CHAPTER XX
DRY-FARMING IN A NUTSHELL

This is an excerpt from John Widtsoe's book on dry farming: Chapter 20, Dry-Farming in a Nutshell, excerpted from Dry-Farming: a system of agriculture for countries under low rainfall, by John A. Widtsoe, A.M., Ph.D, President of the Agricultural College of Utah, published 1920.

After almost 100 years this book is still used by farmers around the world. Why might that be?

LOCATE the dry-farm in a section with an annual precipitation of more than ten inches and, if possible, with small wind movement. One man with four horses and plenty of machinery cannot handle more than from 160 to 200 acres. Farm fewer acres and farm them better.

Select a clay loam soil. Other soils may be equally productive, but are cultivated properly with somewhat more difficulty. Make sure, with the help of the soil auger, that the soil is of uniform structure to a depth of at least eight feet. If streaks of loose gravel or layers of hardpan are near the surface, water may be lost to the plant roots.

After the land has been cleared and broken let it lie fallow with clean cultivation, for one year. The increase in the first and later crops will pay for the waiting. Always plow the land early in the fall, unless abundant experience shows that fall plowing is an unwise practice in the locality. Always plow deeply unless the subsoil is infertile, in which case plow a little deeper each year until eight or ten inches are reached. Plow at least once for each crop. Spring plowing; if practiced, should be done as early as possible in the season.

Follow the plow, whether in the fall or spring, with the disk and that with the smoothing harrow, if crops are to be sown soon afterward. If the land plowed in the fall is to lie fallow for the winter, leave it in the rough condition, except in localities where there is little or no snow and the winter temperature is high.

Always disk the land in early spring, to prevent evaporation. Follow the disk with the harrow. Harrow, or in some other way stir the surface of the soil after every rain. If crops are on the land, harrow as long as the plants will stand it. If hoed crops, like corn or potatoes, are grown, use the cultivator throughout the season. A deep mulch or dry soil should cover the land as far as possible throughout the summer. Immediately after harvest disk the soil thoroughly. Destroy weeds as soon as they show themselves. A weedy dry-farm is doomed to failure.

John A. Widtsoe, A.M., Ph.D.
President of the
Agricultural College of Utah
1907-1916
now Utah State University,
Logan Utah

DRY
FARMING
by
John A Widtsoe

Table of Contents:

Read the above chapters by visiting www.soilandhealth.org/01aglibrary/010102/01010200frame.html

Give the land an occasional rest, that is, a clean summer fallow. Under a rainfall of less than fifteen inches, the land should be summer fallowed every other year; under an annual rainfall of fifteen to twenty inches, the summer fallow should occur every third or fourth year. Where the rainfall comes chiefly in the summer, the summer fallow is less important in ordinary years than where the summers are dry and the winters wet. Only an absolutely clean fallow should be permitted. The fertility of dry-farm soils must be maintained. Return the manure; plow under green leguminous crops occasionally and practice rotation. On fertile soils plants mature with the least water.

Sow only by the drill method. Wherever possible use fall varieties of crops. Plant deeply—three or four inches for grain. Plant early in the fall, especially if the land has been summer fallowed. Use only about one half as much seed as is recommended for humid-farming.

All the ordinary crops may be grown by dry-farming. Secure seed that has been raised on dry-farms. Look out for new varieties, especially adapted for dry-farming, that may be brought in. Wheat is king in dry-farming; corn a close second. Turkey wheat promises the best.

Stock the dry-farm with the best modern machinery. Dry-farming is possible only because of the modern plow, the disk, the drill seeder, the harvester, the header, and the thresher. Make a home on the dry-farm. Store the flood waters in a reservoir; or pump the underground waters, for irrigating the family garden. Set out trees, plant flowers, and keep some livestock.

Learn to understand the reasons back of the principles of dry-farming, apply the knowledge vigorously, and the crop cannot fail. Always farm as if a year of drought were coming. Man, by his intelligence, compels the laws of nature to do his bidding, and thus he achieves joy. “And God blessed them—and God said unto them, Be fruitful and multiply and replenish the earth, and subdue it.”

Harvest on a Dry Farm
Box Elder County Utah