

SCENE SHOWING WILLAMETTE VALLEY FARM AND FRUIT LAND



WALNUTS THRIVE IN OREGON

New Industry Promises Much, and Groves Set Out During Present Year Will Cover 5000 Acres.

By Professor C. Lewis, Oregon Agricultural College.

DURING the last few years walnut growing has passed through a wonderful development in the Pacific Northwest, and this development has been the greatest in the Willamette Valley in Western Oregon, while Yamhill County is probably the banner county. Nevertheless every county in the Valley has the conditions that will make the growing of this very valuable nut highly successful.

Southern Oregon is giving some attention to this industry, and today bearing trees are to be found in every city and village from Ashland to Portland. Undoubtedly there are thousands of acres of ideal walnut land to be found in Western Oregon, extending from an elevation of 200 feet on the slopes of the Cascades to sea level. As yet the regions east of the Cascade Mountains have not developed walnut growing to any great extent, while much of the region is not adapted to this industry. Nevertheless the rich, fertile valleys offer an inviting field for experiment. Although the acreage of bearing trees is yet small, the new plantings that will soon be in bearing amount to many thousands of acres and the Willamette Valley alone will see the planting of 5000 acres to walnuts during the present year.

To the person who contemplates engaging in this industry there is one point that must be understood at the very outset, and that is that there are two strains of walnuts. The first is often known as the soft-shell type, and is grown successfully in Southern California in some of the coast counties. It is of Spanish origin and does not succeed in the Pacific Northwest. When planted in the North, it comes into bloom as early as February or March and is caught by frosts. The second strain is generally known as the French type, and nearly all the varieties have been imported from France. The center of French industry is at Grenoble and here the nut is grown very successfully, even to an elevation of 2500 feet, quite near the snow line. Here this nut has battled with the elements, and the result is a hardy, late blooming walnut. As is characteristic with most fruits and

nuts, the Northern-grown French strain is superior in quality to other types. The Oregon nut also seems superior in size and quality over the majority of imported nuts, and it is safe to say that American enterprise will result in the production of the finest walnuts the world has ever seen.

Walnut-growing is more exacting in its demands than some other lines of horticulture and while very profitable and easy to grow, nevertheless must have certain requirements, such as proper soil and carefully selected trees and a little special care the first few years, if real success is obtained.

The walnut develops a pronounced tap root and requires a deep, rich, well-drained soil. Many of the red hill lands seem to furnish very desirable soils. The soils to be avoided are the so-called white lands, which are always poorly drained, and certain types of subsoils, namely, those which consist of hard-pan, cement gravel and very loose gravel.

There are plenty of soils in Western Oregon that consist of good rich soil to a depth of from five to fifteen, and at times even thirty feet, that are all good walnut lands.

Where it is possible to do so, grafted trees should be planted and the acorns used on these grafted trees should be carefully selected. If this is done the result will mean an orchard containing trees every one of which will bear a high-grade commercial nut. Should the acorns be carefully selected from the same trees or trees of the same variety, the result will be a remarkable similarity of product, which will bring a very high price. Such a walnut orchard would command a greater price than any bearing fruit orchards that are being sold today.

Should one be unable to secure grafted trees, selected seedlings or nuts from isolated trees or orchards of one variety should be grown. If nuts are planted they should be cultivated in the nursery from one to two years. The ground should be carefully plowed and put into good garden condition before trees are planted and good cultivation should be maintained, as is practiced by our best orchardists. The walnut is a very rapid grower and develops into a very large tree, and as a result, must be given plenty of room. From 50 to 60 feet should be allowed for the tree. While the orchard is still young, other fruits, such as apples, pears, prunes or peach, can be planted as fillers, and when crowding begins, the fruit trees can be removed.

Some growers plant small fruits and garden truck the first few years.

Very little pruning is required. The tree has a tendency to droop considerably, and it is found desirable to head the trees high. No laterals are allowed to grow the first three years, and then the head is formed from six to eight feet from the ground. Under no conditions should the tree be headed in, as it would tend to develop a spreading instead of an upright tree.

As yet there are no serious insects, pests or plant diseases of the walnut in Oregon, and in this respect the industry has a decided advantage over fruitgrowing. The trees come into bearing the fourth year and double every year after-

ward up to maturity, which would be from 15 to 20 years of age.

The best varieties to grow are the Franquette and the Mayette. These are of the highest grade, are large, handsome nuts, the meats fill the shell well, have a light colored pelle, are rich in flavor and very productive.

Walnut-growing offers one of the finest fields of invention to be found. There is a large area of walnut land that can be purchased from \$5 to \$100 per acre. Good grafted trees can be obtained for \$1.50 apiece, and nine trees are enough for an acre. Seedlings cost from one-third to two-thirds less. One man and team can easily care for 40 acres. From the seventh year on the investment will pay good interest on a valuation of \$1000 per acre, and a good bearing orchard will easily bring that figure.

There is no danger of overproduction, as the present supply of nuts in the United States is less than one-half pound per capita. Nuts as a food are coming into greater demand. Oregon nuts wholesale at 15 cents to 20 cents per pound. At 10 cents they will pay on the investment.

PEARS FIND READY MARKET

This Fruit from Oregon Orchards Has Sold for 18 Cents a Pound by the Carload in New York.

By Charles A. Malheem.

AS a fruit of particularly appetizing quality, the pear leads the list. It is the favorite in France, whence the best varieties known in present-day markets originated, and in that, and other European countries, has always commanded the highest prices in competition with other fruits of equal quality. This condition exists to a marked degree in the United States. The use of fruit as a regular diet is almost universal with us, and the increasing demand for better grades is largely the result of education or natural habits in that respect.

Hence American consumption calls

for the very best pear that can be produced, and to take care of that exacting demand, as far as it will go, Oregon's entire output is annually requisitioned by the Eastern markets. New York people, especially, are familiar with our pears and want them at any price. In 1907 they paid 18 cents per pound wholesale for them by the carload, and again during the past season the Oregon pear brought more money in Manhattan than did any other fruit, regardless of kind or origin. This is a remarkable tribute to the excellence of our product. The general quality of the pear is the only advertising value it possesses. It has no fancy appearance to commend it to public attraction. The blushing cheek and alluring colors of the apple and peach are lacking, and its reputation must be based exclusively upon sterling merit.

The industry in Oregon is still in its infancy. Its progress, as compared with that of the apple, has been slow, and it is perhaps fortunate that this condition has existed. When it was first started transportation facilities were not up to the present standard, local markets were limited and the Eastern supply was adequate to take care of the demand. With decreasing production there, however, markets were gradually opened and, aided by the fruit's reputation, the growth of the industry quickly followed along substantial lines. In the meantime cultivation had been conducted upon a basis of skillful experiment and the final development of a fruit without superior in any locality is largely to be attributed to that fact, as well as the tireless energy and present sagacity of such pioneers as the late J. H. Stewart, of Medford, and others, who, recognizing this state as an ideal one for pear culture, devoted a half score of years of effort to accomplish this invaluable result.

In 1908 the aggregate of pear-bearing orchards in Oregon was 2000 acres, with 10,000 acres of young trees. The acreage planted during the present season will be the largest on record, and basing upon the general outlook, it can safely be estimated that within ten years more than 100,000 acres of the fruit will be in full bearing, and contribute to the state's annual resources not less than \$10,000,000. This is justified by the success thus far achieved. The unprecedented returns received by

our fruitgrowers for their fancy pears has resulted in a greater attention to pear culture than was given it under former conditions, and the present general activity unmistakably emphasizes the brilliant future of the industry.

No variety of fruit can be produced to better advantage and yield greater net returns to the orchardist than the pear under properly applied methods, in Oregon. Our climate is as nearly perfect for the successful cultivation of this fruit as the horticultural world can discover. The growing demand for the Oregon pear throughout the East and West, the increasing prices paid for it and the decreased production throughout the East insure the certainty of markets. Production is more regular and prolific than the apple, the danger of damage by frost more remote. The keeping quality of a well-cultivated pear of the best variety is sufficient to carry it, under the improved methods of transportation, to the Eastern markets, as well as Europe.

Our season of production is an interim. Our pears are placed in the California pear, which serves to open the markets and stimulate the demand. The latter is at its best when the Oregon pear arrives, and the standard of prices is not adversely affected by the anticipated volume of Eastern crops, but on the other hand is advanced by reason of the known superiority of the Oregon product. As an illustration of the growing demand for the same and the astonishing increase in selling price, may be mentioned the fact that in 1897 the top-notch figure paid in the New York market for Oregon pears was \$2.50 a box, as against \$5.25 a box ten years later.

The ultimate possibilities of the pear industry in this section are difficult to presage. It is a question of the amount of over-production. The market is constantly widening, the demand naturally growing by increased population, and the best fruit is being produced, becoming better each year. If the present careful methods of packing and shipping are continued and cultivation carried on in accordance with the principles of scientific horticulture, it may safely be said that the prospects are limited only by the extent of our available lands.

GROWER REAPS BIG PROFITS

Experience of Mosier Orchardist Shows What May Be Done by Proper Methods on Oregon Apple Land.

By A. B. Bateham, Manager East Hood River Fruit Company.

ALREADY Oregon is one of the leading fruit states of the Union. Inviting in the fruit industry in Oregon that each year increasing numbers of newcomers start their own orchards. Hundreds of thousands of dollars of Eastern money are invested each year in fruitgrowing in this state. Foremost among those who actively engage in the business are business men from Portland and other cities of the Coast, who, from personal observation, have become convinced of the security of the investment and desirability of the vocation.

The products of Oregon orchards are known and sold in every country of the globe and in almost every city of the United States. The prices which this fancy fruit sells for seem almost marvelous, but it is not more so than the carrying and keeping qualities of the fruit and its beauty, fragrance and high flavor. England's quest through all lands for the very best is rewarded by securing shipments of unsurpassable Oregon Yellow Newtown Pippins. New York's insistent demand for quality is satisfied with the unequalled Oregon Spitzengruber and other choice apples.

A prosperous Oregon fruitgrower says that he once abandoned fruitgrowing in an Eastern state because it seemed to be the most heart-breaking business he ever knew. Through the Winter, anxious eyes scanned the thermometer and severe nips caused apprehension and often failure, while during the remainder of the year, too much or too little rain threatened the crop. Contrasting that experience with the equitable seasons of Oregon he says that not only is his bank account healthier, but life in general is worth living.

If 1909 Oregon fruitgrowers were interviewed each would tell the same general story of prosperity and contentment, only varying in details. One instance may be given of a neighbor well known to the writer, J. P. Carroll, who came from Kansas to Oregon in 1884 and bought 40 acres in Mosier Valley, all in brush, grub oaks and pines. His capital only sufficed to buy the land and put up a temporary cabin and barn. Two years later he had cleared enough land so that he set out six acres of apple orchard. He raised some corn and other crops to help along and kept clearing more land each year until in three years more he increased his orchard to ten acres. By the time the oldest trees were in bearing the product brought in \$1200. In 1904 and 1905, the proceeds were \$2000 each year. In 1906 the yield increased to \$4000. There was a short crop in 1907, but he was able to get \$1000 for his apples where and his apples brought about \$2000. This year he has already sold \$4000 worth and has about 1900 boxes stored in his fruit house awaiting shipment.

The farm at present is all cleared and has ten acres of bearing apple orchard and 18 acres of trees two to four years old. Three acres of cherries six years old and seven acres of apples were planted this fall. He has a fine large fruit house, is well equipped for the business, owns nothing and will take the returns from this year's crop to build a comfortable dwelling house. He does not want to sell, for he says he is happier there than he would be anywhere else, and will make more money than if he sold for \$40,000 and invested in other ways.

This story of real success shows what has been done on an Oregon fruit farm without any side help or speculation. If others should fail to do as well, it would be only owing to differing dispositions in men.

PRUNES AN IMPORTANT CROP

Fruit, Once Slighted, Has Won Its Way Into Wide Markets Where the Demand Is Constantly Growing Stronger.

By W. K. Newell, President Oregon State Board of Horticulture.

THE prune is an important factor in Oregon horticulture. It is surpassed in value of crop only by the apple in this state. Other standard fruits may be grown in many localities, but the Italian prune finds a congenial home only in certain sections of the Pacific Northwest. The Italian, or, as it is now generally called, the Oregon prune, is by far the best of all varieties. We may well claim the name, Oregon, for this prune, as 80 per cent, at least, of the total production of the variety is produced in Oregon.

Prunes are grown on a commercial scale in Jackson, Douglas, Lane, Linn, Benton, Marion, Polk, Yamhill, Clackamas, Washington, Multnomah, Columbia, Wasco, Umatilla, Union and Malheur counties. In the four counties east of the Cascade Mountains the bulk of the crop is shipped to Eastern markets in the fresh or green state and usually brings handsome returns. When the fruit is shipped fresh, it is picked as soon as it is well colored and is packed in what are known to the fruit trade as four-basket crates. In packing the prunes they are placed in the "baskets" in layers with white paper between each layer. Packed in this way they carry well and present an attractive appearance.

The prunes grown west of the Cascade Mountains are cured in evaporators with artificial heat. Every large grower has his own plant, and in every prune-growing neighborhood there is at least

one evaporator which does custom work for small growers. The average annual crop of prunes in Oregon is about 27,000,000 pounds of dried prunes and from 100 to 150 carloads of fresh prunes. The average price is about 45 cents per pound for the dried prunes and, perhaps, 50 cents per crate, or \$900 to \$1000 per car for the fresh fruit. It will be seen that the value of the entire crop amounts to about \$12,500,000 annually. This year, owing to very unfavorable weather, the crop was not up to the average.

The best grades of prunes are usually sold to evaporator operators at from \$15 to \$20 per ton fresh. An acre should produce from five to seven tons of fresh fruit. Pickers are paid from 5 to 7 cents per bushel box for gathering the fruit, according to the size of the prunes and the weather conditions. An average day's work for a picker is from 20 to 40 boxes. I believe it is absolutely correct to say that from the standpoint of food value the prune is the most valuable fruit we grow, and it should find a place on the average garden table of every home in the land. It is cheap, nourishing, palatable and healthful. For many years a foolish prejudice existed in the minds of many such persons as an article fit only for the table of a boarding-house. Happily, this prejudice has been overcome and market prospects are now excellent.

The prune needs a well-drained, warm soil for its proper development. It succeeds admirably on the red hill lands of the Willamette Valley and in the warm, sandy valleys of Douglas County. It is a good time now to plant prune orchards and the prospective orchardist should give this fruit attention.

