

Progress of Agriculture
in Kansas.

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Progress of Agriculture in Kansas. 416

When the first settlers began to locate in Kansas many people were anxious to know what the future held in store for the new territory and for the worthy pioneers who choose to make their homes on Kansas soil. Some of the settlers predicted a flourishing agricultural country immediately, and a rapid accumulation of wealth with but little effort. Others firmly asserted that it was impossible for agriculture to prosper in Kansas, and the people who attempted to till her soil would meet with defeat and disaster. These two reports spread rapidly throughout the eastern and older settled parts of the country. The former report brought into the territory many immigrants who had barely enough means to defray the necessary expense of moving, and possibly enough to support them until they hoped to raise a crop. The latter report kept many men of wealth from locating here, or even investing in Kansas enterprises.

The agriculture of Kansas began under about as trying circumstances as one

can imagine. Many of the early settlers were poor, and what was still worse, they held greatly exaggerated views of the productivity of Kansas soil. Many of them, it appears, thought that if they could only succeed in locating on a Kansas homestead, the battle was practically won. They would never have attempted to farm under similar circumstances in the older states, even when surrounded by friends and relatives who were able and willing to aid them.

The soil of Kansas was untried. What crops could be grown successfully, and what ones would prove unprofitable was unknown. The methods and varieties best adapted to the soil and climate were untested. In fact, experience of every kind relating to successful agriculture in this new region was lacking. Hot winds and droughts were a frequent occurrence. Ravaging insects made raids occasionally, sometimes destroying promising crops when nearly ready for the harvest. Many settlers were, for these reasons compelled to abandon their claims.

Modes of spreading knowledge were undeveloped. The settlers were scattered, and hence had poor opportunities for studying each others methods, and learning where in one farmer excelled another. Each farmer had to learn largely from personal experience what was successful, and what was apt to result in a failure. This was a slow, expensive, and very unsatisfactory method.

The geographical location of Kansas places it at a disadvantage to foreign or even eastern markets. If a good crop was raised, about the only demand for it was by emigrants passing through the country and by the recent settlers who had not been here long enough to raise a crop. This local market was easily inflated, and there was no way to dispose of the surplus, except by long and unprofitable hauls.

On the other hand, Kansas had many natural advantages. Much of the soil was very rich, and ready for the plow. It did not require half a life time to remove the heavy growth of timber, nor a constant

digging of stones to get the ground in fit shape for cultivation, although Kansas has a fair supply of timber, and an abundant supply of rocks.

Notwithstanding the occasional droughts and hot winds, the climate, upon the whole, is comparatively favorable. The winters, although cold at times, are comparatively short and dry. The spring and fall seasons are long and pleasant, and usually well adapted to the growing and maturing of crops. The weather is so favorable that not unfrequently the settlers would live in a tent throughout the year, while cattle and horses would pass the winter in many parts of the state on the open prairies.

Almost every locality has sufficient timber to furnish the farmers with fuel and fencing material. In many parts of eastern Kansas are found rich deposits of coal. The prairies, before they were disturbed with the plow, were covered with a large growth of grass, which furnished pasture for unlimited herds of cattle, and flocks of sheep, while a bountiful supply of hay for winter feeding could be easily procured.

When the good qualities and the opposing forces of Kansas were properly weighed, it was found that the good qualities were far the greatest. Instead of remaining a wild and uninhabited country, fitted only for the roving of wild animals and the play-grounds of cyclones, she has made the greatest progress in agricultural pursuits of any state in the Union in the same length of time.

The early settlers, although poor, were, as a class, intelligent, industrious, and sober. In fact, only such as these could withstand the hardships and privations of pioneer life. To their enterprise must be attributed much of the later success in this state. Being far from market, their attention to producing so far as possible, those articles which were required at home, first, and to producing for the general market only after home was supplied. In this way, each family was as independent as possible, while the expenses of living were reduced to a minimum.

But this system has undergone a great

change since that time. Railroads have connected Kansas with both the Atlantic and the Pacific, with Canada and Mexico. Our products are no longer confined to home consumption and home demands, but compete with the products of other states in the markets of the world.

As more of the land was brought under cultivation droughts and hot winds became less frequent, and agricultural products increased accordingly. At first only a small portion of land along the streams was considered fitted for cultivation. Later, necessity has demanded that more land be cultivated, and the result is that comparatively high land has been found capable of producing excellent crops.

The early days of Kansas were full of trouble. For several years prior to her admission as a state the "Border Ruffian war" had been raging on Kansas soil. Following her admission came the Civil war. Both of these seriously retarded the growth of agriculture along with all other industries.

One remarkable feature of Kansas is

her excellent ability to recover from the severe injuries which she has occasionally sustained. The severe drought of 1860 was followed by a succession of bountiful harvests, but the "grasshopper" raid of 1874 appeared as if it would make a permanent blot on her progress. Many farmers were compelled to sell, give away, or even abandon their property and seek a home elsewhere. Eastern people contributed of their surplus wealth to support the unfortunate people in Kansas. Yet, only the following year Kansas won first prizes for fruit displays at Newark, New York, and Philadelphia, having all the eastern fruit-growing states as competitors. The following year (1876) she surprised people from nearly all parts of the civilized world by her magnificent display at the Centennial Exposition. Following these, and perhaps partly due to these, came a rapid increase in her population and products. The green sod which had been trodden by buffalo for many generations were rapidly transformed into

broad fields of grain, or the herds of buffalo were succeeded by countless droves of improved cattle, horses, and sheep.

The population of Kansas was as large thirty years after the first permanent settlement was made as was New York or Pennsylvania when their first settlements were one hundred and fifty years old. Even the growth of the great western states of Indiana, Illinois and Iowa are far inferior to that of Kansas.

Kansas produces perhaps the greatest variety of crops of any state in the Union. Being a large state, she has a large extension of climate, and also a great variety of soils. Its geological formation is also somewhat variable, being a part of six geological periods. These influences tend to make the country adapted to the growth of many plants. Almost all the standard crops of the United States can be raised to at least some extent in this state. The four leading agricultural products of the state are wheat, corn, hogs, and cattle. We will consider briefly the progress of each of these products.

Wheat in Kansas.

Wheat was one of the first cereals cultivated in Kansas. The people being somewhat isolated from the wheat-growing sections farther east, its culture was necessary in order to provide for home consumption. In this, like in many other branches of agriculture, the pioneer met with many drawbacks and discouragements. Frequently the ground was so dry in the fall that the ground could not be properly stirred, nor the wheat put in as it should be. The winters were frequently too cold with the small amount of snow on the ground, so that winter-killing was not unfrequent. Strong winds in early spring would sometimes blow the soil away from the roots of the young plants, and leave them to die. Insects and parasitic plants frequently effected the growing crops. All of these tended to result in disaster to the successful culture of this crop.

Yet, notwithstanding all these hindrances, wheat-raising has survived, and wheat has long since become a standard

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crop. In many localities it is almost the exclusive crop.

Previous to 1861, the wheat crop was so small that it was hardly worthy of notice. In 1865, the yield was estimated at 200 000 bushels, which was up, to that date, the largest crop ever raised. In 1881, wheat attained to second rank among Kansas crops, a place she has ever since held. The yield that year exceeded 19 000 000 bushels, valued at over \$20 000 000. Only the following year, 1882, the product was nearly 34 000 000 bushels, valued at about \$23 000 000. Ten years later, 1892, Kansas surpassed all her previous records, and also any state in the Union. The yield that year was more than 70 000 000 bushels. By this time the wheat crop of Kansas had ceased to be an insignificant product, but formed an important factor in the Nation's supply.

In many of the eastern states, fertilizers are a necessary part of almost every crop. The Kansas wheat-growers know little about using fertilizers except what they hear and read. By giving the ground thorough cultivation, it has been proven that at

least twelve successive crops can be raised on the same piece of land without applying fertilizers and with no signs of the soil-fertility deteriorating.

Kansas Corn.

Taking the state as a whole, corn is considered the leading agricultural product. The earliest settlers who practiced agriculture made this their standard crop, and it has ever since held this same rank. They planted corn on their "red land," and as the ground became more thoroughly cultivated they continued to plant corn.

Corn raising has passed through similar experiences as wheat growing. Several times the yield has been far too small to repay the farmer for his work, yet many crops have yielded such large profits as to make corn raising, upon the whole, a profitable occupation, so that the Kansas farmer can successfully compete with the farmers of other states in raising this cereal.

The various uses to which corn can

be put makes it a very valuable article to the Kansas farmer. The larger portion of the product is used for feed for live stock of various kinds. But, if the wheat crop is a failure and flour is high, the farmer, as well as his city neighbor, may, and frequently does substitute corn meal for wheat flour, and thus reduce his living expenses. If the farmer has a large crop of corn and the price is low, while fuel is scarce and dear, corn is frequently made to take the place of coal and wood. Or, if the corn is shelled, the cobs are a valuable article of fuel.

In 1860, statistics report the corn product of the state a little more than 6000000 bushels. The next five years show only a slight gain, - less than a half million bushels. Nine years later, 1874, came the great grasshopper raid, which did serious injury to the crop. Yet the total yield that year was over fifteen and a half million bushels. The following year, 1875, the increase was five fold that of the previous year. Although

Kansas was yet a new country, agriculturally speaking, yet this yield gave her sixth rank in the line of corn producing. Since that date the yield has fallen below that of 1875 but once, that being the dry year of 1887. Considering one year with another, the annual corn crop has continued to increase almost as rapidly since 1875 as before that date.

In 1885, the yield was 194,130,814 bushels. The highest yield up to date is that of 1889, which reached a total of 273,888,321 bushels.

Hogs and Cattle of Kansas.

Closely allied to and largely dependent on corn culture is the raising and fattening of hogs. Corn furnishes an excellent feed for hogs, and by converting the corn into pork, we find it much easier to transport, and usually a much more profitable way to dispose of the corn.

The early settlers of Kansas raised but few hogs. It was very inconvenient to transport them in the manner that most Kansas pioneers mi-

grated. Besides this difficulty, hogs require to be fed on some kind of grain during nearly if not the entire year. Hence, the pioneer preferred investing in other kinds of stock which could live almost entirely on the native grasses and hay made from the same.

But, as corn culture became more extensive, hogs were found to be a profitable investment. Contemporaneous with the increase of corn culture we find an increase in the number of hogs raised. In 1860, the total number of hogs in the state was, according to agricultural reports, less than 1500. The increase was slow until after 1875. In 1880, the number reported exceeds 1,280,000. Five years later, 1885, we find in the state, more than 2,000,000 hogs. Since that time the increase has been light.

The cattle industry antedates that of any other branch of agriculture. The countless herds of buffalo which roamed over the prairies at will for many years, furnishing the Indians with

meat for food, and hides for clothing and various other purposes, as well as the great herds of domestic cattle which succeeded the buffalo, testify to the grazing capacity of Kansas. The short, dry, winters; the luxuriant growth of grass; the low price of the land, all tended to make cattle-raising a profitable employment. Besides these, cattle could be transported long distances to market much easier than almost any other kind of stock. While the country was sparsely settled, cattle were driven from almost all parts of the state to the towns along the Missouri River, where there was a market for them. This driving, or rather "grazing" cattle to market, as it was commonly called, often lasted many weeks during the summer and autumnal seasons.

But this industry too has been greatly changed. The immense herds which once were so abundant on these prairies have almost disappeared. In most parts of the state the broad prairies have been converted into great grain farms.

This has necessitated a change in the manner of raising cattle. The large herds have, in most part of the state, given way to smaller lots of better quality. In early days, when pasture was unlimited and feed required only the expense of preparing it, the number of cattle kept appeared to be the main object. But as land became more valuable, range scarce, and feed expensive, it became necessary to reduce the numbers in the herd and improve the quality of the individuals. The rough, raw-boned, long-horned, Texas steer, which required five or six years before he was fitted for market gave place to the high-grades and thoroughbreds, which are ready for market at almost any age, and nearly matured at two and a half or three years. Kansas now has a grade of cattle almost if not fully as good as that of any other state. While the number of cattle kept in the state has probably decreased, the keeping of a few well-bred cattle is one of the profitable branches of general farming.

Tame Grasses.

So long as open range was abundant, tame grasses were not cultivated. In fact, they were not necessary. The native grasses were better adapted to the climate, and although they were sure to give a light yield per acre, yet it was not deemed an economical advantage to change.

But when outside range became scarce, and each farmer had to provide pasture and winter's feed for his stock within the enclosure of his own domain, he found it necessary to get from his land as large a return as possible. This led to the introduction of tame grasses.

In about 1875, timothy, clover, and blue grass were first cultivated to a small extent in the eastern counties of the state. These grasses were found to be so much more profitable than native grasses that they have become the main dependence for pasture and for hay.

Alfalfa is cultivated to some extent

in almost every county in the state where agriculture is carried on extensively. In the valleys of the Kansas and the Arkansas Rivers, especially the latter, it is cultivated quite extensively. This plant has many qualities which make it well adapted to Kansas, and in many localities it is considered the most profitable crop that can be raised. In the vicinity of Garden City, it is said to produce more than \$14 worth of seed per acre, besides several tons of excellent hay. One firm in Garden City purchased and shipped east 9500 bushels, paying more than \$45 000 for the same, all during the last five months of 1892.

Sundry other Crops.

Woolgrowing, although never becoming extensive compared to other crops, has received some attention. No doubt Kansas could be as great a woolgrowing country as almost any state in the Union, but other things paying so much better, this branch of husbandry has been neglected. Yet, as late as 1891, when

sheep-raising was already declining, we find a wool product of 1,345,789 pounds, valued at \$228,783.79. The total number of sheep kept that year was only 240,568 head.

Dairy interests are not so highly developed in Kansas as it is in many of the older states. Yet all indications show that Kansas can become a flourishing dairy state when a little more attention is given to it.

In the northwestern part of the state, where it is too dry to raise corn successfully, sorghum is grown for feed quite extensively. This has been found to be a very valuable crop for cattle feed. Many cattle are wintered exclusively on sorghum fodder and the native grasses, uncut.

In about 1886 and 87, when the process of making sugar from sorghum by the diffusion process was first invented, Kansas was made the main field of this industry. It was found that the climate and much of the soil was well adapted to growing the saccharine varieties of sorghum. Hence,

several "Sorghum Sugar Factories" were built and put in operation. It appeared for a few years as if Kansas would furnish a large amount of the sugar of our country. But this did not prove so successful as was expected. Although some of the factories are yet in operation, yet the occupation can not be considered a leading industry of the state.

The raising of broomcorn has attained considerable prominence in some localities, especially Rice, McPherson, and Elsworth counties. In 1892 there were more than 75 000 acres planted to this crop, yielding a return of more than \$1,105 000.

Even cotton, that subtropical plant, has been grown to a slight extent in the south-eastern part of the state. In 1892, more than 600 acres were planted to this crop, yielding a return of \$10,171. This, we never expect to become a standard crop, but it shows the capability of the state in that line.

In addition to these may be mentioned

oats, rye, flax, potatoes, garden vegetables, fruits of various kinds, and many other crops which thrive in almost every part of the state.

Realizing what has already been done in the agricultural line in this state, the question of the future presents itself to us. Will the present rate of growth continue? We can easily see that the limit of her productive capacity is not nearly reached. Many acres are yet uncultivated, and those which are cultivated can, by more thorough work, be made to yield far greater returns than under the present system. During the next twenty years we may expect to see great changes in the agriculture of Kansas. Perhaps fewer farms will be opened in the future than in the past, but those which are cultivated will be worked on more scientific principles.

Although Kansas may not progress so fast in the future as in the past, yet we see no reason why she should not maintain her relative rate, and soon become the leading agricultural state in the Union regardless of age.