

Agriculture in Pima County, Arizona

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One familiar with the many and unrivaled resources of Pima County needs no prophetic vision to foresee the inevitable position of TUCSON among the cities of the Great Southwest. "He who runs may read." This is in truth GOD'S COUNTRY. No other section of this great and rich commonwealth of states can boast a natural endowment more magnificent. Prodigal was the Infinite when He made Arizona.

Tucson has tributary to it the richest and most productive copper regions known, is surrounded by a splendid stock growing country, has the Southern Pacific shops, is headquarters for the "Randolph Lines," is the largest and most important business point in the territory and is a culture and educational center. Her climate is one of her proudest boasts—an asset worth millions of dollars.

But the time has come to exploit the AGRICULTURAL POSSIBILITIES OF THIS SECTION. The belief that nothing but a disturbance can be raised in Arizona must be dissipated. The Chamber of Commerce must advertise the fact with ever increasing emphasis that there is NO RICHER SOIL IN THE WORLD than right here

in this so-called desert country.

Nor is it necessary to await the consummation of some gigantic irrigation project on the part of the federal government. UNDER PRESENT CONDITIONS between 35,000 and 40,000 acres of splendid farming land tributary to Tucson can be irrigated. Opportunities are NOW offered the energetic and progressive agriculturalist. await the inauguration of a general irrigation system, and one is confronted by a fabulous increase in the price of land. WHEN LAND IS CHEAP IS THE TIME FOR THE FARMER TO INVEST. Not only the fertile valley land of the Santa Cruz and the Rillito, but also very much of the extensive upland is potential with untold wealth. Land purchased at from \$15.00 to \$40.00 per acre, when irrigated by means of gravity ditches or pumping plants, will at once increase in value from 300 to 500 per cent.

Industry, intelligence and a limited capital assure success in intensive farming. All conditions are favorable and NOWHERE ARE THE MARKETS BETTER. The fact that the local market supplies less than ten per cent of the fruit, vegetables and agricultural products consumed locally is sig-

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nificant, insuring exceptionally high prices for years to come. A quarter section of the best land in the so-called agricultural states will net no greater profit than a twenty acre tract in Pima county, given proper management. An investment of one-fifth the capital invested in Iowa will produce larger net results, and with an expenditure of much less labor.

Through irrigation agriculture is destined to become one of the greatest industries in Pima county. The development of water for irrigation purposes is one of the most important questions affecting the future welfare of Tucson. The Arizona Agricultural Experiment station, with its head offices in Tucson, is conducting highly interesting investigations of the underflow of the water, and it is fully demonstrated that the water supply of the valley is capable of great development by pumping. However, the supply now used for irrigation is obtained mainly from gravity ditches heading in the sandy river beds of the Santa Cruz and the Rillito; and the area now under cultivation, not exceeding 8,000 acres, is confined largely to the valley lands, **THOUSANDS OF ACRES COULD BE ADDED** to the valley land now cultivated by the further digging of gravity ditches or by the installation of pumping plants.

Even a good windmill, with sufficient water tank capacity and an economical conservation and distribution of water, will irrigate a garden and a few fruit trees which, with sev-

eral hundred chickens and a few hives of bees, will provide a good living for a small family.

WATER MAY BE OBTAINED IN ABUNDANCE by digging wells from eight to 125 feet deep, depending on the proximity of the river beds. The kind and size of the pumping plant needed is determined, of course, by the lift of the water and the area to be irrigated. Gasoline engines, while more expensive to install and operate than windmills, raise more water in proportion to their cost and have the added advantage of being serviceable twenty-four hours in the day. Electric motors and steam engines are also used considerably.

A pumping plant—steam engine—originally costing \$2,000 has been in successful operation for eleven years on a 100-acre ranch near Tucson, and is today apparently as good as ever. Fuel for irrigating one acre of alfalfa with this plant costs \$1.00. The cost per acre varies with different pumping plants, kind of fuel used, depth of the water, kinds of crops, etc.

Another Illustration.

On the outskirts of Tucson on typical mesa land, a small pumping plant has been installed recently at the following expense: Digging a one hundred foot well, including a ten inch pipe twelve feet in length sunk in the bottom of the well, \$125; a 5,000 gallon tank with elevated platform, \$190; a four-horse power gasoline engine, \$250; and pump \$125. Total expense—all labor hired—\$690. This engine

pumps 3,500 gallons per hour at a cost of about 14 cents, or about four cents per one thousand gallons. This plant—with which it is impossible to pump the well dry—would easily irrigate from five to ten acres of fruit trees, alfalfa, garden truck, strawberries and other small fruit. \$500 will purchase from ten to fifty acres of good unimproved mesa or valley land. A comfortable adobe dwelling and necessary out buildings need not exceed \$1,200.00 in cost. Hence a total of less than \$2,500 will place a rancher WHO KNOWS HIS BUSINESS, in a position where he may become independently rich. Place this same plant in the valley, where water may be obtained at a depth of from eight to thirty feet and the cost of operation would be reduced to a minimum.

FOR INTENSIVE FARMING water can be pumped with profit from fifty to one hundred feet, depending on the efficiency of the plant, intelligence of the farmer, etc. For extensive farming, however, the lift should not exceed forty feet.

A gardener farming intensively two and one-half acres of upland, just east of Tucson, states the cost of irrigating the same with a four-horse power gasoline engine pumping 4,000 gallons per hour to be but \$27 for gasoline and lubricating oil from February 1st to June 1st, 1908. The well is 86 feet deep with twenty feet of water. The crop consists of all kinds of vegetables and many fruit trees, including quinces, apricots, plums and apples. This plant running ten to

twelve hours per day will irrigate ten acres of similar crops.

The PRODUCTIVITY OF PIMA COUNTY SOIL IS AMAZING. On mesa land one mile east of Tucson a bed of Arizona Everbearing strawberries twenty-eight feet by twenty-two feet, set out February 1, 1907, produced during April and May, 1908, a crop that sold for \$63. The second crop due in June and July promised even greater results, but the owner used the bed for transplanting a larger area.

A Few More Hot Facts.

Alfalfa produces six crops per year, netting a profit of from \$65 to \$120 per acre.

All vegetables yield abundantly.

On a small ranch near old Fort Lowell, where only seventy acres are under cultivation, the following results are obtained:

The average net profit is \$100 per acre on thirty-five acres of alfalfa.

On a four-acre yield of strawberries—Arizona Everbearing and Brandywine varieties—the net profit per acre in 1907 was nearly \$500, this being very much below the average profit from year to year. The same land has netted a profit of \$1,000 per acre from the sale of plants and strawberries. The plants bloom practically every month in the year except January, and the berries ripen from the middle of March until the first of December, and often until Christmas, although the main crop is produced during April, May, June and July.

Sweet potatoes of a very fine variety have averaged on this land for

nine years a net profit of \$300 per acre.

Green chili averages a net profit of \$300 per acre and as high as \$727 worth has been sold from two-thirds of an acre.

There is an enormous profit in tomatoes.

\$1,815 worth of onions were sold off of four acres in 1907.

The above is a conservative statement of facts.

Many others farming intensively are obtaining as good results—some better.

Fruits.

Nectarines and peaches produce well in favored localities. Apples, plums and pears are a profitable crop and quinces and pomegranates do well. Olives, figs, grapes and dates rival the best of other sections.

Tucson is particularly fortunate in being the seat of the Territorial Agricultural College and the Arizona Agricultural Experiment Station. Director R. H. Forbes and his efficient staff are performing a most important and practical work along agricultural lines. and by their investigations are contributing materially to the economic wealth of Arizona. No single agency is doing more to advance the farming interests of this section. Bulletins, giving practical information on a wide range of subjects are published for free distribution. The up to date agriculturalist is a man of brains. SCIENTIFIC METHODS ARE ESSENTIAL to the highest success, and especially is this true in intensive farming. To start with TUCSON WANTS ONE THOUSAND INTELLIGENT FARMERS with a capital of from \$2,500 to \$3,000 each.