power.<sup>35</sup>

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35. Cessna, Bert, Ingalls, Kansas, Interview.

The churches at Ingalls are a strong factor in perpetuating the town's position as a cultural and trading center. The beautiful Catholic Church, of Spanish Mission style, was completed in 1931 at a cost of \$22,000.<sup>36</sup> This fine new building replaces an old wooden structure which had been built in 1907. The membership of the church at Ingalls is several hundred and is the only Roman Catholic Church in the county.

The Union Church, which had been built and donated to the town in 1887 by Soule, served the community until 1927. At this date the church was disbanded and the Methodists and Baptists each built basement churches with plans to complete the buildings when more prosperity prevailed. To date neither has found it expedient to complete its building.

The schools at Ingalls are a local source of pride. School districts comprising 216 square miles and with an assessed valuation in excess of two and one-half million dollars are consolidated at Ingalls. The high school, which houses the upper six grades, was built in 1918 at a cost of \$45,000. The two grade school buildings are valued at about \$15,000.<sup>37</sup> There is no bonded indebtedness whatsoever

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36. Burns, Joseph H., Ingalls, Kansas, Interview.

37. Cessna, B.D., Ingalls, Kansas, Interview.



on the schools since 1931. Seven districts have been consolidated since 1920. Two more are of a more recent addition. At present nine school busses transport more than 200 rural grade and high school students to the schools at Ingalls.

U. S. Highway 50 South skirts the northern edge of the town where it was routed about six years ago. Formerly the highway passed directly through the town where the large Santa Fe Trail marker, set up in 1906, attracted considerable attention. It is generally agreed that the change in routing has hurt the town's trade.

The social institutions now located at Ingalls and the habits and traditions centering about them will probably consolidate the present position of Ingalls as a trading and social center for many years to come, even though it is quite near to larger towns.

#### Montezuma

Montezuma was laid out the latter part of June, 1886, by the Western Kansas Town & Land Company of which T. T. Taylor of Hutchinson was president. The townsite was located about seventeen miles south and five miles west of Cimarron in the then unorganized county of Gray.

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The Montezuma Chief, the newspaper sponsored by the town company, in 1887 hailed Montezuma as "The Queen City of the Prairies."<sup>38</sup> The promoters proposed Richland County with Montezuma as the county seat. The two-story hotels--the Hotel Montezuma and the Pioneer House--were operating there early in 1887. A new bank building 24 by 36 feet was about to be completed and was to be occupied by a private banking firm. Four firms who handled real estate and loans were located in Montezuma and advertised in the paper at this time. There were also two grocery stores, a blacksmith shop, a lumber yard, and the weekly newspaper. The post office was located on the second floor of a large 24 by 42 feet building , the first floor of which was occupied by a hardware store.

The town company selected the name of the famous Aztec Indian for their town and also gave the avenues Indian names. The town site was beautifully platted, with the four avenues running at right angles from the twelve central blocks, and with four boulevards on the limits.<sup>39</sup> The streets which ran north and south were named for the states. Everything was in readiness for a genuine boom and in the spring of 1887 the Western Kansas Town and Land

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38. Montezuma Chief, January 7, 1887.

39. Kansas Historical Collection, Vol. 10, p. 467.

Company of Montezuma sent excursion agents east to pilot immigration into south Gray and adjacent territory.<sup>40</sup>

In the vote on location of the temporary county seat of Gray County in April, 1887, Montezuma had the united support of the south part of the county. Cimarron won the election with a plurality of 150 votes over Montezuma.

In the "People's Convention" at Ingalls, held about the middle of September, 1887, Asa T. Soule, the Ingalls promoter, promised a railroad to Montezuma if in return that town would vote for Ingalls for county seat. Montezuma delivered the goods, and Soule built a railroad from Dodge City to Montezuma,<sup>41</sup> calling it the Dodge City, Montezuma & Trinidad Railroad. This road was to be leased and operated as a part of the Chicago, Rock Island and Pacific.

As a result of the completion of the railroad, business and residence lots as well as land prices rose. The Montezuma Chief advertised widely in 1887 that the railroad was to be extended the next year to Garden City as well as west and southwest. Montezuma was advertised as the coming health resort of the state. The mineral waters from the adjacent springs had curative qualities and health was

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40. The Daily Sentinel, Garden City, Kansas, March 16, 1887.

41. Kansas Historical Collection, Vol. 10, p. 464.



assured, said the paper.<sup>42</sup> Five thousand shade trees were reputed as growing along its avenues. But that year the population for the "Queen City of the Prairies" was only 109.

The dry years came and, there being no business, the Rock Island ceased operating the railroad to Montezuma. Two townships through which the road ran had voted bonds to the amount of \$70,000 to the road, and naturally did not like this abandonment. Soule was dead, and there was no one to fall back upon. The farmers raged in vain when the rails were taken up and sold to a Gould line in Texas. Then, to compensate themselves, they decided to take a hand. By night they carried off the ties, the stations and the bridges; not even a stick of lumber was left; nothing but the railroad grade remains to tell the story.<sup>43</sup> In 1895 the town site was vacated, and the town Montezuma disappeared from the Gray County map for a time.

In 1910 a county post office in Montezuma township, eighteen miles south of Cimarron, was listed by the government census. It had tri-weekly mail and a population of 11.<sup>44</sup>

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42. Montezuma Chief, June 12, 1887.

43. Kansas Historical Collection, Vol. 10, p. 467.

44. Kansas, Frank W. Blackmar, Vol. 2, p. 300.

The A. T. & S. F. Railroad built its Colmar cut-off in 1912 and in May of that year laid out a new town two or three miles north of the old town site, naming it Montezuma for its predecessor. A station, a hotel, two general stores, two elevators and two lumber yards were planned for immediate construction.<sup>45</sup>

Montezuma grew rapidly and soon had a large trade territory, ranking second only to Cimarron in the county. Several brick buildings including the Montezuma State Bank in 1913, were built during this period in the new town of Montezuma. The Farmers Elevator was built in 1914.

Upwards of one hundred families of Mennonites, who were excellent wheat farmers, settled near the town and aided greatly in the progress of Montezuma and its trade territory. In 1916 the Montezuma Press was published, partly in German for the Mennonites, but this practice was of course discontinued during the War with Germany.

Land values rose rapidly during and after the War. Land sold at \$35 to \$45 per acre<sup>46</sup> by 1920 and as high as \$60 by 1929 in Montezuma Township. Wheat had brought prosperity to Montezuma.

At the present time there are six grain elevators in

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45. Kansas Historical Collection, Vol. 10, p. 467.

46. Montezuma Press, June 10, 1920, Vol. 6.

Montezuma with a combined capacity of more than 500,000 bushels. Seven oil companies deliver fuel by truck to the farmers.

In May, 1937, the town claimed a population of 402.<sup>47</sup> The assessed valuation of real and personal property in 1936 amounted to \$271,288 of which \$46,233 was public service property.

The city purchases electricity from the Kansas Power and Light Company. In 1937 there were 130 light customers. The water and sewer system was completed in 1930 and every house in town is required to be on the sewer system. There were 71 water users in 1937.

The schools are the feature of the town. The high school building was constructed in 1925 at a cost of \$70,000 and six teachers are now employed. The large gym and auditorium will seat 450 people. The fine grade school building was erected in 1929. It is of old Spanish architecture and has, in addition to ten class rooms, a large basement equipped for a play room. The building is connected with natural gas, water, electricity, and sewer. Seventy-five sections comprise the consolidated district and there were nine busses operating in 1937.<sup>48</sup>

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47. City Clerk, Montezuma, Kansas, Interview.

48. Member of School Board, Montezuma, Kansas, Interview.



The Methodist Church built a new building in 1930 at a cost of \$50,000.<sup>49</sup> The structure is of red brick and is one of the most beautiful churches in southwestern Kansas.

One of the finest Boy Scout cabins in Kansas was built by WPA and the local American Legion in 1936. The building is 24 by 44 feet and cost about \$6,000.<sup>50</sup>

Montezuma has social and trade advantages not equalled by many towns many times larger.

### Ensign

The town of Ensign was promoted in the boom days of 1886 by a town company of which G. L. Ensign was president.<sup>51</sup>

The Ensign Razzoop was the name of the newspaper which was owned by the town company and used for its advertising campaign regarding the town which was located about ten miles from the south county line and two miles from the east line. In 1887 the editor of the Razzoop stated that there was almost a certainty of oil according to the state geologist<sup>52</sup> and artesian water was assured at 400 feet.

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49. Erskine, Mrs. C. B., Cimarron, Kansas, Interview.

50. Scoutmaster, Montezuma Troop, Interview.

51. Files of the American Guide (unpublished).

52. Ensign Razzoop, Vol. 1, No. 13, Nove. 16, 1887.

The railroad which Soule, the Ingalls promoter, built to Montezuma in 1887 missed Ensign by about a mile and the town was moved to the railroad in 1888.<sup>53</sup> When the railroad was taken up in 1895 the town failed to survive and completely disappeared for a number of years.

In 1910 there was a rural postoffice by the name of Ensign located fourteen miles southeast of Cimarron and it had a population of forty-one.<sup>54</sup> Ensign was again moved when the A. T. & S. F. Railroad was built through the south part of the county in 1912.

At the present time the town enjoys a fairly large trade territory, about two-thirds of which is in Gray County and the remainder of which is in Ford County. Four large grain elevators are operated there to meet the needs of the wheat industry. In addition there are two bulk oil stations, three filling stations, a large general store, two hardware stores, a restaurant, a local telephone company, and a barber shop. The bank was closed a few years ago and consolidated with the Montezuma State Bank.<sup>55</sup>

The city secures electricity from the Kansas Power

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53. Blackmar, Frank, Kansas, Vol. 1.

54. American Guide (unpublished).

55. Manager Farmers Elevator, Ensign, Kansas, Interview.

and Light Company and natural gas from the Argus Pipe Line Company.

The grade school, which is not in a consolidated district, is a wooden structure and was built in 1914. It employs only two teachers. The high school was built in 1917 and proved very costly due to high construction costs and some bond forgeries. Five teachers are employed by the high school.

The population of Ensign was 221 in 1936<sup>56</sup> and the valuation of real and personal property was \$159,935, of which \$43,864 was public service property. The town is located on Kansas Highway 45 and on the branch line of the Atchison, Topeka, and Santa Fe Railroad and will undoubtedly continue to be a wheat shipping point of some importance.

### Copeland

Copeland is eighteen miles south and eighteen miles west of Cimarron, being only a little more than a mile from the Haskell County line and four and one-half miles from the Meade County line. The town was named after

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56. State Board of Agriculture, 30th Biennial Report.



E. L. Copeland, Treasurer of the A. T. & S. F. Railroad,<sup>57</sup> having had its beginning in June, 1912 soon after the completion of the branch line of that road. In sentiment Copeland is largely a part of Haskell County and more than one-half of its trade comes from the farmers living in that county.<sup>58</sup>

Copeland boomed in 1913 and continued to develop until the recent drought. It was a very progressive little town. Sidewalks were built in 1914 soon after the beginning of the town. The streets were curbed and gravelled in 1929, and during the boom days of the late 'twenties about thirty-six business places operated there. In 1936 the population listed by the State Board of Agriculture was only 273, the population having declined rapidly during the drought from a high of about 460 in 1931. More than one-third of the population has left since the drought.

Copeland is one of the most picturesque towns on the western Kansas plains, made so by the scores of windmills which, until recently, pumped the water supply for almost every home, and by the dozen concrete storage tanks of

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57. Files of the American Guide (unpublished).

58. Emmons, Cashier Copeland State Bank, Interview.

the grain elevator which rise to a height of 110 feet.

In the spring of 1935 a water system was constructed with WPA aid. There were seventy-five water users in 1937. The Kansas Power and Light Company furnishes the electricity and the Argus Pipe Line Company the natural gas. In 1937 the companies had 125 and 90 customers respectively.<sup>59</sup>

The Copeland Cooperative Equity Exchange, which was organized in 1916, has in recent years, when additional storage was built, become known throughout the country as being the largest farmer-owned country elevator in the world. A 16,000 bushel capacity elevator was built in 1916, and in 1928 and 1929 the storage was increased to 517,000 bushels at a total cost of \$125,000.<sup>60</sup> There were 150 stockholders in the spring of 1937, who were located principally in Haskell, Gray, and Meade Counties. An embezzlement of \$500,000 by the manager in 1930 and the recent consecutive crop failures have forced the farmers to turn the elevator over to the companies holding the mortgage.

Three other elevators, with additional storage capacity of 130,000 bushels are located at Copeland.<sup>61</sup>

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59. Emmons, G. T., Cashier Copeland State Bank, Interview.

60. Hatfield, N., Mgr. Copeland Equity Exchange, Interview.

61. Ibid.

The country schools near Copeland are not consolidated as at Montezuma, Ingalls, and Cimarron. Nevertheless, in 1937 the Copeland Schools employed nine teachers. The schools are now housed in separate buildings, a fine grade school building having been built in 1929 at a cost of \$32,000. The high school had been completed in 1919 at a cost of \$19,000 and for a decade accommodated both grade and high school.<sup>62</sup>

Two churches are located at Copeland. The Methodist Church, which is a wooden structure, was built in 1915 and the Christian Church completed a basement which has been used for church services since 1931.<sup>63</sup>

Copeland has, perhaps, been hurt more than any other town in the county by the drought years in so far as full recovery of its trade is concerned should good times return. The Copeland State Bank, which had done business there since its organization in 1914, was consolidated with the bank at Sublette, in Haskell County in 1937.

However, in 1936, the assessed valuation of real and personal property for the city amounted to the sizeable total of \$236,082 of which \$44,862 was public service property. The town is located on the all-weather Kansas 45

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62. Emmons, G. T., Cashier Copeland State Bank, Interview.

63. Unpublished Files of the American Guide.



Highway, and on the branch line of the A. T. & S. F. Railroad over which it is served by two passenger trains daily.

The location of the large grain elevator at Copeland should insure some trade in the future from the wheat farmers over a large territory.

#### Other Trading and Shipping Points

Throughout the history of Gray County a number of small towns, post offices, or railroad stations have existed for a longer or shorter period of years, and in some instances have had a considerable trading territory for a time.

The village of Cave was located in the extreme southeast corner of Gray County, being twelve miles from the nearest railroad station at Fowler in Meade County. A general store was located there and it was the trading center for a large area in Gray, Ford, and Meade Counties. In 1910 a money order post office was maintained there. The population was forty.<sup>64</sup> With the development of the automobile it no longer served a need and has since dis-

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64. Blackmar, Frank W., Kansas, Vol. 1, p. 300

appeared from the map.

Charleston is located on the Atchison, Topeka, and Santa Fe Railroad about seven miles west of Ingalls, and receives some trade from that section of the county. It was founded by the railroad in 1888<sup>65</sup> for a railroad shipping station. The townsite had been homesteaded by a Mr. Wilkinson. Several promotional schemes were attempted in behalf of the town. A Topeka company tried to put over an irrigation project advertised as the "Elmhurst Tracts" in which ten and twenty acre plots were offered for sale at high prices. The scheme failed, however, since very little interest was shown in it by investors.

Two grain elevators, one general store, the post office, a filling station, and a lumber yard are located at Charleston. It is in the consolidated school district with Ingalls.

Haggard is a shipping point on the branch line of the Atchison, Topeka, and Santa Fe Railroad and is located five miles west of Ensign on Kansas Highway 45. A farmers' elevator was built there in 1913. In 1937 there were three grain elevators with a combined capacity of 70,000 bushels. There was also a general store, a post office, and a fill-

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65. American Guide.

ing station.<sup>66</sup>

A town by the name of Lockport was located a short distance from the site of the present town of Copeland. From 1886 to 1890 it was a very lively little town with sixty to one hundred people. There were six or eight residences and several business houses. The town plot was half in Gray and half in Haskell, the town well being on the county line. At one time there were two or three general stores and two hotels.<sup>67</sup> It was the regular stopping place for freighters between Fargo and Springfield in Seward County and Cimarron in Gray County.<sup>68</sup>

Chester and Colusa were other small hamlets which served the territory, for a time, in the vicinity of Copeland a few years prior to the founding of Copeland.<sup>69</sup>

A number of other rural postoffices and stores have existed from time to time but were of relatively slight importance. Due to developments in transportation and communication, the possibilities of any new towns being established in the future are remote.

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66. American Guide.

67. Ersline, Mrs. C. B., Cimarron, Kansas, Interview.

68. Ibid.

69. Blackmar, Frank W., Kansas, Vol. 1, p. 323 and 382.



## Newspapers

The local newspapers have had an important place in the social development of Gray County.

The first newspaper in the territory which is now Gray County was the New West which was established at Cimarron in March, 1879. It was according to the paper, "Devoted to the Development of the Great American Desert."

One or two weekly newspapers were published at Cimarron before the boom days of 1886, at which time newspapers were established in every town and hamlet. Cimarron had three or four, Ingalls two or three, and Ensign and Montezuma their own papers. These papers were all loud in the praises of their respective towns. Their enthusiasm knew no bounds and each proclaimed a great future for the town in which it was located.

When the drought years came the newspapers continued to boost the country until they were finally forced to close. By 1894 only the Jacksonian at Cimarron remained to advertise Gray County in its slow climb upwards. Eagerly it seized any sign of prosperity and broadcast the news far and near.

The Montezuma Chief was established in the present Montezuma on February 20, 1914 and has had a good circul-

ation through the south part of the county.<sup>70</sup> The Copeland Chronicle was also established about this time and thrived well along with the town of Copeland until the recent drought years. Early in 1937 the Jacksonian bought and consolidated with the Copeland Chronicle and moved it to Cimarron.

### Churches

The churches in Gray County have always made up an important part of the social heritage. This was especially true at the time of the settlement of the county when almost every school house was utilized by the neighborhood for Union Sunday School and church services.

Several churches were built in the early days. At Ingalls, A. T. Soule had built the Union Church in 1885. At Cimarron, 1887, the Presbyterians had an elegant church edifice in which regular preaching and Sunday School were held by the Presbyterians and Methodists combined.<sup>71</sup>

The Methodists had a large membership, a regular pastor, and expected to build a commodious church in the fall.

This church was built at a cost of \$3,000.<sup>72</sup>

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70. The Jacksonian, Nov. 14, 1931. (Mrs. C. B. Erskine).

71. Ibid., Jan. 1, 1887.

72. State Board of Agriculture, Sixth Biennial Report.

Church organizations in Gray County in 1888 were the Baptists with 121 members; Congregational with 5 members; Cumberland Presbyterian, 19 members; Methodist Episcopal with three church organizations and 212 members; Presbyterians with 25 members; and United Brethren with four organizations and 107 members.<sup>73</sup>

In 1926 the memberships in religious bodies according to the Bureau of Census were 1465, which was distributed as follows: Methodists, 625; Mennonites, 384; Roman Catholic, 135; Disciples of Christ, 53; Protestant Episcopal, 52; Northern Baptists, 39; Lutherans, 17; and all others 160.<sup>74</sup>

Probably the strongest religious group from point of the social influence on its membership are the Mennonites who came to Gray County in 1912 and years following. In the census enumeration listed above, this sect was second only to the Methodists in numbers and far exceeded the Roman Catholics who were third. The Mennonites comprise from 15 to 20 per cent of the entire population of the county.

Four or more denominations of Mennonites settled in the county and had a very significant part in its economic

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73. State Board of Agriculture, Seventh Biennial Report.

74. U. S. Dept. of Commerce, Bureau of the Census, Religious Bodies: 1926, Vol. 1.



and social development. They are a hardy and frugal people whose ancestors have been successful farmers for generations. Because their religious rules forbade taking up arms against their fellowmen they were persecuted and driven from one European country to another. It is said of them that they migrated to Germany from Holland and then to Russia and finally to the Americas. The Atchison, Topeka, and Santa Fe Railroad colonized thousands of them in central Kansas to develop the railroad's land grant, and it was a Mennonite, Bernhard Warkentin, who about the year of 1885, introduced into Kansas the celebrated hard, or Turkey wheat, from southern Russia.<sup>75</sup>

When the Atchison, Topeka, and Santa Fe Railroad built their southern branch through Gray County in 1912 they looked with favor on Mennonite colonization in this area. In March, 1912 four families of Mennonites came to Gray County and settled near the town of Montezuma. This group belonged to the Church of God in Christ, and to outsiders were at once conspicuous because of their general appearance and attire. The men especially are quite picturesque with their long beards. This group is quite slow in taking up the habits and customs of their American

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75. Bradley, The Story of the Santa Fe, p. 134.

neighbors. In the Montezuma neighborhood some eighty or more families of these Mennonites settled in a colony and lived in an area of about eleven miles square.<sup>76</sup> They continued to speak their native language, a low German dialect, and were very much opposed to change. They built quite a large church two miles north and two west of Montezuma at a cost of \$1,800, and this has served as the center of the colony's social-religious functions which are very numerous.

The Mennonite people have always practiced strict frugality and economy. In Gray County they first built small houses which were later used for chicken houses or granaries. During the good years many fine large homes were built and thousands of dollars worth of machinery was purchased by these people. About twenty families of this denomination moved from the county since the drought.

Another denomination of Mennonites settled near Montezuma in 1915 and 1916. This group totaled about twenty families<sup>77</sup> and although they had their own church building and services in the German language they were more progressive in their cultural habits and customs than the bearded Mennonites. This group was more inclined to

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76. Schmidt, D.J.H., Mennonite settlement, Montezuma, Kansas, Interview.

77. Assistant Cashier, Montezuma State Bank, Interview.

fraternize with their American neighbors and participate in community enterprises. Because of their strict moral training this group has been outstanding for its high character and consequently has contributed much towards the intensive development of Montezuma Township.

Other Mennonites settled north of Ingalls in Logan and Foote Townships from about 1915 and 1916 on. This was a conglomerate group representing possibly four or five denominations or religious beliefs. Union church services were held in German for all Mennonites for a time in one of the district school houses. For several years there were two church organizations but finally most of them joined the Mennonite Brethren Church organization whose church building is now located five miles north of Ingalls.

This group of Mennonites is highly progressive. The majority of their church services are held in English and their programs and other church functions are attended by people from miles in every direction. This group is very public spirited and has furnished more than its share of leadership and talent for almost every worthy project.

Two church buildings completed in recent years in Gray County are especially worthy of note. The Roman Catholic Church, St. Stanislaus, at Ingalls, was completed at a cost of \$22,000 and is the only church sponsored by its



denomination in the county. The beautiful modern Methodist Church in Montezuma was built in 1930 at a cost of \$30,000 and is one of the most outstanding church buildings in all of southwestern Kansas.

### Clubs and Organizations

In 1937 practically every community had from one to three study or recreational clubs. There were thirteen Farm Bureau Clubs and eight 4-H Clubs. The Priscilla Study Club of Cimarron was organized in 1908. The Twentieth Century Club of Cimarron was organized in October, 1926 and sponsors the Junior-Read-a-Book Club, which in turn is sponsoring the City Library. The club organized the library in May, 1933 and has invested \$100 a year besides free time donated by club members. The Happy Hour Junior Club is sponsored by Priscilla and features a recreation program.

The Montezuma Library was organized by the Montezuma Study Club in 1920. In 1932 it was voted to the Township and is financed by the township trustees but sponsored by the Study Club.

The Farm Bureau swept the county in 1929 when the first club was organized. The first Farm Agent was sent

to Gray County in 1918 and taught the farmers to grow two bushels of wheat where he had only grown one before.<sup>78</sup>

The first county fair was held at Cimarron in 1910. The fair was sponsored by the Cimarron Commercial Club and the Gray County Fair Association which was incorporated in 1915. Exhibits in science and art hold an important place along with farm exhibits and livestock.

#### Public Utilities

The Atchison, Topeka, and Santa Fe Railroad is the largest property owner and tax payer in Gray County.<sup>79</sup> The main line of this transcontinental road crosses Gray County from the eastern border northwesterly along the Arkansas River, a distance of 25.63 miles. The track was completed in 1872, the railroad company having received in the county a strip of land twenty miles wide in alternate sections.

The Atchison, Topeka, and Santa Fe was largely instrumental in the settlement of the county and has continued to serve the territory well. The road bed has not only been maintained in good condition but has been built up to

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78. Erskine, Mrs. C.B., Paper read before Gray County Federated Women's Clubs.

79. County Treasurer, Gray County, Interview.

the standards of modern engineering science.

The Dodge City, Montezuma, and Trinidad Railroad which had been built from Dodge City to Montezuma in 1887 by A. T. Soule and had been operated by the Rock Island Railroad Company for a number of years following, was discontinued in 1895. The same year the rails were taken up and sold to the Gould lines in Texas since the prospects for any business from that area in the future appeared extremely remote at that time.

In 1912 the Atchison, Topeka, and Santa Fe Railroad built a railroad through the south part of the county. As a result, the value of the land increased many times and gave a direct outlet for the south part of the county. Trackage added on the southern branch of the Santa Fe was 25.54 miles and brought the total railroad mileage for the county up to 51.17. The south part of the county owes much to the A. T. & S. F. for its economic and social development. The school districts and other local governments through whose territory the railroad passes receive from 10 to 30 per cent of their revenues from the railroad.<sup>80</sup>

The second heaviest tax payer in the county is the

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80. County Treasurer, Gray County, Kansas, Interview.  
( J. C. Leatherwood ).



Argus Pipe Line Company which constructed its lines in 1929 from the Hugoton Gas Field to serve towns, villages, and some rural customers in Haskell, Finney, Gray, and Ford Counties. Its eastern terminal is Dodge City and it serves Copeland, Montezuma, Ensign, and Cimarron in Gray County.

Telegraph service lines were completed to the territory soon after completion of the railroads. The Western Union Telegraph Company maintains agencies at all railroad stations in the county.

The first telephone line in Gray County was constructed by the farmers north of Cimarron in 1904. This line extended north from Cimarron for many miles, had forty-eight miles of wire, the farthest away customer being thirty-five miles from the Cimarron office. There were about thirty customers in north Gray and in Garfield Township of Finney County.<sup>81</sup> By 1914 local telephone exchanges had been established in each of the other towns.

The line north of Cimarron was the forerunner of the Western Telephone Company which today owns a number of telephone exchanges in southwestern Kansas and operates all of the lines in the county except the Ensign exchange. En-

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81. Anderson, Arthur, Manager Western Telephone Company, Cimarron, Kansas, Interview.

sign is almost without telephone service at the present time, largely because of rate difficulties.

The Western Kansas Telephone Company reports a drop of about 25 per cent patronage since the depression and drought. Its heyday, however, was fifteen or more years ago, at which time the roads, automobiles, and radio had not been so highly developed and the telephone was considered almost an essential by every farm as well as city home.

The assessed valuation of public service property in Gray County in 1936 aggregated \$1,865,700 which was 17 per cent of the county's total assessment.<sup>82</sup>

### Schools

The first elementary school in Gray County was opened at Cimarron in 1874,<sup>83</sup> the same year that the Santa Fe station and section house were built.

Education for the children was considered an absolute essential by the early pioneers. In the country where no school houses were to be found, if there was a person capable and qualified to teach school, school was conducted in

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82. Kansas State Board of Agriculture, Thirtieth Biennial Report, p. 328.

83. American Guide (unpublished).

one room of the home--usually a sod house. The neighbor women did the house work while the mother taught the children the rudiments of an education.<sup>84</sup>

Some of the early school houses built in Gray County included the Montezuma building built in 1887 at a cost of \$7,765. Ingalls built a schoolhouse in 1888 at a cost of \$1,000 and in 1892 another building was added. The two Ingalls buildings together were valued at \$1,800.<sup>85</sup>

The majority of the elementary schools in Gray County were founded shortly before the organization of the county in 1887. Nineteen more districts were organized in 1888, bringing the total for the county up to forty-seven, with 819 enrolled.<sup>86</sup> The total estimated value of all school properties and equipment was placed at only \$26,426 in 1888. Many of the early school houses were built of sod. The daily attendance averaged only 336 at that date for the limited term which averaged only 16.5 weeks for the county.

During the score of years following 1888 very little progress was made in the general school program. For the first decade of this period the schools were maintained at

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84. Erskine, Mrs. C. B., Cimarron, Kansas, Interview.

85. American Guide (unpublished).

86. State Superintendent of Public Instruction, Biennial Report, 1888.



a low level. In 1898 only \$7,307.48 was received to operate the thirty-eight schools in the county. The average length of the school year in 1898 was only 13.38 weeks.<sup>87</sup>

The high school at Cimarron was organized in 1908 and all of the grade school graduates of the county were eligible to attend without a tuition charge. A superintendent and one teacher were employed at Cimarron.<sup>88</sup> High schools were also organized at Ingalls in 1915, at Montezuma in 1916, at Ensign in 1918, and at Copeland in 1919.<sup>89</sup> These were all in rural high school districts.

The great progress in the Gray County School System which has characterized the last score of years got into full swing by 1918. In that year the \$45,000 Ingalls Rural High School building was completed, which was at that time one of the most modern schools in the entire southwestern part of the state.

A new building was completed at Cimarron in 1919 at a cost of \$30,000; a building at Montezuma in 1919 cost \$11,000; and a building at Copeland in 1919 cost \$19,000. The enrollment for the first few years was very low since there were only a few students advanced above the freshman

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87. State Superintendent of Public Instruction, Biennial Report, 1888.

88. Erskine, Mrs. C. B., Cimarron, Kansas, Interview.

89. Cleary, Prof. M. G., Ingalls, Kansas, Interview.

year in high school in these communities at the date of organization of the high schools. By 1921 the total enrollment for the high school in the county was 183. Only 160 had been graduated.<sup>90</sup>

In 1920 seven districts comprising 134 square miles voted to consolidate at Cimarron; six and a half districts, with 127 square miles consolidated at Ingalls; and three districts totaling 75 square miles consolidated at Montezuma. Motor busses were purchased and approximately one-half of the rural children of the county were transported to the town school each day where they could take advantage of more favorable facilities and the nine-month school term.

Mainly due to the building program in 1918 and 1919 the value of school property in the county in 1921 reached \$241,737 and almost a like amount was expended for school operation and maintenance that year.<sup>91</sup>

The enrollment in the Gray County schools in 1936 was 1,309 of which number only 276 were enrolled in the twenty-two rural schools, all of which except the new two-room building near Haggard were one-teacher schools.

Outside of the increase in the high school enrollment

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90. State Superintendent of Public Instruction, Biennial Report, 1922.

91. Ibid.

which has increased from 183 in 1921 to 410 in 1936, the most noteworthy development in the school situation in Gray County during the last few years has been the construction of school buildings at Copeland, Montezuma, and Cimarron.

A fine high school building, in 1925, and a modern grade school building in 1929, were built at Montezuma. A new grade school building was completed at Copeland in 1929 at a cost of \$32,000. The outstanding school building in the county is the new Cimarron grade and high school which was completed in 1933 at a total cost of \$130,000.<sup>92</sup> Some \$40,000 was furnished by PWA and a bonded indebtedness to the school district in the amount of \$75,000 also resulted.

School men, as well as patrons, feel that more modern facilities are needed at Ingalls, Copeland, and Ensign, and in a number of the rural districts. There is also a growing feeling that facilities should be provided for more vocational training. In the event that larger school buildings and more money should become available in the future, it is probable that the above mentioned requirements will be met.

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92. Hinkhouse, K., Superintendent of Schools, Cimarron, Kansas, Interview.



## Banks and Credit

The deposits in the banks and the credit facilities available are important items in the social well-being of a community.

Four banks were opened for business in 1886 although Gray County was not yet organized. These institutions, which were all privately owned, were the Cimarron Bank, with \$12,600 capital; the First National Bank, Cimarron, with capital of \$50,000; the Bank of Ingalls, \$10,000 capital; and the Bank of Montezuma, capitalized at \$10,000.<sup>93</sup> Six years later, in 1892, only the Cimarron Bank and the Bank of Ingalls remained in operation. The former had only \$21,000 on deposit and the latter had but \$13,000. The Bank of Ingalls went into voluntary liquidation on May 6, 1893.

The first state bank in Gray County, the Cimarron State Bank, was chartered in 1900 and on September 1, of that year had loans of \$15,000 and deposits of \$20,000 of which \$9,000 were county funds. This bank was short-lived and closed its doors on September 18, 1902, and for a time thereafter no bank operated in Gray County. The

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93. State Bank Commissioner, Biennial Reports.

final loss to depositors of the Cimarron State Bank was negligible.

The Citizens State Bank received its charter under date of September 26, 1902 and opened for business at Cimarron. The Gray County State Bank started at Cimarron two years later with a paid-in capital stock of \$10,000. By September, 1906 the two banks had combined deposits of \$140,000, a new high for Gray County. The total deposits of the two Cimarron banks reached \$180,000 in 1914<sup>94</sup> and from that time grew at a fast rate.

The Farmers State Bank, Ingalls, received its charter on April 26, 1910 and at the present time is one of three banks remaining open in the county. The September 12, 1934 statement showed loans and deposits of \$62,000 and \$81,000 respectively. In 1926 the deposits had been much greater, at \$181,000 and loans of \$138,000.

The Montezuma State Bank was chartered December 21, 1912. On September 12, 1914 its statement showed loans of \$20,000 and deposits of \$57,000. Its September 15, 1928 statement had \$139,000 loans and \$212,000 deposits with \$18,000 Capital and Surplus. The bank at present is one of three remaining in the county and with the closing of

banks at Ensign and Copeland, the Montezuma Bank fills a genuine need in the south part of the county.

The Peoples State Bank, Ensign, was organized in 1914. At the date of its consolidation with the Montezuma State Bank in 1934 it had deposits of \$79,000. Its financial structure was sound, but its earnings, like many other small banks during this period, had been curtailed and further operation was no longer profitable.

The Copeland State Bank was chartered February 3, 1915. This bank did a big business due to the extensive grain market at Copeland. During the good wheat years the bank was one of the largest in the county, having deposits of around \$250,000 from 1926 through 1930. The bank's business fell off during the recent drought and in 1937 it was consolidated with the bank at Sublette without loss to depositors.

On May 22, 1929, the First National Bank opened at Cimarron taking over the business of the Gray County State Bank.

The official annual statements in September, 1932 to the State Bank Commissioner showed total resources in Gray County banks of \$723,000 and capital of \$123,000. By 1934 the total resources had declined to \$475,000, a heavy contributing factor to the decline being the failure of the



Citizens State Bank in Cimarron in December, 1932 with an 80 per cent loss to depositors.

The majority of the loans made by the banks in Gray County have been loans with personal property for security.<sup>95</sup> In the early days considerable money was loaned on real estate but present banking law prohibits all except a small percentage of real estate loans.

### Long Term Credit

The New England Investment Company took mortgages on much of the land purchased and homesteaded by the first settlers. The company went bankrupt when the great exodus of the settlers took place because of the drought. The forced sale of much of the land failed to satisfy back taxes.<sup>96</sup>

From 1904 forward land prices made steady gains. People from central and eastern Kansas came west and purchased property, in the majority of cases paying cash. The few mortgages held on the land were owned by individuals, local companies, and investment houses.

The Federal Land Bank authorized agencies and began

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95. Cashiers, Cimarron, Montezuma, Ingalls, and Copeland banks, Interviews.

96. Egbert, J.H., Cimarron, Kansas, Interview.

lending on land in Gray County in 1917. Local agencies did not receive much competition, however, until 1933, when the law of that year lowered the interest rate.<sup>97</sup> A large number of loans were made in the county and at the present time the chief mortgage holder in the county is the Federal Land Bank. The life insurance companies are second in number of mortgages held.<sup>98</sup> Local agents no longer write loans since they cannot compete with the low government rates.

Twenty-six Gray County farmers and stockmen are stockholders in the Garden City Production Credit Association.<sup>99</sup> In Gray County most of the loans had been made with livestock for security. Loans totaled \$13,215.87 in that county and were made for from six months to one year in accordance with the Farm Credit Act of 1933. A Gray County man, Guy D. Josserand of Copeland, is president of the Garden City Production Credit Association.

Beginning late in 1933 and continuing to July, 1935, the Home Owners Loan Corporation made fifty-two loans in Gray County totaling \$60,000. These loans carried interest rates of about  $5\frac{1}{2}$  per cent, repayments are made by

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97. Cessna, B. D., Federal Land Bank Agent, Ingalls, Kansas, Interview.

98. Erskine, C. B., First National Bank, Cimarron, Kansas Interview.

99. Sec., Garden City Production Credit Assn., Mar, 1937, Interview.

the month on principal and interest, and loans approximate 60 per cent of the present value of the property.<sup>100</sup> Only two foreclosures have been made in the county. The loans were made to urban property owners and aided both the owners and the building and loan associations which held liens against the urban property.

### Hail Insurance

Because of the great hail hazard in western Kansas, some form of crop insurance is very desirable. For a number of years prior to 1929, hail insurance was very popular throughout this area. Often farmers with a \$5.00 per acre wheat crop in prospect would carry \$30.00 per acre insurance and gamble on a profit should a heavy hail come. Practically every farmer carried hail insurance and the insurance companies, in bidding for business, overpaid losses in the light hail years and then suffered heavy losses during bad years. In 1929 the companies petitioned the Commissioner of Insurance to raise the rate in the county from 10 to 12 per cent. This petition was disallowed and all of the old line stock companies

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100. Egbert, J. H., HOLC agent, Cimarron, Kansas, Interview.



blacklisted Gray County and no insurance was written there for a number of years by these companies.

The Wheat Growers Mutual Hail Insurance Company was organized at Cimarron in 1929, and by 1937 had 250 agents in 80 Kansas counties.<sup>101</sup> This company filled a definite need in the territory and as a result has enjoyed phenomenal growth. By checkerboarding risks over a wide area, the company has found that the 10 per cent rate is more than adequate to meet present needs and to lay aside reserves for future contingencies.

#### Roads.

An important asset of the people of Gray County is a fine road system. In 1936 there were 83.45 miles of improved state and federal highways in the county.<sup>102</sup> The outstanding highway is U. S. Highway 50 South, which is one of the popular transcontinental tourist routes in the country. This road follows, for much of the way, the route of the old Santa Fe Trail along the valley of the Arkansas. South 50 has always been kept up to the engineering standards prevailing for federal and state road systems.

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101. Walker, F. C., President Wheat Growers Mutual Hail Insurance Company, Interview.

102. Kansas State Board of Agriculture, Thirtieth Biennial Report, p. 328.

In 1937 the highway was paved from Dodge City through Cimarron completing about eight miles of pavement in Gray County. The remainder of the highway is surfaced with a conglomerate oil mat which assures a fine all-weather thoroughfare.

Kansas Highway 45 crosses the county following the right of way of the branch line of the Atchison, Topeka, and Santa Fe Railroad for a distance of about twenty-six miles. This is also an all-weather road surfaced with a treatment of high grade oil compound.

Kansas Highway 23 crosses the county from north to south about six miles from the east county line. This highway has not been developed to any extent until the last two or three years but is attaining more importance as a through highway from north to south. There are more than thirty-six miles of gravelled road in Gray County on this highway and the State Highway Department plans at present include a project to apply an oil surface within the next year.

In addition to the main highways mentioned above, the county maintains a fairly complete system of gravelled county roads. By 1937 some 135 miles of these improved gravelled roads had been constructed by the county and were systematically spaced so that each community has good farm

to market roads.<sup>103</sup> In addition the county engineering department maintains a considerable mileage of improved dirt roads. Since 1920 practically every mile of the various school bus and rural mail routes have been graded. The 1935 Gray County road fund totaled \$45,000 which indicates that the county road program has attained considerable importance.

The percentage of Gray County families which own automobiles, and as a result utilize the highways regularly, is very high. In 1936 the County Treasurer's office reported 1,206 car licenses and 420 farm trucks. According to the U. S. Census of 1930 there were 211 farmers<sup>104</sup> living near unimproved dirt roads. These roads, however, can be readily travelled on except during periods of unusually heavy precipitation.

Twenty years ago there were practically no roads maintained by the county. The generally level nature of the topography covered with the short buffalo grass permitted travel at a good rate of speed in almost any desired direction. At that date there were few fences or cultivated fields to hamper travel. It was not until the consolidated school busses, wheat trucks, and automobiles

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103. Barton, Clayt, County Engineer, Gray County, Interview.

104. U. S. Census, 1930.



made frequent trips that the need for an extensive county road system arose.

#### Farm Home Development

Electrical power, city water and sewer, natural gas, and other modern conveniences have in recent years become available to a majority of the urban homes in Gray County.

Rural homes have also attained a considerable degree of improvement in recent years. According to the 1930 U. S. Census, the 731 farmers' dwellings in the county were valued at \$1,016,430.<sup>105</sup> In addition the other buildings on the farms were valued at \$865,000. Thus the total value of farm buildings had increased by more than \$500,000 within a decade.

A far greater increase in farm capital was directed into channels for purchasing implements and machinery. By 1930 the total value of this type of equipment totaled \$2,049,708. In the single year of 1929, the Gray County farmers purchased almost one million dollars worth of automobiles, trucks, combines, and tractors.

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105. U. S. Census, 1930

In 1930 there were 922 automobiles, 558 motor trucks, 833 tractors, 545 combines, 27 electric motors, 109 stationary gas engines, and 413 telephones on farms in the county.<sup>106</sup> The major part of this equipment was purchased during the ten years, 1920 to 1930, and practically all of the rest in the decade prior to 1920.

Many of the farm homes in the county are in a bad state of repair at present, and additional buildings are needed for storing farm machinery when not in use. However, the most glaring lack of development is possibly in the field of household conveniences and appliances. For instance, in 1929 only 17 farms used electric power, only 197 had water piped to the house, 80 had bathroom piped, and only 71 homes were lighted by electricity.<sup>107</sup>

Present indications are that future development along these lines will be slow, mainly because of the relatively sparsely settled farm area which creates a condition which requires a large capital outlay with a promise for profitable operation being remote.

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106. U. S. Census, (1930).

107. Ibid.

## CHAPTER VII

### Conclusion

An attempt has been made in this thesis to present the material in a manner to show the economic development of Gray County in its several ramifications. The wide scope of the thesis, in the nature of the problem as well as in the period of years covered, is a factor which has been most difficult to surmount. A limit of time and financial resources may be blamed, to a certain extent, if valuable material has not been uncovered and brought within the scope of the thesis. Also the author realizes that the inclusion or rejection of material may not have been judicious in all cases, or that the treatment of the subject matter could have been approached from widely diverse angles with equally effective, or even better results.

The author does feel, however, that the facts regarding Gray County as presented in this thesis from an economic interpretation are a contribution to available data of the Great Plains area. To the knowledge of the author no similar study has ever been completed for an area so



limited as a single county. Consequently this study assumes a form quite original, in many aspects, from any surveys previously made in this region.

This study reveals, in many instances, economic and social trends, development, and practices which are clear and unmistakable. Conclusions formulated from the trends apparent from analysis of material presented in the four main parts of the thesis follow under their respective headings.

### Natural Characteristics

The generally level character of the topography and the fertility of the soils assures Gray County a vast acreage of arable lands. Probably less than 10 per cent of the county area, located in the sandhills south of the Arkansas River, is unfit for cultivation, but even this land has provided fair pasture for livestock. Approximately 80 per cent of the land in the county is a fine silt loam, many feet in thickness, which is of the best soil found in the state for agricultural purposes. In the Arkansas Valley are upwards of 30 or 40 square miles of rich bottom lands.

Western Kansas is several hundreds of miles from any large body of water and consequently has a typical con-

tinental climate where moisture is the chief limiting factor of crop growth. The high elevation of Gray County also makes it especially subject to high winds, hot winds, soil blowing, hail storms, and numerous other factors which have a bearing on crop production. The growing seasons, although varying considerably in length, are ample for crops which thrive here except that early fall frosts often damage the grain sorghums.

Available weather records covering more than sixty years demonstrate that there has been a great fluctuation in rainfall from year to year. Years with almost humid climate are followed by almost arid ones. The ranges in annual precipitation at Cimarron have been from 10 to 34 inches with the average for the last 31 years being almost exactly 20 inches. The rainfall deficiency for the last six years has been by far the most extended and severe period on record. Inopportune distribution of rainfall, hot winds, wind erosion, and insects are often more responsible than deficient annual rainfall for the uncertain crop returns for this area.

In the past attempts at irrigation from the Arkansas River have been made. These projects proved unsuccessful mainly because most of the water was used for irrigation purposes farther up the valley. In recent years a very

limited acreage has been irrigated from the river. Vast underground reservoirs of water from the underflow of the Arkansas River as well as other strata of sheet water at varying depths underlie practically every acre of Gray County. In the Arkansas Valley the underflow is found at only a few feet and several pumping plants have been installed and approximately 2,000 acres of land irrigated. On the upland plains windmill pumps are utilized to supply water, from an average depth of 100 feet, for human use, for the livestock, and for the family garden.

During dry years, when dry land farming becomes extremely unprofitable, there is always talk of additional pump irrigation. The shallow depths at which water is available in the Arkansas Valley, and its more than 25,000 acres of rich bottom lands, would seem to create an ideal situation for pump irrigation. The absence of any large towns for a market prohibits the profitable growing of truck crops. Sugar beets, alfalfa, corn, and sorghums are successfully grown under irrigation in the Garden City district of Finney County. To date, however, the necessary capital has not been forthcoming for similar development in Gray County.

Greater productivity from Gray County's fertile soils will probably come from improved methods of soil culture



rather than from extensive utilization of the underground water resources.

### Settlement Of County

The overland mail, which began in 1849 over the Santa Fe Trail, brought the first temporary residents to present Gray County territory. After the completion of the Atchison, Topeka, and Santa Fe Railroad in 1872 quite a number of men came west to hunt buffalo for their hides.

It was not until 1878 that the first homesteaders settled in Gray County. By 1884 only a very small portion of the county had been settled and the people were interested principally in raising livestock.

During the period from 1883 to 1886 western Kansas had abundant rainfall. The railroad made a drive to sell its land grant and the farmers from the east settled on the short grass country almost to the foothills of the Rockies. The cattlemen had utilized this vast range until then since 1872 and they did not like for the farmers to take over the prairies. The Great Blizzard of 1886, which is generally regarded as the worst in the history of this area, removed the cattlemen from competition with the farmer.

While all of western Kansas was receiving favorable rains, Gray County was being further blessed by the activities of a multi-millionaire promoter from New York, whose efforts added greatly to the circulating medium of the county. The benefactor's death in 1890 and the dry years which had already set in when Gray County was organized in 1887 soon caused a deflation of the promising early boom. Only about a thousand people, who lived in very stringent circumstances remained in the county by 1898. Cattlemen ventured back into the county again and ran their herds over the deserted farms that had gone back to sod.

Beginning in 1899 the trend of population has been generally upward. The resettlement of the county was slow until 1905 at which time the population totaled only 1,746. 1906 saw the beginning of the new land boom and by 1909 the population aggregated 3,033.

Some of the reasons for a return of confidence in agriculture were the developments in summer fallowing. It was found that some crops were more drought resistant than others and the underflow of the Arkansas River was discovered and used on a limited scale for irrigation.

During the period of 1914-1917 the war prosperity was coming on rapidly. More than 1,700 people moved to Gray

County. They were all beginning to see the potential riches in wheat.

From 1920 to 1930 more than 1,400 were added to the total population. Bumper crops and the fact that our export markets continued good after the war brought returns to the western Kansas farmer which were almost fabulous. The development of the tractor revolutionized farming in western Kansas--making large scale farming possible, improving the system of soil culture, and bringing about the era of village farmers.

The drought of 1932-1936 has caused no extensive exodus of population. Obvious reasons are the aid from the federal government, the nation-wide depression closing opportunities elsewhere, and the fever of speculation which has imbued the farmers since the days of the big profits in the late 'twenties.

The future growth or decline of population depends, of course, on how the agricultural industry fares in the county. Should favorable yields and prices be forthcoming in the near future it is probable that a slight increase in population can be expected. Should the present uncertain condition continue within the country and towns of Gray County and conditions elsewhere over the nation generally improve it is possible that some extensive ad-



justments in land ownership and population would occur.

## Industries

Agriculture is the only industry which has played an important role in the economic development of Gray County.

The large-scale range cattle industry which came in to being at the time of the completion of the Atchison, Topeka, and Santa Fe Railroad in 1872 was short-lived, coming to an abrupt ending with the severe blizzard in 1886.

The early settlement of Gray County by farmers in 1884 to 1886 came as the result of artificial stimulation by the railroad company in offering its land grants at low prices and by giving low freight and passenger rates to prospective homeseekers. Also the United States Government offered the public domain to the land-hungry pioneers and adventurers under the provisions of the Homestead and Timber Claim Acts.

When the drought of 1887, and the years of insufficient moisture immediately following, came, the homeseeker with adequate capital and without practical agricultural experience on the semi-arid plains faced starvation and most of them returned to the East. By 1898 Gray County was practically depopulated, and most of the few who remained

did so mainly because they were too poor to leave and had no place to go.

From 1898 to until after the World War the agricultural development of the county was slow but steadily upward. And rightly so, for there was neither economic justification nor adequate knowledge to bring the semi-arid plain up to its full agricultural possibilities.

During this period many of the early settlers gained practical experience and adequate capital. Their interests centered chiefly in stock raising and crop production was aimed to supplement livestock production rather than to compete with it. This practical method of farming brought economic prosperity to many of the early settlers who had 'stuck it out' through the adversities of the early years. The new settlers who came in increasing numbers year after year were generally slow in adopting the practical methods which had been worked out through a painful process by the pioneers over a long period consisting of bad and good years alike.

As the tractor and combine were developed and found especially adaptable to the level acres of western Kansas, bumper wheat crops were produced on low-priced land. With only about two months a year of farming operations being required, the 'suit case' farmer appeared on the scene,

exploited the soil, drove land prices skyward, and upset the rational system of farming. Virtually a one-crop system featuring wheat growing came into being.

The folly of the one-crop system and over-development of agriculture did not become generally apparent until the severe drought came in 1932 and continued unabated for a number of years. Land prices, mortgages, and local taxes in general were found to be too high in proportion to the average revenue-producing capacity of the region. Only the Federal crop control and soil conservation programs, with the accompanying benefit checks, saved the Gray County farmers from complete disaster.

The present situation is of great concern to everyone involved. The native buffalo grass is gone, thousands of acres which have been put under cultivation are subject to wind erosion, and the farmers as a whole are helpless and cannot free themselves from the existing conditions. Any change in agricultural policy, either back to previous conditions or to a more satisfactory land usage in the future, will require, besides a large amount of capital, the very best in planning and helpful guidance that this nation can produce.

The most immediate possibility of temporary relief is a good wheat crop at fair prices and with this hope before



them the Gray County farmers planted the largest wheat crop in history in the fall of 1936, which again failed to produce a crop.

In spite of recent crop failures and low prices, indications are that the wheat industry will continue to be the dominating industry in this county. Under normal conditions large quantities of fine wheat can be produced at a low cost and the market demand for this type of wheat can usually be depended on. The drought period has made it imperative that the farmer learn better methods of soil culture. Methods of cultivation have been developed by some of the resourceful farmers which have achieved successful results even during the drought period. Some of these methods will to some extent be adopted by the farmers in general. Harmful cultivation practices inducing soil erosion such as tilling dry soil with one-way plows and discs will be in less favor in the future thus tending to prevent wind erosion and a recurrence of the dust storms.

Under the stimulus of the government soil conservation program and the lessons learned concerning a one-crop system when failures and low prices occur, a considerable increase in diversified agriculture with feed crops and livestock being featured will undoubtedly re-

have become a cause of apprehension which in many instances have proven insurmountable. Further scaling down of interest rates would be a material aid during the present hard times.

Development of important industries other than agriculture in Gray County is rather remote at present. A possibility for industrial development lies in the discovery of oil or natural gas. No deep tests for these resources have been drilled as yet in Gray County. It lies midway between the oil and gas field of Clark County and the oil field of southern Scott County. Considerable acreage of Gray County land is under lease by oil companies and in 1935 some \$20,000 was paid to land owners in lease money.

Mainly because of the lack of fuel and power, and large nearby markets, no manufacturing industries of any consequence are now found within the county. The local markets in Gray County are supplied almost entirely by retailers selling manufactured products shipped in from outside the county.

## Social Development

The schools, churches, roads and highways, railroads, telephones, telegraph, other public utilities, the public service institutions, and the homes are the substance of the social heritage of the people of Gray County.

The pioneers who settled in Gray County faced numerous hardships, many of them peculiar to the semi-arid prairie country. Also the pioneers here had many advantages which other American pioneers did not have. In 1872 daily mail and telegraph services as well as other advantages of older settled communities were at once available to the settlers as a result of the completion of the railroad and associated enterprises.

The development of the towns, where a majority of the social institutions are located, is in a fair measure an accurate gauge of the social wealth of the county as a whole.

Cimarron, the most important trading center, and present county seat, has had a leading place in the annals of southwestern Kansas. The town started as a railroad station in the spring of 1877 and soon a small town developed there. The early merchants had a vast trading territory in southwestern Kansas, Dodge City, nineteen



miles east, being the only important competitor. By 1886 Cimarron had grown to a city of importance with a population in the neighborhood of 1,000 and aspired to become the county seat of newly organized Gray County. In July of 1887 Cimarron was named temporary county seat but lost to the millionaire-sponsored promotional town of Ingalls in a disputed election as a result of the decision of the Supreme Court. After the drought had caused a depopulation of Ingalls an election was called in 1893 and the county seat went to Cimarron.

General business conditions remained at a low ebb for a number of years. In 1900 the population of Cimarron was only about 200. From that date until 1932 Cimarron experienced a continuous growth and development, the population being 587 in 1910 and reaching 1,005 in 1930. Most of the outstanding civic improvements in Cimarron have been completed since 1928. This tendency originated from the great wealth received from the bumper wheat crops of that period. The drought and depression have hampered the general progress of the city, but in 1933 the fine \$130,000 school plant was completed as a PWA project. The population of Cimarron has declined by about 10 per cent during the drought. When good years return Cimarron should make a rapid recovery. A fair share of the county's business is

gravitating towards Cimarron because of the county seat activities and as a result the town should have some further population growth and development. The nearness of the larger trading centers of Dodge City and Garden City labels a prediction of extensive growth, during this era of rapid transportation, for Cimarron as unsound.

Ingalls had its inception in 1884 as the pet scheme of a multi-millionaire promoter, who planned the town for county seat so that it might be a fitting place of the source of his million-dollar irrigation ditch. Ingalls was to be tax free and the promoter promised to spend \$100,000 for public improvements. By lavish spending and the making of many promises, the county seat went to Ingalls in the election of 1887. The town had considerable business development for a time but in 1890 the death of the promoter, the failure of the irrigation ditch, and repeated crop failures caused the town to shrink to half a dozen houses. In the election of 1893 the county seat was given to Cimarron, but Ingalls managed to survive as a small trading place during the hard times. In recent years the town has made quite a recovery mainly due to the building of grain elevators, schools, and churches. In 1932 the population reached 280 but has declined to 211 in 1936. Ingalls is only six miles from Cimarron and there-

fore one can expect it to grow very little, if any, in the future. The town is the location of the large consolidated school and of the only Roman Catholic Church in the county. This, and the fact that a number of farmers live there, should perpetuate the village of Ingalls for many years to come.

Montezuma was promoted in 1886 by a town company which proposed Richland County with Montezuma as the county seat. In September of 1887 the promoters traded their county seat aspirations to the Ingalls promoter for the promise of a railroad. The railroad was built and the town was advertised widely, but the dry years came and the population reached only 109. Since there was no business the railroad was taken up and the town site was vacated in 1895.

The Atchison, Topeka, and Santa Fe Railroad built its Colmar cut-off in 1912 and in May of that year laid out a new town two or three miles north of the old town site, naming it Montezuma for its predecessor. Montezuma grew remarkably fast and soon had a large trade territory, ranking second only to Cimarron in the county. Wheat brought prosperity to Montezuma and its trade territory and six large grain elevators were constructed there. In May 1937 the town claimed a population of 402 and had electric



lights, a city water system, natural gas, fine modern grade and high schools, and a new \$50,000 church building. Because of its strategic location in the south part of the county, Montezuma has trade prospects which promise to maintain it as the only important trade center in the county besides Cimarron.

The town of Copeland had its beginning in June, 1912, soon after the completion of the branch line of the A. T. & S. F. Railroad through the south part of the county. Copeland grew rapidly and continued to develop until the recent drought. The population had reached 460 in 1931, but more than one-third of the population has left since the drought. Indications are that Copeland may be unable to recover much of its trade territory when better times return. The schools there are not consolidated and the bank was recently moved to Sublette. Copeland will undoubtedly continue to be a wheat shipping point of considerable importance since the large 500,000 bushel grain elevator is located there. The town will probably be the home of a considerable number of farmers who operate in the surrounding wheat district, and should maintain its population at about its present level. Future growth is problematical since Montezuma has apparently won the position of supremacy in the south part of the county chiefly

because it is more strategically located.

The town of Ensign was promoted in the boom days of 1886 by a town company whose efforts were rather unsuccessful. The railroad which Soule, the Ingalls promoter, built to Montezuma in 1887 missed Ensign by about a mile and the town was moved to the railroad in 1888. When the railroad was taken up in 1895, the town failed to survive. Ensign was again moved, having been established as a country post-office, when the A. T. & S. F. Railroad built its line through the south part of the county in 1912. The town had a fair trade territory and became a wheat shipping point of importance during the recent boom. Since the depression the town has lost much of its trade, the bank having been consolidated with the one at Montezuma, and the proximity of Dodge City on the east and Cimarron on the north make the future of this small town appear very unfavorable.

Due to the development in communication and transportation and the generally rural character of Gray County, none of the towns in Gray County can expect much development in the future. Cimarron, because it is the county seat, and Montezuma, which is advantageously located in the south part of the county, are the only towns which appear to have much chance for future development. Copeland, which

has a fair location, should maintain itself at about its present level, while Ingalls and Ensign will probably continue to decline.

The local newspapers have had an important place in the social development of Gray County. The first newspaper was established at Cimarron in March, 1879. During the boom days of 1886 newspapers were established in every town and hamlet and were loud in praises of their respective towns. The drought forced these newspapers out of business and by 1894 only the Jacksonian at Cimarron remained to advertise Gray County in its slow climb upward. Newspapers were established at Montezuma and Copeland in 1914, but the newspaper at Copeland has been closed. The weekly newspaper at Cimarron has a definite place in the county and will continue to have a good circulation. It is also possible that the Montezuma newspaper may continue to fill a definite need in the south part of the county.

The churches have always been an important part of the social heritage of the county. At the time of the settlement of the county many of the school houses were utilized for union church services. Later small churches were built in each of the towns. In 1931 the beautiful Roman Catholic Church was completed at Ingalls and the year before the Methodists built modern churches at Cimarron



and Montezuma. The Mennonites, a German-speaking religious sect, rank second only to the Methodists in numbers and maintain three rural churches in the county.

At the present time practically every community has one to three study or recreational clubs. This is in marked contrast to former times, when few clubs were maintained. Some of the outstanding organizations at the present time are the Farm Bureau clubs, which swept the county in 1929, the 4-H clubs, and the study clubs. The county fair, which was organized at Cimarron in 1910 has enjoyed considerable success.

The Atchison, Topeka and Santa Fe Railway Company was largely instrumental in the settlement of the county and has continued to serve the territory well. In 1912 the same company built a branch through the south part of the county giving that part of the county a direct outlet. The railroad is by far the largest tax payer in the county. The second heaviest tax payer in the county is the Argus Pipe Line Company which constructed its trunk line and distribution systems in 1929. Other important public utilities are the telegraph and telephone companies. At the present time the public utility property totals 17 per cent of the county valuation.

In the early days the majority of the school houses

were built of sod and were as a rule poorly equipped.

The attendance was low, school terms short, and teachers were poorly trained and paid. No noticeable advance was made until after 1900. The first high school, the one at Cimarron, was organized in 1908. From 1915 to 1919 high schools were organized at each of the other towns and great progress has characterized the Gray County school program from that date. In 1920 the rural schools near Ingalls, Cimarron, and Montezuma were consolidated and at the present time only about 20 per cent of the county's school children are in attendance in the one-teacher rural schools. A large increase in high school enrollments and the construction of school buildings at Copeland, Montezuma, and Cimarron are the most noteworthy developments in the school situation during the last few years. The people of Gray County are proud of their schools, which are remarkable under prevailing circumstances, and as a result the educational facilities should keep pace with developments elsewhere.

Although several banks were organized at the time of the organization of the county it was not until 1906 that the banking business reached a sizeable figure. In 1929 the total resources of Gray County banks approximated one million dollars. Since that date two banks have been con-

solidated and one was closed-which resulted in a heavy loss to depositors. At the present time only three banks are operating, one each at Cimarron, Montezuma, and Ingalls, and in line with other general trends it is reported that some stockholders of the last named bank are in favor of moving it to the nearby and larger town of Cimarron.

Long term credit, consisting principally of loans on farms and homes, was until recently furnished by individuals, local companies and investment houses. The Federal Land Bank began loaning on farm real estate in 1917 and when the law of 1933 lowered the interest rate it became the chief mortgage holder in the county. The various life insurance companies hold most of the farm mortgages not held by the Federal Land Bank. The HOLC has loaned \$60,000 to urban property owners since 1933.

One of the most important assets of the residents of Gray County is a fine road system. Twenty years ago practically no roads were maintained by the county, the level topography, practically free from obstruction by fences and cultivated fields, permitting travel in almost any desired direction. Since 1920 a fine system of graded and gravelled roads has been constructed to meet the requirements of the consolidated school busses, wheat trucks,



and automobiles which must make frequent trips. Also three fine all-weather through highways are maintained by state and federal government support. The county road system has undergone continued improvement during the drought and depression, several projects having been completed under the supervision of PWA and WPA.

A good measure of the achievements, social and economic, of any group of people is found, more than any place else, in the homes which are maintained. In Gray County, with the exception of the city of Cimarron, the adoption of modern improvements and conveniences has been extremely tardy. At present electrical lights and power, city water and sewer, natural gas, and other modern conveniences are available to the residents of Cimarron, Montezuma and Copeland. Ingalls and Ensign have electric lights and power but do not have some of the other improvements.

The rural homes have undergone no great development during the last score of years despite the period of spectacular prosperity during the 'twenties. While it is true that more than \$500,000 was added to the value of farm buildings in the decade just prior to 1930, the fact also remains that the majority of the houses in use today have not been improved in any way since they were built 20 or 30 years ago.

A large part of the large incomes of the decade of the 'twenties was directed into channels for the purchase of implements and machinery. In the year of 1929 alone almost a million dollars, or twice as much as was expended in a decade for building improvements, was invested in machinery.

In 1929 only 17 farms used electric power, only 71 were lighted by electricity, and but 197 had water piped to the home. During the depression and drought years, home improvements of this kind have naturally been at a standstill. Also rural electrification projects are extremely unlikely in this sparsely settled farm area. In present trends may be noted that many farm homes are being deserted, and yet the acreage under cultivation has not declined, while the number of farmers has actually increased. Indications are that many of the farms are being operated from the towns, where modern conveniences are available, or by persons living outside the county.

It will be interesting to note what trends the future economic development of the county will follow. Will the present tendencies of the movement away from the farms and the increase in the number of village and 'suitcase' farmers continue? The outcome of such a course will be a concentration on large-scale wheat production, with the

major social advance coming in the improvement of transportation facilities and the institutions located in the towns. Or will future events generate a genuine back-to-the-land movement, resulting in a well-balanced farm program capable of supporting a progressive and permanent rural population?



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Boston, Richard G. Badger, c 1920 . 288 p.

A good source for obtaining information relative to the colonization policy of the Atchison, Topeka, and Santa Fe Railroad.

Burgess, James L. and Coffey, George N. Soil survey of the Garden City area, Kansas. (In United States Department of Agriculture, Bureau of Soils. Field Operations of the Bureau of Soils, 1904. Sixth Report. Washington, Government Printing Office, 1905, p. 895-923).

A soil survey of a large area east of Garden City is described and the economic history of the area is given. A large section of Gray County is covered by the report. A very valuable reference.

The Daily Sentinel. March 16, 1887. Garden City, Kansas, 1887.

Contains an article on the town of Cimarron.

Ensign Razzoop. Nov. 16, 1887. Ensign, Kansas, G. L.

Ensign, Publisher, 1887.

A good issue of the paper which clearly illustrates the type of advertising used by this newspaper to advertise the town.

The Garden City Daily Telegram, June 22, 1938. Garden City, Kansas, The Telegram Publishing Company, 1938.

This is the third annual edition describing the resources of southwestern Kansas and their development, both actual and potential. This edition contains valuable data on improved methods of agriculture as developed by the practical farmers of this territory. No one making a study of southwestern Kansas can afford to pass up this edition.

Gray County Republican. Jan. 12, 1888-May 31, 1888. Ingalls, Kansas, Allen B. Sayles, editor, 1888.

Contains information about the early history of the town of Ingalls.

Ingalls Union. Jan. 2, 1890 to June 7, 1894. Ingalls, Kansas, The Union Publishing Company, 1890-1894.

The files of this paper, now located in Kansas Historical Society Library, Topeka, Kansas, were a valuable source of information about the early history and decline of the town of Ingalls.

Inman, Colonel Henry. The Old Santa Fe Trail. Topeka, Kansas, Crane & Company, 1908, p. 144-148, 433.

Accounts of the early history of this transcontinental trail were found to be of some value for this thesis.

The Jacksonian, Jan. 1, 1887 to May 15, 1938. Cimarron, Kansas, Charles S. Sturtevant, 1887-1938.

The most important newspaper for source material. Files of this paper are available for the entire period covered by this study. A very valuable reference.

Kansas State Agricultural College, Agricultural Experiment Station. Relation of crop yields to quantity of irrigation water in southwestern Kansas. Manhattan, Kansas, Kansas State Agricultural College, 1922. 28 p. (Bulletin 228).



Projects in irrigation were carried out under soil and climatic conditions very similar to those found in Gray County. This study should receive consideration before making any forecasts of probable extension of irrigation in the Garden City area.

Kansas State Board of Agriculture, Biennial Reports.

Topeka, Kansas, State Printer, 1889-1937.

Contains detailed annual statistics of livestock and field crops by counties. These official records provided the basic data for this study, especially for the study of agriculture.

Kansas State Historical Society. Collections. Topeka,

Kansas, State Printer, 1897-1925. Contents: Vol. 6-8,

10, 12, and 16.

Several articles concerning the early local history of Gray County were drawn upon for material and as an aid in substantiating information obtained from other sources.

Kansas Supreme Court. Kansas reports. Vol. 42. Topeka,

Kansas, State Printer, 1890, p. 54 to 96.

Contains the case of the litigation resulting from the disputed county seat election in 1887 and the decision as handed down by the court. A good source for facts covering this aspect of the county's history.

Kelly, E.E. An old cattleman's story. (In the Topeka

Daily Capital, Topeka, Kansas. Feb. 18, 1934.)

The story of D. W. "Doc" Barton, of Ingalls, Kansas who established the first cattle ranch in western Kansas in 1872, is told. This is a noteworthy article about the adventures of the man who has witnessed a greater period of Gray County history than anyone alive today.

Landes, Kenneth K, with State Geological Survey of Kansas and Kansas State Planning Board. Mineral resources of Kansas counties, Vol. 38, No. 11, Mineral Resources Circular 6. Lawrence, Kansas, University of Kansas, 1937.

A valuable survey of mineral resources and probable future development. Contains a report for Gray County.

Montezuma Chief. Aug. 7, 1886 to June 12, 1887. Montezuma, Kansas, J. H. Hebard, editor and manager, 1886-1887.

Important source of information about the old town of Montezuma.

Montezuma Press. June 10, 1920. Montezuma, Kansas, Earl Fickert, editor, 1920.

Reference is made to the price of land in the Montezuma vicinity at this date.

The New West. May 14 and May 21, 1881. Cimarron, Kansas, A. D. Wettick, Publisher, 1881.

Contains some of the earliest available data concerning the development and settlement of the county and the growth of the town of Cimarron.

Peterson, Elmer T. The battles of phantom cities. (In Saturday Evening Post, Vol. 199, June 4, 1927. Philadelphia, The Curtis Publishing Company, 1927, p. 45 to 47, 213to 218).

The story of the Cimarron and Ingalls county seat fight as told by a reliable authority. Mr. Peterson edited a newspaper in Gray County for many years and had access to the files of the paper covering the early period. A valuable reference.

Peterson, Elmer T. Trumpets west. New York, Sears Publishing Company, 1932, p. 127-280.

A novel written about the development of southwestern Kansas. The author of the book lived in Gray County for several years where he edited the newspaper at Cimarron. The setting of the story is in Gray County and covers the period from 1885 until the 1920's. The story is told vividly and is an important contribution to the literature of southwestern Kansas and particularly to Gray County.

Richardson, P. N. and Rister, C. C. The greater southwest. Glendale, California, Arthur H. Clark Company, 1934. p. 345-362.

Reference has been made in the thesis to the causes enumerated for the passing of the open range in western Kansas.

State Superintendent of Public Instruction of Kansas.

Biennial reports. Topeka, Kansas, State Printer, 1889-1937.

Much of the necessary data for the summary of the school development was obtained from these reports.



Southwestern Bell Telephone Company General Commercial  
Engineering Department. Economic survey of Kansas.  
St. Louis, Missouri, 1930. 230 p.

This report was made by a department of the public utility company to its management for the purpose of studying the economic progress of the several regions of the state of Kansas and their potential telephone market. The book was of value in providing a broader perspective of the possible scope of an economic survey.

United States Department of Agriculture. Plant industry  
bulletin. No. 171, 172, 178, 184-188, 190, 191.  
Washington, United States Government Printing Office,  
1910. 17 p.

A study of the relative importance of various factors on wheat production in the Great Plains area for the 12-year period preceding 1910.

United States Department of Agriculture, Office of Experiment Stations. Experiment station record. Vol. 58.  
Washington, Government Printing Office, 1928. p. 321.

A report on the results of experimentation in growing crops by irrigation.

United States Department of Agriculture. Yearbook 1908.  
Washington, Government Printing Office, 1904. p. 287-289.

Contains an article on the so-called changes of climate in the West and cites statistics for the Dodge City station from 1875 to 1907.

United States Department of Agriculture, Weather Bureau

Kansas Section. Climatological data. Topeka, Kansas,  
1930-1937.

Monthly bulletins covering weather data from all of the official weather observation stations in Kansas are issued. Contains cumulative averages dating back to the beginning of records.

United States Department of Commerce, Bureau of the Census.

United States census of agriculture: 1935. Washington,  
U. S. Government Printing Office, 1936. p. 351-375.

Statistics of farms, farm acreage and value, and selected livestock and crops statistics are given. A valuable supplement to the reports of the U. S. Census.

United States Department of Commerce, Bureau of the Census.

Eleventh to Fifteenth Census, 1890 to 1930. Washington,  
Government Printing Office, 1892-1932.

Eleventh and twelfth census issued by census office, Department of the Interior.

Works Progress Administration Writers Project of Kansas.

American guide. (Unpublished files). Topeka, Kansas,  
Works Progress Administration, 1937.

All of the unpublished data concerning Gray County was borrowed through the courtesy of Mr. R. R. MacGregor, Director of the WPA Writers Project of Kansas. Considerable data about the early history of Gray County has been compiled, some of which was found acceptable for this thesis. Due to the extreme inexperience of the researchers too much reliance cannot be placed on the authenticity of the material presented.

## PERSONAL INTERVIEWS

Anderson, Arthur. Cimarron, Kansas, April 25, 1937.

As manager of the district office of the Western Telephone Company and a resident of the county for more than thirty years, he was able to furnish reliable information on the history of the telephone business in Gray County.

Barton, Clayton. Cimarron, Kansas, April 25, 1937.

Mr. Barton has been county engineer of Gray County for more than a decade. He answered some questions relative to the Gray County road system.

Barton, D. W. "Doc". Ingalls, Kansas, April 26, 1937.

"Doc" Barton was the first cattleman to utilize the range west of Dodge City, coming here from Texas in 1872. Now past 90, and still in good health, he is one of the best authorities on the early history of this territory, especially interesting are his stories about the Cimarron Crossing and the Old Santa Fe Trail.

Brice, Harry. Cimarron, Kansas, April 25, 1937.

Came to Gray County before it was organized and since then has been a civic leader, having been county attorney for several terms. He has the only complete set of abstract books in the county and was kind enough to check back through his records of many years for information relative to years which showed the largest number of land sales.



Burns, Joseph H. Ingalls, Kansas, April 26, 1937.

Born in Ingalls and the first graduate of the Ingalls Rural High School, in 1916, and now Cashier of the Farmers State Bank at Ingalls, he knows Ingalls and its trading territory like a book. He volunteered much about the local status of the banking business, schools, churches, and other institutions.

Burns, Terrence. Ingalls, Kansas, April 26, 1937.

Foreman for the A. T. & S. F. Railroad at Ingalls for forty years. Now retired. His parents, Irish immigrants, settled in the Arkansas Valley near Ingalls more than sixty years ago. Mr. Burns is an authority on the history of the development of the county.

Cessna, C. B. Ingalls, Kansas, April 26, 1937.

Banker, insurance man, Federal Land Bank agent, farmer, and school board member. Advanced some valuable opinions and gave pertinent information on the schools and farm loan situation.

Cimarron Farmers Cooperative Oil Company. Cimarron, Kansas, April 25, 1937.

Interviewed the person in charge of office who was kind enough to give facts and figures about this farmer-owned enterprise.

Cleary, M. G. Ingalls, Kansas, April 26, 1937.

Superintendent of the Ingalls Consolidated Schools since 1935. Superintendent at Cimarron in 1912 and helped organize the high school at Ingalls in 1916 and was first principal. He willingly supplied any information desired about the development of Gray County schools.

Egbert, J. H. Cimarron, Kansas, April 25, 1937.

Present mayor of the city of Cimarron. Has been a leader in business and politics of county for many years. A resident of Gray County for more than 50 years. He is probably the best informed person on the economic background of the county. He was in charge of the HOLC program in Gray County.

Emmons, G. T. Copeland, Kansas, April 27, 1937.

Cashier of Copeland State Bank. Gave information on city of Copeland, the banking and business situation, and about the schools.

Erskine, C. B. Cimarron, Kansas, April 25, 1937.

President of the First National Bank at Cimarron since 1912. Gave a valuable interview on the banking and farm situation in the county since 1912.

Erskine, Mrs. C. B. Cimarron, Kansas, April 25, 1937.

Prominent club woman who has been a Gray County resident all her life. Formerly county superintendent of schools. She pointed out logical persons to interview, thus saving time. She also put at my disposal the material used by the Gray County Federated Womens Clubs in presenting their historical pageant in 1931 depicting the progress of Gray County. She also placed numerous papers in my hands on local history by members of the various clubs.

Hainline, W. L. Copeland, Kansas, April 27, 1937.

Assistant Cashier of Copeland State Bank and city clerk of the city of Copeland. He supplemented material given by Mr. Emmons. He also gave some figures about the municipal water plant and the lights set-up.

Harris, Jack. Cimarron, Kansas, April 25, 1937.

City clerk of Cimarron for a number of years. Gave information relative to the city and its improvements, substantiating his remarks by figures as shown on his records.

Hatfield, O. H. Copeland, Kansas, April 27, 1937.

Manager of the Farmers Equity Exchange at Copeland, the largest farmer-owned elevator in the world. Told the history of this organization.

Hinkhouse, Kenneth. Cimarron, Kansas. April 25, 1937.

Superintendent of schools at Cimarron from 1936 to 1938. Told about operation and financing of Cimarron's new \$130,000 school building.

Leatherwood, J. C. Cimarron, Kansas, April 28, 1937.

County Treasurer of Gray County. Made available information on number of car licenses, tax levies, etc.

McReynolds, H. H. Montezuma, Kansas, April, 1937.

Cashier of Montezuma State Bank, member of Montezuma Board of Education, and a leading citizen of that town since 1914. He answered questions raised about the business and social life of Montezuma and its trading territory.

Montezuma State Bank, Assistant Cashier. Montezuma, Kansas, April 27, 1937.



This young gentleman, whose name I do not have, was city clerk of Montezuma. He was also scout master of the scout troop of that place. He gave facts and figures about the city's municipally owned water plant and about the financing of the new \$6,000 scout cabin.

Peat, F. E. Ensign, Kansas, April 27, 1937.

Member of School Board and manager of the Farmers Cooperative Grain and Supply Company. Lived in Ensign vicinity for many years. Gave valuable facts about a variety of subjects pertaining to the growth of the town of Ensign and its trading territory.

Schmidt, D. J. H. Montezuma, Kansas, April 27, 1937.

Mr. Schmidt is a leader in the Mennonite colony northwest of Montezuma and answered, to the best of his ability, any and all questions asked about the economic and religious life of his people.

Smith, C. A. Garden City, Kansas, April 28, 1937.

Mr. Smith is Secretary-Treasurer of the Garden City Production Credit Association. Furnished figures relative to Gray County business handled by the association.

Wagner, F. A. Garden City, Kansas, April 28, 1937.

Manager of the Garden City Experiment Station. Mr. Wagner made available all crop and weather data compiled since the station was first started in 1912.

Walker, F. C. Cimarron, Kansas, April 25, 1938.

President of the Wheat Growers Mutual Hail Insurance Company. Mr. Walker went to much trouble to furnish records about his company and the crop insurance situation in western Kansas covering many years.