

AGRICULTURE IN OREGON

One third of the population interested in farming.
 Every advantage offered the newcomer.
 Opportunities for diversity of production.
 Many acres of government land still open.
 Soil of Oregon richest in the country.
 Bumper crops for more than thirty years.

THE early settlement of Oregon was along agricultural lines. Farming still remains the greatest industry of the state. Each year witnesses its greater development, for the country is so rich and extensive that agriculturally it is practically unlimited. About one third of the population of Oregon is engaged in some form of farming. This number is being constantly increased by newcomers—farmers from the east and immigrants from foreign countries. They are coming to seek their fortunes in a country wonderfully rich, and none find disappointment if they are energetic and willing to grasp the opportunities within their reach.

While farming in Oregon is considerably different from that in older communities, there is no reason why the tenderfoot should not be able to make the best of the opportunities offered him. The methods of farming in western Oregon are different from those followed in the eastern part of the state, therefore conditions change in almost every section. This might lead to confusion and the newcomer would be harassed. The state, however, has wisely made provisions to give the newcomers every benefit of the country. The State Agricultural college at Corvallis has been established for this purpose. It has a corps of 35 teachers and investigators, who have studied every condition that may arise. Lectures, bulletins and circulars are prepared to meet every known condition that may confront a farmer in Oregon. These and all the facilities of the college and experimental stations are at the disposal of the farmer, and they are all free to residents of the state. In addition to this the college supplies, when necessary, letters of special information, therefore no agricultural need need never be confronted with a problem to which he cannot obtain an answer.

can be secured in Oregon as in other sections of the United States. The price is governed by the quality of the soil, location and improvements. It runs from a few dollars to \$10 and \$40 an acre and higher, but a farmer today can secure a farm in Oregon for less money than he would have to pay in any other section and from the Oregon farm he would receive more than he would elsewhere.

The soil of Oregon is of volcanic origin, being disintegrated lava. Once the whole section was evidently forbidden ground for agriculture, but after centuries the wear and tear of the elements, glacial actions and other causes has disintegrated and ground the former beds of lava into the finest and richest soil throughout the country, fertile valleys and plateaus, whose soil possesses unlimited possibilities. Each year's development strengthens the belief that the soil is inexhaustible. In the valleys the soil is of a loam rich and dark, nearly all the rainfall penetrates immediately into it. The sub-soil being thoroughly saturated retains the moisture, which is utilized by the crops during the spring and early summer.

These conditions make it possible to grow enormous grain crops and has established the fact that the ground is inexhaustible. It is a recorded fact that one farmer near Wainwright has cultivated his land continuously for 48 years and has never reaped less than 35 bushels of wheat to the acre, while in 1903 land that he broke in 1852 yielded him 45 bushels of wheat to the acre. Fields that have been cropped for 30 years and more continue to produce wheat in the east and middle west are considered bumper crops.

energy, a large family and a carpet bag. A few weeks ago he started on a visit to Germany and carried with him \$10,000, his profit in wheat. Huddeman never owned an acre of ground, but made his wealth by raising wheat on ground which he leased from the Indians of the Umatilla reservation.

Were it not for many similar cases Huddeman's fortune might be cited as an exceptional one, but in Umatilla county alone there are hundreds of farmers who have prospered as he has, and in other counties there are hundreds of others. Henry Koepke in the hard times of 1853 lost everything he owned except a stout heart. Today he is worth \$150,000, has a magnificent winter home in Los Angeles, Cal., and has toured Germany. He made his wealth from inland Empire wheat. Lewis Hoebbe made \$15,000 in four years on land he leased, and J. W. Crow this year cleared \$25,000 on wheat he planted in lands leased from the Indians.

Prosperity has reigned throughout the wheat country of Oregon, so far this year over 100 mortgages have been paid off and recorded in Umatilla county. Nearly every farm in the county is clear of debt. Instead of the farmers now begging the banks for loans, as was the case 10 or 15 years ago, the farmers are now in a position to loan the banks money.

OREGON'S WHEAT CROP.

Yield of Wheat Per Acre Takes First Rank in the Country.

Grain growing in Oregon, especially in the valley of the Columbia river, is astonishing the world. This year the crop has been so enormous that Oregon is supplying the globe. Considerable wheat is raised in the Willamette valley, but as it is becoming more densely populated the land is more valuable for diversified farming, therefore grain growing each year is being more confined to that part of the state which forms a big section of the inland Empire. This part of Oregon has taken first rank as the greatest grain producer in the country. The reports of the department of agriculture for 1903 show that the entire wheat yield of the country was 14.4 bushels per acre, while the yield for Oregon and other sections of the inland Empire was 31.2 bushels per acre. When the figures for 1904 are compiled it will show that Oregon was a larger producer than ever before recorded.

Not only is the yield of Oregon wheat greater per acre, but the grain is much heavier than found in any other part of the United States. It is frequently impossible to find any Oregon wheat light enough to class as No. 1, which weighs about 58 pounds to the bushel. Wheat growers in other parts of the country consider themselves very fortunate if they get their grain classed as No. 1. Oregon wheat under ordinary conditions averages from 59 to 65 pounds to the bushel.

Working Like a Fallow.

There is now no record anything like a fallow of the crop in Oregon, but on the contrary there are records where one farmer in Umatilla county has never in 23 years had a yield of less than 40 bushels per acre, and several times in that period it ran up to 65 bushels.

Various varieties of wheat are raised and the planting is largely governed by the rainfall. Where the rainfall is 20 inches or more Little Club is mostly used, and where the rainfall is from 15 to 20 inches Red Chaff seems to be the best suited. In sections where the rainfall is less than 15 inches several varieties are planted, including Great, Red Russian, Canadian Hybrid, Genesee and Sonora.

Grain is sown in the fall, about the time the rainy season begins, and matures and ripens in the early spring when the rainfall decreases. When the rainfall is 20 inches a yield of 40 bushels to the acre is a matter of common record, while frequently 50, 60 and even 70 bushels have been harvested. Spring wheat under favorable conditions yields from 20 to 30 bushels per acre.

Fortunes in a Few Years.

Wheat in the past few years has made the fortunes of a number of Oregon farmers and this year has seen them increase their wealth materially. Umatilla county, it is estimated, raised 4,000,000 bushels of wheat in 1904, the net profit of which was \$1,800,000, which was divided between 1,000 farmers, or an average of \$1,800 each. Of course, some made considerably more. Nine years ago John Huddeman came to Umatilla county as a German emigrant, with nothing but the strong will, untiring

Harvesting a big crop like the one this year is a revelation. A large combined harvester and thresher drawn by 20 to 30 horses is used. This machine beats, threshes, cleans and sacks the grain as it goes through the field. Every operation except tying the sacks is done automatically, and when six sacks are filled and tied the machine drops them off in a pile to wait for the wagon to come and carry the golden grain to the train to be shipped to supply the world.

Oats are grown to a considerable extent in the Oregon section of the inland Empire. The oats raised are mostly for local consumption, but some farmers have gone into raising them on a large scale and have found it profitable. The main oat country of Washington and Oregon, however, is further west, and the Grand Ronde valley furnishes many bushels.

The national government estimated that for 1904 the 252,000 acres of Oregon planted in oats would produce 6,814,000 bushels with a net value of \$2,676,740. The crop in the Willamette valley this year was light, but the eastern part of the state made up for any shortage, both in increased acreage and a greater yield.

Although growers declare Oregon is unsuited for barley, very few farmers plant it, as they consider they can get better results from wheat. This year's crop of barley from 61,701 acres is estimated at 2,548,473 bushels, or about 43 bushels to the acre. The revenue from this is figured at \$28,385.

Rye is the smallest of Oregon's cereal crop. This year the 11,347 acres yielded 169,707 bushels, valued at \$69,733.

Cost of Raising Wheat.

The cost of raising wheat in Oregon is much less than in the east or other sections of the United States. In the wheat belt of North Dakota the cost of raising a heavy crop, a bumper as it is called, one that averages 35 bushels to the acre, is \$7.50 an acre, while the cost in Oregon ranges from \$5 to \$7. Aside from the difference in cost the amounts received from an acre of Oregon wheat cost a large figure. In Dakota a 35-bushel crop at 60 cents a bushel makes a profit of \$13.50 an acre for the Dakota farmer. This is small when compared with the experience of John Timmerman of Oregon this year. He harvested a crop of 30,000 bushels this year from two sections and was able to make a profit of \$12,000 on his year's work.

The yield of wheat in the inland Empire, which embraces parts of Oregon, Idaho and Washington, this year is estimated at 50,000,000 bushels. Of this amount Oregon produced something like 15,000,000 bushels. The yield in Umatilla county alone is remarkable. In 1903 the crop of the county figured a total of 2,750,000 bushels, while this year it will reach easily 4,500,000 bushels.

A Crop of 18,000,000 Bushels.

What has happened in Umatilla county is really a sign board of the whole state. The United States government settled a bushel means a profit of \$13.50 an acre for the Dakota farmer. The yield in Umatilla county alone is remarkable. In 1903 the crop of the county figured a total of 2,750,000 bushels, while this year it will reach easily 4,500,000 bushels.

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Oregon Hop Fields Are Profitable.

pasture he has and to the number of cattle on the farm. Some of the best yields of fall-corn wheat was grassed down close by the farmer's sheep in the early spring until the field looked absolutely bare.

Shearers can be had at from 8 to 7 cents a head. Several shearing machines were last year brought into the valley, decreasing the cost under this head.

Angora Goats Profitable.

The breeding and raising of Angora goats has proved a profitable enterprise in Oregon. A ready market is found for the mohair, experts declaring that the Oregon fibre is longer and of a better quality than that secured from goats bred and raised elsewhere. Good average nannies can be bought at from \$4 to \$6 each. Bucks at from \$15 to \$100. The owner of a 150-acre farm, with 40 acres of rough land to be cleared off can safely use from 35 to 50 goats. The owner of 1,200 acres, of which half is rough land, can properly put any number up to 100 on his place. Any perpendicular fence not less than 3 1/2 feet high will hold them in. The smaller the pastures the more goats can be kept. Goats and sheep, or goats and cattle can run together on the same range. A mixed band of goats will average 3 1/2 to 4 pounds of mohair per head. Prices have ranged from 30 to 40 cents a pound for the past four years. The increase from well cared for goats should not be less than 100 per cent. The kids should be kept in a small enclosure for the first two or three weeks of their life, to which their mothers can return for the night. After that they can go with their mothers.

Hops in Oregon.

"Always money in hops," is the answer one gets to a question as to the industry here. The hop is everywhere in Oregon, from the great wheat fields of eastern Oregon to the little home-steads of the coast counties. The growth of clover and other forage plants and the wide-spreading of the dairy industry contribute to its value. It is a surprise to some eastern visitors to see hops grow to a 250-pound weight at 15 months old running on clover fields with one good feed a day of separated milk from the dairy, and one quart of them was marked for feeding before killing. One of the finest droves of Berkshires, 140 in number, was kept and fattened on a Polk county farm on 15 acres of arthropods, which grow here in perfection. The market value of hops is steady, and buyers are very readily found. Into the vexed question of breeds there is no space to enter. All do well.

More Sheep Profitable.

Oregon horses rank superior throughout the country for endurance, speed and endurance. These qualities are the result of skill in breeding, favored by natural conditions of Oregon, which are such as to produce animals with large lung capacity and strong clean, sound limbs. The early homes of Oregon were animals of great endurance. They had to be to withstand the strain of six long months across the Great American Desert. Many fell on these trips, but those that survived were the ones blessed with an almost unlimited endurance. This essential quality is still found in the Oregon bred horse and they are worthy descendants of their ancestors who toiled from the east.

East of the Cascades every condition favorable for the breeding of light harness and speed horses is found. The climate and vegetation is unsuited, but it was in this part of the state that the celebrated and invincible Foter was prepared for his great four-mile race. Other horses almost as well known were bred and reared in this section, and their strength was marked for endurance, strength of limb and the best of feet.

The heavy draft horse finds an ideal home in the western part of the state. The luxuriant vegetation provides a feed which enables a colt to attain great weight at an early age. Despite the great number of horses raised in the state the demand exceeds the supply. Prices are also very favorable, and a team of draft horses frequently sells for from \$400 to \$600.

Stock Raising.

Oregon Has Natural Conditions Which Cannot Be Equalled.

Every natural condition for successful stock raising exists in Oregon. It is on this account that Oregon bred and Oregon raised cattle command the call in all stock yards. This branch of farming has made rapid strides in the past few years and is continuing to make them. So greatly has it increased and so important has it become that during the present year the National Livestock association held its annual convention in Portland. There were thousands of delegates present from all parts of the country. Many of them made tatters of their own states and each was unanimous in declaring that for climate and natural conditions Oregon is unsurpassed by any state in the union.

Stubbled and Fine Pasture.

This method of feeding has worked some wonders. The alfalfa and the stubblefields furnish a pasturage with a very high nutritive content, the flesh of such animals being firm, tender and of excellent flavor. This method of feeding and its success has induced many farmers to provide themselves also with sheep and hogs to run in the stubblefields, and has returned more and easier money than any crop they can raise.

With the progress in cattle raising more attention each year is being paid to the raising of blooded stock. Better grades of cattle, sheep, horses and hogs are being imported. At the International Livestock Exposition in Chicago in 1903 Oregon captured first prize for Short-horn bulls and this year at St. Louis captured another first prize for thoroughbred stock.

According to the estimates of livestock agents of the railroads there are in Oregon at present about 700,000 cattle, valued at more than \$14,000,000. Added to this there are 2,500,000 sheep, worth something like \$5,000,000; 100,000 hogs, valued at \$1,000,000; and 200,000 horses of the value of \$2,000,000 making the total stock interests of the state \$20,000,000 or more.

New Methods in Feeding.

Each year seen a reduction in the open range of the country and this is strengthening the tendency to grow hay for feed and mature the cattle on home feeding ground. It is estimated that the product from one acre of alfalfa is worth for maturing purposes 100 acres of wheat. With the increase in irrigation facilities alfalfa is being grown on a larger scale. These irrigated

fields will be planted with crops and taken out of the range. The stockmen will then fall back on the interior bunchgrass country and use alfalfa land for fattening. There always will be a large area of Oregon which will never be of use for any purpose other than range and it will always provide a feeding ground for young stock. Owing to the one feature Oregon will never lose her lead on the cattle industry.

Sheep Raising Profitable.

As a sheep producing state Oregon stands in the first rank. Many millions of dollars are invested in this industry, and the returns are very large. Summer feeding grounds for the sheep are found in the Cascade and Blue mountains, while the protected bunchgrass in the foothills and the alfalfa ranches along the streams provide spring and fall grazing and such winter feed as is required. The early and warm spring is a great boon to the lambs and they average more than 90 per cent saved.

The present year has been one of the greatest in the sheep industry in Oregon. This is the reason for the large reduction in the number of sheep on the range at present when compared with the number a year ago. The railroad officials unite in saying that never before have they experienced such a heavy movement of sheep as they have during 1904.

The wool from Oregon sheep approximates 20,000,000 pounds a year and it finds a ready market. One mill in the east each year buys 3,000,000 pounds at a fancy price. Oregon wool has one advantage over that of other localities and comes nearer to being of the same quality as Australian than that clipped in any other place in the world. On account of the even climate the wool is very seldom found to have knots or lumps in it, as is the case where there are quick changes from heat to cold and cold to heat. Last year Oregon wool sold for something like 15 cents a pound, while this year considerably more will be realized; wool which in the past sold for 15 cents now brings from 18 to 20 cents a pound.

On the sheep ranches of eastern and southeastern Oregon the Merino varieties are universally used. Many fortunes have been and are being made. Men starting as hands on monthly pay of \$40 and found faithful, have been trusted with bands of sheep on shares. So in a few years they have got together bands of their own numbered by the thousand.

Best Breeds of Sheep.

In western Oregon there are few sheep ranches properly so called. Most sheep are kept in flocks of from 50 to 300 head by men who know the value of this stock, but are engaged in other industries on the farm.

To the question of the best breeds to be kept and why, various and widely different replies have been returned, by common consent the Merinos are excluded, and the decision is to be made between the long-wooled Cotswolds, Lincolns and Leicesters, and the close-wooled Shropshire and Oxford Downs.

The 160-acre farmer is recommended to keep from 25 to 50 sheep, graduating his number to the acres of rough

able and least expensive of the many opportunities in the agricultural line now open in Oregon. Land suitable for growing hops is scattered throughout the state. It ranges in price from \$25 to \$100 an acre, the average price being \$45. It takes a very short time for a hop yard to come into full bearing. Planted in the fall or one year it will produce a small crop the next season and will be in full bearing the second season. The crops harvested are almost beyond comprehension, for a yield of 1,200 pounds an acre is a matter of common record.

In New York state, where hops have been cultivated for years, the soil has become so exhausted that considerable fertilizer has to be used, while in Oregon very little if any is employed. The climatic conditions of Oregon are exactly suited for hop culture. The winters are not long, and this allows the plant an early start in the spring. The mild winters of western Oregon are particularly favorable, for there is no danger of the frost killing the roots, as frequently occurs in New York.

Cost Little to Raise.

The cost of raising hops in Oregon is much less than in the east. According to the best figures obtainable the average cost in the east is 10 cents a pound, while the average in Oregon and at other places in the Pacific northwest is 7 cents. The profit of a crop can easily be figured and an 1000 can be gained of the profit some Oregon growers reaped this year, particularly when it is understood that a number of them received as high as 35 cents a pound.

Marion county in the Willamette valley, while one of the smallest counties in the state is the greatest hop producer. Last year it furnished 4,750,000 pounds of hops, or nearly 100 million pounds to the United States. It still ranks first as the greatest hop producer. Polk county also has some large hop yards which have a yield of between two and three million pounds a year. While Lane county, which adjoins Marion, in 1903 produced 1,300,000 pounds. Clackamas county, further north, produces annually nearly 2,000,000 pounds, and nine other counties in the state produce a total ranging from a few thousand pounds to a million pounds or more.

DAIRYING IN OREGON.

Jersey Cow Bred and Bred in the State Leads the World.

Every condition desirable for successful dairying is to be found in Oregon and in this respect nature has been most liberal in its gifts to the state. Ideal dairying conditions exist throughout the western part of Oregon and in the Willamette valley, which is now the center of the dairying interests of the state. That Oregon with its dairy products has taken first rank is only necessary to mention, for the state has taken up into its important hotel on the Pacific coast, and in fact in many hotels of the east, unless they find on the menu cards the words "Oregon Cheese." The products of the state have taken rank with Roquefort and other imported grades.

This is only one part of the industry, but it shows the importance and growth of the dairying interests of the state. Oregon butter has made a reputation wherever found, and it is now distributed to all parts of the United States. It has so increased in favor and the demand has become so great that creameries are experiencing difficulty in meeting it. Dairying is one of the greatest opportunities now open in Oregon and any man with sufficient money to buy a few cows can secure a neat monthly income.

Dairying in the Willamette Valley.

The Willamette valley is especially suited for dairying. Its climate in this respect surpasses any other section of the country. Cool summers and winters free from low temperature are the conditions which all dairymen know are necessary to the successful prosecution of the industry. West of the Cascade mountains in the past few years there have been established more than 100 creameries and cheese factories. Each year new ones are added and the demand for Oregon dairy products is increasing so rapidly that before long every farmer will have a creamery within a few miles of his home. Three years have been the dairying interests in the Willamette valley increase more than 100 per cent.

In Oregon dairying is carried on along lines much different from those followed in other states and at a much less cost. Many of the farmers own their own cream separators, which makes the delivery of the small bulk of pure cream simple and convenient. It also leaves the skimmed milk at home, and the feeding of this to the hogs has worked a marvelous change. As an illustration of the growth of the business, farmers who a few years ago would handle no enterprise less than a 150-acre farm, are today making a handsome monthly profit from milking four to six cows.

In western Oregon along the coast, where grass flourishes from eight to 12 months in the year, the problem of furnishing feed is easily solved. In the interior of the state, where grass can only be depended upon to furnish the necessary feed for a dairy cow but

(Continued on Following Page.)

Harvesting Oregon's Wheat Crop.

Dairying Interests Are Increasing.