

Western Oregon Should Raise a Million Bushels of Field Beans and Thousands of Tons of Green Beans Annually.

MARION AND POLK COUNTIES ARE THE BIG BEAN COUNTIES OF THIS STATE

Over Twelve Hundred Acres of Field Beans Raised in These Two Counties Last Year, and 5000 Bushels a Day of Green Beans Have Come to Salem Factories During Two Months of Each Year; and That Is Not Nearly Enough

By Ella McMunn.

There were 616 acres of field beans raised in Marion county last year, and about that acreage in Polk county, while the area devoted to green beans far exceeded that, as they came rolling into Salem by rail, truck and cart for two months at the rate of 5000 bushels a day.

The war showed Oregon what it could do in the way of raising beans, that important staple of army diet, and the canneries have fostered the industry by making contracts with growers to insure them from loss, and have gone so far as to furnish them with seed of the proper sort. And have even launched into the field as growers themselves in order to keep the wheels moving at the various institutions.

The field bean, or dry bean industry, first reached a point of commercial importance in 1912 when John Johnson of Quincy launched out with nine acres, realizing \$2000 for his crop, that being some money in those days, when the purchasing power of a dollar was three times what it is at present. The following year 50 acres were planted in the Quincy neighborhood, the growers being William Jones, Bruce Jones, Frank Ford, and John Johnson, with an increased acreage, while among the new growers of more recent years are John S. Paregory and C. C. Millet, who produced excellent crops during the two rather unfavorable years just past.

As high as six tons to the acre have been reported, but the general average seems to have been four tons, with an excellent margin of profit, for while the price of dry beans was about where it is now, the expense of harvesting the crop was less, which proved a contributing cause to the greater popularity of the more lucrative green bean industry.

Mr. Johnson, who pioneered the project in this section, and stayed with it for eight years, until his recent purchase of a loganberry farm, states that his bean crops paid for his first farm of 15 acres, erected him a dwelling place, and cared for his large family, although at that time the beans were planted by hand, pulled by hand, threshed out by hand and even given the final polish by

being stirred about with a hand-propelled broom.

Now, a seeder, drawn by horses or a tractor, plants a wide row, or rather several rows at once and on the large places a machine not unlike that which cuts hay is used instead of the toilsome method of hand pulling and after a little preliminary trying they are put through a bean thresher, which travels about the country in the familiar style of the grain thrasher.

The advantages of the machinery more than offset the disadvantages, for while the utmost care must be used in getting the beans hulled before they shatter upon the ground, and the machine does to some extent split the bean, this system prevents the large amount of dirt and grit that finds its way among the beans, which has clung to the roots of the plant when it was hand-pulled.

With labor scarce, even the matter of cultivation, formerly done with a horse and small plow-like apparatus, has been improved upon by attaching to the tractor beet cultivators to the number of three or four, adjusted to fit the bean rows.

Planting for green beans is done in late April and early May, and picking begins about the middle of July or a little later and continues two months. For dry beans the planting is done any time in May and the harvest occurs about October 1, although it can be hurried with profit if there are indications of rain upon the matured bean, which has a tendency to shatter upon the ground, especially if sun follows a shower.

The bean has few enemies in the insect world, the only one of any consequence being the bean weevil or flea beetle which introduces itself into the bean during the blossoming season and appears after the kernel has matured, leaving a small cavern from which he has escaped, but not injuring the heart or germinative power of the bean. To overcome this insect F. H. Chittenden, assistant entomologist in the United States Department of Agriculture, urges that planting be deferred until the insect has left the bean or been killed by heat or sulphur fumigation.

However, Oregon growers have not been bothered with this pest, but lost money in 1918 when a cry was set up immediately after harvest: "Sell your dry beans. There are bugs in them which will make them unsalable when the larvae have developed." That it was a false alarm, spread with a view to causing growers to let go at a loss, is shown by the fact that the same 1918 beans still on the market have not developed weevil.

Eight years ago statistics showed that Oregon annually imported 100 carloads of beans, the state institutions, lumber camps and dry-farming regions being heavy consumers, but whatever it may be in the matter of dried beans at the present time it is probable that few states are equaling her record exporting green beans in cans, or that apparently paradoxical statement, dried GREEN beans, a product turned out by the Salem King's plant in Salem.

But whatever success has attended the crop in the past, greater laurels are promised the present year, for with our plenter state and competitor, California, suffering from a three years drought, and about to be placed on water rations, we may be forced to feed the complacent residents of the Golden State, whose pluck and energy we all admire, while thanking Providence that we can, at this moment, look out upon green pastures and growing crops.

The poorest soil on the farm will raise beans, according to the experience of growers, who find that rich soil has a tendency to make foliage, so the practice has become general to plant to beans such fields as have been cropped to death and depleted of nutriment by successive plantings of grain. And while the yield of beans may not be phenomenal, the humus is restored to the soil and the following crop of grain is doubled and trebled. But, in addition to careful and frequent cultivation, the ground should be lived up in some fashion, and an extensive grower of Lima beans in New Jersey returns all the bean straw to his 150 acres.

a proceeding necessary, as he uses the same ground for beans each year. This man also has his own cannery, and plants three acres of beans in a day, until all are planted, so that he may pick three acres each day

THE BEAN KING OF THE WHOLE WILLAMETTE VALLEY

F. O. Harris of Benton County Had 220 Acres of Beans in One of His Fields—The Field Was Plowed in One Week With Two Tractors

F. O. Harris of Granger, in the northern part of Benton county, Or., has 220 acres of beans in one of his fields. This field was plowed in one week, two tractors going night and day. It was cultivated with one team and a four-row cultivator, and two boys did the hoeing. Mr. Harris had 220,000 pounds of beans, an average of 1000 pounds to the acre.

At 5 cents a pound and it has been considerably more than that in recent years) he had a crop worth about \$11,000. (The present wholesale price of beans is about 8 cents,

so Mr. Harris did better than expected if he held his crop.)

Figure out the expense noted above, the cost of his seed, and add interest on his investment and see if Mr. Harris isn't well into the income tax class. Mr. Harris indicated that girls make the best help in harvesting the beans, as they waste much less of the crop. Mr. Harris is a Californian who rented the Peter Whitaker farm (in the same county) three years ago and raised beans. He made money, bought a farm near Granger and then bought another. He is still raising beans.

THOUGH HE HAS HAD THREE DRY YEARS, STAYS IN GAME

R. C. Shepard, Over in Polk, Will This Year Try Field Beans Again With Clover, Using the Beans as a Cover Crop

Editor Statesman:

My experience in the growing of dry beans has been limited to the past three seasons and may be interesting principally because I have nothing to boast of; in fact, rather the contrary. I was first impelled to try beans as a means of increasing the food production, as we were urged to do when the United States first entered the war, so in 1917 I planted 10 acres about June 1, using a one-horse one-row planter and planting about 12 pounds to the acre; this on ground known as white land and considered extremely poor land. I cultivated twice, pulled them by hand and threshed 3000 pounds, or 300 pounds per acre and sold for 9 cents net per pound. This paid very satisfactorily, as it left the land in excellent shape for fall seeding. The season had been dry and I hoped that a normal season would have produced a larger yield, so in 1918 I put in 40 acres on land the most of which was the same kind as the previous season. I used a disc drill, stopping most of the holes so as to put them in drills 2½ feet apart. The season was so dry that some of those beans never sprouted until the fall rains. The stand was consequently very thin. I did not cultivate at all and the yield was light. I only threshed two tons, or 100 pounds per acre, which I sold for 7 cents per pound net without cleaning.

I still felt that with a good season there might be money to be made, and as I considered this as a sort of summer fallow and this class of land produces very poorly in spring grain, I felt that there had been no loss, although there had been a very little margin after estimating expenses.

This year I expect to try two acres with clover. For I should like to see what beans will do if we ever get a season with some rain in June.

The pulling and threshing comes at a time when fruit and grain men are offering high wages to every sort of labor, and I figured that my bean crop barely broke even, and when reading that California bean growers sometimes harvest 30 sacks per acre, when buyers talked of the great importations of Japanese, Manchurian and Mexican beans, I concluded that I could not compete with them and shall confine myself to the crops that are more profitable.

This year I expect to try two acres with clover. For I should like to see what beans will do if we ever get a season with some rain in June.

R. C. Shepard, Route 1, Salem, Or., March 15, 1920.

STRING BEANS IN MANY WAYS IMPORTANT CROP TO GROW

It Is Fast Becoming an Important Industry in the Vicinity of Salem, Says Mr. Franklin, a Grower Over in Polk County

Editor Statesman: The growing of string beans for commercial purposes is fast becoming an important industry in the vicinity of Salem. The reasons for this are many, but it will suffice to name just a few. First, probably, is the soil and climatic conditions. Then too the many canners and dehydrating plants in Salem that are always ready to buy at a fair profit to the grower all he will grow.

String beans are in many ways a very important crop for the farmer to grow. They make a good crop to grow between young trees while the young orchard is growing. They also bring in quick return for the man of small means with a family while he is developing his place in more permanent things.

If a person has land adapted to the growing of spinach, that crop can be followed with string beans if desired. However only one crop is generally grown.

String beans, like other crops, respond to good soil, a well prepared seed bed and good cultivation. I would recommend rather deep fall plowing, leaving ground rough until spring, when the ground should be kept disked and harrowed until planting time, to conserve all moisture possible; about June 1st, after which thorough cultivation and keeping the ground free from weeds; then a good crop is almost sure.

Of course the yield of string beans will vary like other crops, but one can reasonably expect three or four tons of the green beans per acre, while in some instances, as high as six tons are harvested. Where irrigation can be used a big yield is assured.

The plants in Salem all keep wide awake field men who are always ready to assist the grower in any ways possible in the growing of beans, etc., especially as to time for harvesting the crops.

W. C. FRANKLIN, Salem, Ore., Rt. 1, March 17, 1920.

WESTERN OREGON SHOULD RAISE A MILLION BUSHELS A YEAR AT LEAST OF FIELD BEANS

Beans Are a Splendid Food Crop to Grow, and Oregon Has Never Produced Enough of Them—How to Plant, Grow and Harvest Beans.

(Following is Extension Bulletin 207 of the Oregon Agricultural College Extension Service, of date May 1, 1917, on "Field Beans," by Geo. R. Hyslop, professor of farm crops.)

The field bean is one of the great food crops of the world. Very few other edible seed crops produce more nutrition to the acre. Beans represent one of the world's most concentrated food products, and consequently are in great demand in places where it is difficult to transport food. As a foodstuff in mines, lumber camps, construction camps on the frontier, and in the army and navy, beans are always popular because of their immense food value in comparison with their bulk, and normal cost. A bushel of beans has a food value equivalent to 108 pounds of round steak.

Beans are a splendid food crop to grow, and Oregon has never produced enough of them. Census statistics of 1909 indicate that 652 acres were planted to beans in Oregon in that year, with an average production of 72 pounds per capita of the total population. The production for the United States for the same year was a little less than 8 pounds per capita, indicating that we are far below the average of the United States in the production of beans. We do not produce nearly enough beans for our own needs, and there is a large bean-consuming territory north of us that we might supply with this crop.

Indications are that in 1917 Oregon will produce about enough beans for her own use, if weather conditions are favorable and the yields are good. We should not only extend our acreage of beans at least to the point of supplying fully our own needs, but should also engage in the industry extensively enough so that we may market the excess crop in the eastern and northern states.

Beans are more concentrated and more valuable pound for pound than the ordinary grain. They are valuable enough that they may be profitably shipped for considerable distances in normal years. They constitute a cultivated cash crop which is well suited to our conditions, and for which there is usually a good market.

Soil and Its Preparation.—When land is too poor to grow little or no beans, it is said to be too poor to grow anything. The little navy type of bean, or the bush field bean, grows very well on many soils that are exceedingly poor, both in physical condition and in their supply of plant food.

Beans grow successfully on red hill land, good white land, black land, and gray land. They do better, however, on soils that are mellow; well drained, and warm, such as the sandy river bottom land. It is not a good plan to make heavy applications of raw barnyard manure previous to planting beans. Early plowing is desirable. With late plowing the harrow should usually follow the plow as closely as possible. The soil for beans should be worked down to a fine, firm seed bed; fine in order that the roots may properly permeate the entire soil, and firm in order that in drilling the beans they are not needed too deep in the soil. Preparing the land for beans should take place as early as possible. Harrowing at intervals of from six to ten days from the time the land is plowed until it is seeded, will save much weeding later on. In some cases of very badly run-down soils an application of acid phosphate, at 100 to 150 pounds an acre, or in some other instances, an application of calcium sulfate or gypsum at 40 to 50 pounds an acre is likely to give satisfactory results with beans.

Varieties.—The only types of beans that are likely to be successful in the Willamette valley are certain early and uniform-maturing varieties. Of these, the Lady Washington is best for the heavier types of soil. On the more mellow types, the Mexican Tree bean is a splendid variety. The Red Mexican is also a very good variety, and meets a ready sale, especially in the western states. In choosing a variety of beans, always choose one, if possible, that is uniform and that has small to medium-sized seed. The uniformity of maturity is very important because of our wet fall weather. The smaller sizes of beans are very much more in demand than the larger sizes, the white varieties are more strongly desired than most of the red ones.

Inoculation.—If beans have never been grown in your immediate vicinity, it will be a good plan to inoculate the seed. Culture for that purpose may be had from the Oregon Agricultural College, Corvallis, Oregon, by paying a small fee of 40 cents, enough for two acres, or 69 cents, enough for three to 15 acres. Planting.—Seeding of beans takes place as early as possible after the ground warms up well and frost danger is over. Beans are usually seeded in rows 30 inches apart, and at about two to four inches apart in the row. Under irrigated conditions, they are sometimes planted in double rows, with about 30 to 36 inches between the double rows. Under dry-farming conditions the rows are four to six feet apart and the plants six to eight inches apart in the row. Beans are a good crop on summer fallow. They may be planted with a corn planter or with a regular bean planter; the small varieties are often planted with ordinary grain drills. Planting in hills, 10 to 15 inches

apart in the row, is a common practice, with usually about three or four beans to the hill. Beans should be planted just deep enough to insure moisture for germination, which is usually about two inches.

Cultivation.—As soon as the beans emerge from the soil, these should be begun. The first cultivation should be thorough, stirring all of the soil to a depth of about three inches. Later cultivations must be made to kill weeds while they are still small. These cultivations may be made somewhat shallower than the first. Beans should never be cultivated when wet with dew or rain, as that is a means of spreading disease.

Harvesting.—The crop is ready to harvest when the pod turns yellow, since the beans are then in an advanced hard-dough stage. They are usually harvested with a bean harvester, although on small areas they are often pulled by hand. It is usually not possible to cut beans satisfactorily with a mowing machine or self-rake reaper, because the pods hang so close to the ground that this kind of machine cuts them and causes much loss. The important thing is to get the beans harvested as promptly as possible after they are mature. This is especially important on red land, which is likely to stain the beans if they are left out after the rainy season begins.

For a considerable acreage of beans, it is very desirable to have on hand a supply of hay caps. These are made of heavy unbleached muslin or light-weight canvas, 3 feet to 3½ feet square, and either weighted at each corner with a half-pound to three-fourth-pound weight, or fastened at each corner with a light stake. Blankets, small castings, concrete weights, or even flat stones or pieces of heavy wood may be tied to the corners—anything, in short, of sufficient weight to keep the cap from blowing off. In some respects it is probably cheaper to use light stakes, which are tied up close to the corner of the hay cap. These stakes should be notched on the sides so they may be pushed into the shock and will not slip out readily. Caps of this sort will keep the bean shocks dry and prevent spoilage in wet seasons.

Threshing.—As soon as the beans have dried out, so that they will thresh readily, they must be threshed at once or put under cover. They

should be hauled to the machine on tight-bottomed, or canvas-covered racks, so that there will be no shattering and loss of the high-priced bean seed. Where there is sufficient acreage, a bean thresher should be purchased. Such machines are especially adapted to threshing the pods, so that the beans are all recovered from the straw, with a minimum number split or damaged.

Where a regular bean thresher is not available, the beans are in some cases threshed out with an ordinary threshing machine with all of the concaves removed and replaced with wooden blanks. The grate bars must be covered over with tin in order that no sharp corners are presented against which the beans may strike. The cylinder should be speeded very slowly, and in some instances it is necessary to take out the cylinder teeth. The cylinder bars alone will sufficiently thresh out the beans to do very good work. This is only possible, however, on beans which have matured very uniformly, and among which there are no late-matured tough beans. Beans are also threshed out with flails or pounded out with forks; and in some instances they are spread out in a large circle and tramped out with livestock.

The beans after being threshed should be put through a reclaimer and polisher, of which there are several kinds on the market. These machines sort, clean, and brush off the dirt if any is present and thus put the beans in an attractive condition for market.

Beans that have failed to mature, or which have molded slightly and are discolored, are sometimes used nearly the same size and weight of good beans, but the screens and air blasts will not make the separation. These are picked out by hand. Various hand-picking machines are available. The principle in the hand or warehouse-picking machine is simply that of passing a thin layer of beans before the operator in an endless belt. The discolored beans are picked out as they go by, and the good beans are emptied into the sack. Beans should be uniformly and carefully sacked up for marketing purposes. It is not a good plan to attempt to market beans that are not sorted into sizes, and that are not uniform in color, as they do not command as high a price.

Continued on page 4

A PEAN TO THE BEAN

BY ELLA McMUNN

I don't know much about relative food values, and the things that make muscle and those that make fat and some that make brains. And I never will know, because it makes me tired to read about them. My very first choice in the way of solid food, three times a day, the year round, would be chocolate cream, but for reasons that will be apparent to anyone who has bought any chocolate creams since the beginning of the war, it has seemed a patriotic duty to abstain from this confection in order that the French girls may have all they want.

But right after chocolate, my choice falls on beans. As soon as the war was declared I took a sack of beans under one arm and a pig under the other, and retired to my cave at Lake Lahash, and I came through the whole dreadful skirmish without a scratch.

Fork and bean! That is a wonderful combination to greet you with its fragrant, steamy odor when you come in these cold March days just about fagged out from digging post holes or picking spring potatoes in the pasture. You get the fragrance as soon as you lift the latch on the back gate, and you know what is coming. So you make a short job of cleaning the mud off your shoes with a chip, and just as you turn your hands into the rain barrel and call them washed, and then flop into your chair in the little cozy kitchen and reach across the red tablecloth for the beans the first thing. You don't even want to talk, until they have warmed you and comforted you and strengthened you, which they will do even better than chocolate creams—and then you thaw out and are civil and decent, and you decide, after a few more helpings, that you will go back and dig a few more post holes, although you may have thought that you were quite dead when you came in.

Of course, you will sometimes get tired of beans. Just as you get tired of your husband, and your religion and the weather, but take them the year around, husbands, religion, weather and beans—they fill an important place in the scheme of existence, and you learn that there is no real substitute for any of them. (P. S. My address is route 2.)

But all beans are not as good as those grown in Oregon, nor are any beans as good as freshly grown ones, for no vegetable seems to fairly pertain without showing signs of external deterioration to a greater extent than they do. I mean by this that a bean might look plump, white and youthful after ten years of storage and might even retain its flavor to some extent, but the taste is a toughness that all day cooking would not overcome.

In Colorado, where the short summer season prevented bean growing to any extent, Mexico and Texas shipped large quantities of the dried product, but a mess of beans meant an all day fire to cook them after they had been soaked all night. The high altitude and the hard water were given as the cause of this, but I believe now that the beans were a hundred years old and petrified and no good to begin with. Added to this the fact that we had beans on wash day (because there would be a fire all day) and the odor of the soapuds of that old yellow soap I don't see any more—thank God—was more smelly than the beans, in my infantile foolishness I thought that Monday was the dreariest, cruelest, horriest day in the week and by all means should be abolished. Or at least the beans and the washing, as both interfered to a great extent with my personal freedom, for every little while or about a million times anyway, my mother would ask me to put a stick of wood in the stove, and it must have been very evident to her that I preferred to wade in the ditch or to make mud pies.

Well, I am willing to let by-gones be by-gones, having come to a country where neither mud nor water are so scarce as they were in my native state. But I must get back to my subject, which, as you may have guessed by this time, is beans.

Friends, countrymen, All! Plant Beans. And remember, in these days of high cost of everything else, that this humble vegetable will put fat on your bones as surely as education, chewing gum and profanity follow the flag.

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DATES OF SLOGANS IN DAILY STATESMAN (In Twice-a-Week Statesman Following Day)

Loganberries, Oct. 9.
Prunes, Oct. 16.
Dairying October 23.
Plax, October 30.
Filberts, Nov. 6.
Walnuts, Nov. 13.
Strawberries, Nov. 20.
Apples, November 27.
Raspberries, December 4.
Mint, December 11.
Great Cows, December 18.
Blackberries, December 25.
Cherries, January 1, 1920.
Pears, January 8, 1920.
Gooseberries, January 15, 1920.
Corn, January 22, 1920.
Celery, January 29, 1920.
Spinach, February 5, 1920.
Onions, February 12, 1920.

Potatoes, February 19, 1920.
Bees, February 26, 1920.
Mining, March 4, 1920.
Goats, March 11, 1920.
Beans, March 18, 1920.
Paved highways, March 25, 1920.
Lard, April 1, 1920.
National Advertising, April 8.
Sheep, April 15.
Dehydration, April 22.
Hops, April 29.
Poultry, May 6.

(Back copies of Salem Slogan editions of the Daily Oregon Statesman are on hand. They are for sale at 5c each, mailed to any address.)

Paper Mill.
Hogs, May 13, 1920.

(It will interest some people to know that these back copies are selling fast—that, nearly every day, orders are received from near and distant points for the whole series. They will be sold out before the fifty-two Slogans are completed, without doubt.—Ed.)