

Progress of Dry Land Farming

THE idea that dry-land farming is of modern origin has a very extensive belief. Such a view is far from the truth. It gained currency because of the fact that this process was not extensively practiced in Canada or the United States until within the past two decades. But even on this continent, individual farmers have practiced dry-land farming methods for the last 40 or 50 years, but in a way so quiet and unobtrusive that none but their neighbors knew about their operations.

The facts are, however, that dry-land farming has been practiced more or less since the dawn of history. With the exception of Egypt, where irrigation was extensively practiced, all, or nearly all, the great nations of antiquity rose to eminence in areas where the rainfall was so slight that dry-farming methods must have been practiced. Much of the area ruled by the Assyrians and Babylonians was dry. The same is true of much of India and China with their teeming populations. The same may be said of Eastern Central Europe and Western Central Africa.

In Tunis, in North Africa, the country can be farmed only by dry-farming methods, and yet in the early centuries of the Christian era, Tunis furnished to Rome immense quantities of wheat and olive oil. Remains of granaries now stand on sandy wastes—monuments of dead agriculture.

Large areas of Southeastern Europe were not furnished with an abundant rainfall any more than they are at the present time, which means that dry-farming must have been practiced there in ancient times. The Indians of Mexico also practiced dry-farming in the dry area of that country away back in the long forgotten centuries. The truth is, that in all the past more than half the area cultivated has been farmed more or less on the principles which underlie successful dry-land farming.

Area Dry-Land Farming Covers.

With reference to this question the people of Canada and the United States are only concerned with the respective areas in these countries, which, if farmed at all must be farmed on the dry-land plan. Of course it is not possible in the present state of our knowledge to define exactly the areas that must be farmed by dry-land farming methods.

The records of the precipitation in many of these areas have not so far been recorded. It would, however, be approximately correct to say, that in Western Canada there are not fewer than 100,000,000 acres of arable land that must be farmed more or less on the dry-land plan—if it is to be farmed successfully. This will include certain areas in Southwestern Manitoba, still larger areas in Southern Saskatchewan, and yet larger areas in Southern Alberta.

In the United States the area that can only be farmed on dry-land farming principles covers parts of 14 states, all of which lie west of the Mississippi River. The dry-land area in these covers not less than 300,000,000 acres. It was formerly range pasture land, but in the not distant future the present indications point to the fact that it will be farmed by dry-farming methods. This means that an area six times as large as the State of Minnesota, which formerly produced grass only, will soon be devoted to growing large quantities of grain.

What Dry-Land Farming Means.

With reference to precipitation, countries are classified as arid, semi-arid, sub-humid and humid. A region may be classed as arid when the annual rainfall or precipitation is less than 9 inches. It may be classed as semi-arid where the precipitation is between 9 and 18 inches, as sub-humid where it is 18 to 27 inches, and humid where it is more than 27 inches. It is not to be understood that grain crops may not be grown when the precipitation is less than 9 inches on the average. Under these conditions, however, such farming becomes hazardous in the absence of irrigation. When the precipitation runs from 9 to 18 inches, grain crops cannot be successfully grown save by dry-farming methods. With 18 to 27 inches of rainfall good farming should succeed fairly well every year. When the rainfall is above 27 inches grazing lands may be benefited by the heavy precipitation, but seed time and harvest are very liable to be interrupted by an over-abundant supply of moisture. The heavy precipitation also carries much of the soluble plant food in the soil down into the drainage water where it is lost to the crops. About 20 inches is ideal in a moderately cool climate, when much of it

falls during the period of growth in the crops.

Dry-land farming does not mean, of course, the growing of crops without precipitation, or even without several inches of rain, nor does it mean the growing of as wide a range of crops as may be grown in the same areas when it may be supplemented by irrigation. But it does mean the growing of certain crops successfully that could not be thus grown by the ordinary methods of farming as practiced in humid or sub-humid areas. It is a more difficult kind of farming than the other. It does not mean that a man who follows it is following a line of farming in every sense so desirable as where the rainfall is ample. But it does mean that a good living may be obtained from a farm of suitable dimensions in dry-land areas, when the work is intelligently done.

Influences on Dry-Land Farming.

The influence that affect dry-land farming include: (1) the amount of the precipitation; (2) the time of the precipitation; (3) the character of the soil, and (4) the nature of the temperature. The amount of the precipitation has already been referred to. When the bulk of the precipitation falls during the growing period the benefit derived from it is greater than when much of it falls in the Winter season. In Canada and the United States, east of the Rocky Mountains, the bulk of the rain falls in May, June and early July, then is when it is most needed. In some of the inter-mountain districts it is more evenly distributed. Still farther to the west it falls chiefly in the late Fall, Winter and early Spring. Where it falls during the period of growth, Spring crops may be successfully grown, and in some areas also Winter crops. Where the precipitation comes mainly in the late Autumn, grass and fodder plants not only supplies fodder for stock, but also improve the texture of the soil.

While this is true, no farmer should neglect a more or less frequent Summer-fallow; for it is questionable whether the moisture of the soil will be conserved and weeds kept in check without this useful system of farming.

Let me point out that mixed farming does not mean that the settler should confine his attention to any one particular line of livestock. This should be left largely to the tastes of the farmer, as some will succeed best with cattle, others with horses, and a third, perhaps, with sheep or swine. No matter what line is followed it will be found that the keeping of stock will prove beneficial both to the soil and to the pocket of the farmer.

It is hoped that the demonstration farms will have considerable influence upon this phase of farming. Every effort will be put forth to accomplish this ideal method of assuring a safe revenue and one that cannot be irreparably affected by adverse climatic conditions.—Country Life in Canada.

Avoid Silo Accidents.

By observing three simple rules, the farmer who is using silo filling machinery for the first time may avoid some of the accidents which occasionally damage new machines beyond repair.

Here are the things that the inexperienced man should do:

1. Be sure that the machine is being run at the proper speed.
2. Take care that corn is never put into the machine until the motion is up to full speed.
3. In stopping be careful not to shut off the power until the elevator is empty.

If the elevator is not empty the cut material will fall back and lodge in the fans. Then when the machine is started again the cut corn jams the fans and as a result they are bent or broken.

Some men spend so much energy bustling around thinking they are hurrying like everything that they have little strength left for work which counts. Hold up, fussy brother. Put a steady hand upon yourself. Cool your radiator a little. Come down to intermediate speed. No use to wear out your gear and get nowhere, either.

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