

Practical Farming

Helpful Facts Gathered from Reliable Sources
Of Interest to Montana Farmers :: :: ::

(NOTE) If you have any idea to offer to the other readers or wish anything to appear in these columns kindly send it in.

For many centuries arid farming has been practiced in many countries with varying degrees of success. In America, with the westward march of empire, the semi-arid plateaus and foothills east of the Rocky mountains and the international valleys between the Rocky and Cascade ranges have been the scenes of pioneer dry farming for a generation or more. Montana has come later in its settlement and agricultural development than other sections, but it possesses advantages in many respects over regions to the south and east. It's salubrious climate, mild winters, late rainy seasons long days of summer sunshine, bracing atmosphere, and beautiful harvest season are very favorable to agricultural progress. The freedom from hot, drying winds in summer is a distinct advantage.

With a rainfall averaging between thirteen and twenty inches, according to locality, Montana depends upon securing the maximum benefit from the rain that falls. That more than half the rain comes in May and June, during the crop growing season, is a fact of immense advantage to the farmers of the state. While in some seasons and in some sections the rainfall is enough for certain crops, insurance in the form of moisture conservation is a profitable investment.

Conservation of moisture consists in so managing the land as to prevent run-off and secure the maximum diffusion downwards, and then in minimizing the losses by evaporation. By breaking the surface and creating a loose sponge in advance of the season's rainfall, loss by run off may be largely avoided. It is possible in some cases to add the rainfall from higher and broken areas to the natural precipitation on farming land. Evaporation is checked by summer cultivation. Immediately after plowing, which should be early, the disk or harrow is used to prepare an earth mulch before the surface dries out. Afterwards, at intervals during the summer the surface is harrowed to break the crust, destroy weeds and volunteer crops, and prevent evaporation from below the surface. Timeliness is essential in the summer fallow process for moisture lost through weeds and evaporation cannot be replaced.

Fall wheat is the best bet in the way of a semi-arid crop in the Rocky

Mountain region. Its growth comes during two seasons and is completed before the dry season is far advanced, as a rule. Sown about September 1st, in summer tilled land, fall wheat commonly makes a crop of 25 to 45 bushels per acre. The Turkey Red type and a variety called the Khar-koy are most generally grown. For spring wheats the Durum and Macaroni are surest, and the Kubanka variety is in demand. The Marquis is becoming popular. The bald or White Russian barley and the Sixty-day or Kherson oats are preferred because of early maturity. Later sorts frequently fail owing to conditions at the time they should fill out. These and other crops sown early have an advantage over late sowings.

Alfalfa, particularly when sown thinly in rows, on well prepared ground and cultivated, produces good crops of forage. Dry land alfalfa seed is an important crop. One or two pounds of seed per acre in rows is recommended.

Corn uses less moisture than most crops and is especially good for arid conditions. According to altitude from 4,000 feet down, the following varieties are recommended, the first named being for higher and the latter for lower altitudes. Squaw, Gehu, Dakota White Flint, Longfellow, Triumph, Northwestern, Minnesota No. 23, Silver King, Pride of the North, and Minnesota No. 13. Corn should be planted in check rows and cultivated every ten days until August 1st. The smaller varieties may be "hogged off" to advantage. Yields of 20 to 50 bushels per acre may be expected.

Sweet clover has some value as a forage plant, particularly for hog pasture, but the common clovers are better adapted to humid conditions.

Peas and beans flourish when planted on good land and well cultivated. Seed pea growing is becoming an important Montana industry.

Root crops find very congenial conditions. Carrots, rutabagas and mangels grow almost beyond belief, and sugar beets make fine feed for live stock. Potatoes of superior quality are produced and a variety of garden crops can be successfully grown. Summer fallowed land well cultivated is desirable for the garden.

Strawberries, raspberries, currants, and gooseberries can be similarly

grown. Some apples, plums and sour currants are possible.

Among trees and shrubs the box elder, willow, Canadian poplar, birch, Russian olive, Siberian pea and lilac may be grown.

Dry farming to work out best, needs a moderate complement of livestock including some cows, pigs, chickens, and perhaps a few sheep. These may be used as gleaners, pastured on adjoining lands, and fed on cheap feeds.—F. S. Cooley in Montana Farmer.

HOW ICE SHOULD BE STORED FOR COUNTRY USE

Ice is a very important commodity and, therefore, certain important principles must be considered in the construction of a place to store it. Investigators of the department consider that there are four important things to be considered in order to keep ice well. These are as follows:

1. The ice must have a minimum of surface exposed to the air or to the packing material. This is most easily accomplished by piling the ice in the form of a cube. A mass of ice 12 by 12 by 12 feet exposes less surface than the same tonnage piled in any form less nearly that of a cube or of a globe.

2. The keeping of good ice depends upon the completeness of its insulation, whereby it is protected from external influences, such as heat and air.

3. Drainage is important because the lack of it interferes with the insulation.

4. The ice itself must be packed so as to prevent as completely as possible the circulation of air through the mass. The more nearly the mass of ice approaches that of a solid cube, both in shape and texture, the easier, with good drainage and insulation, will be the keeping problem. The keeping of ice, then, depends upon the shape of the mass, its insulation, its drainage and its solidity.

The ease and rapidity with which ice may be gathered depends upon the condition and location of the field as well as upon the tools used for doing the work.

If the ice field is covered with snow the formation of ice will be retarded, as the snow acts as a blanket and raises the temperature, thus retarding the ice formation. If the ice sheet is sufficiently thick and snow falls upon it, the snow must be removed before harvesting can proceed; or if, on the other hand, it is desirable to increase the thickness of the ice after the snow falls, the field may be flooded and the snow saturated with water, which is allowed to freeze, thus adding a layer of snow ice. Flooding on small fields may be accomplished in either of two ways: By "overflowing," which consists merely in conducting water to the field, or by piercing the ice field here and there with a bar or auger, to allow the water to force itself to the surface and gradually to saturate the snow.

Snow may be removed from small fields, when necessary, by means of shovels, but upon large fields it will be economical to use horsepower scrapers.

WARM WATER FOR COWS

Do not forget that the cows and calves need water during the winter as well as feed. Do not overlook the fact that if the water is much below the temperature of that fresh from the well, it will require the use of some of the feed consumed to bring that water to proper temperature after the animal drinks. It is as foolish to expect that a cow can do well at milk production drinking cold water through a hole in the ice twice a day, as it is to think that she can produce milk when eating only corn stalks. Milk is about 85 per cent water and liberal milk producers will not drink sufficient cold water to supply their needs. We have seen the effect of cold water on a milking herd and know that this is so. Arrange some way by which the cow can have water of the temperature of the well. This can be had by pumping at about the time the cows are ready to drink, or can be provided by using a tank heater. It is just as well also to keep in mind that all other farm animals will do better if they can have warm water.

ANNUAL WEEDS

As to duration our weeds may be grouped into three classes—annuals, biennials and perennials. Annual weeds are those which produce seed and die the same season and they begin their growth; they come up anew each year from seed. Some of the most common annual, agricultural weeds occurring in the west are; pig weeds, wild oats, ragweeds, goosefoot or lamb's quarters, shepherd's purse, foxtail grass, false flax, barnyard grass, squirrel-tail grass, sweet clover, knot grass, Russian thistle, crab grass and sow thistle.

The following suggestions are given for combatting weeds of the annual class: In the case of a tilled crop and fallow land, cultivate thoroughly just after the seed has germinated. On land badly infested with such weeds place a crop that

can be given tillage, such as potatoes, or beets. Under no circumstances allow the plants to go to seed. Clean cultivation is one of the best means of keeping the land free from weeds of all kinds.

SPRING SEEDING

By International Laboratories, Seattle, U. S. A.

What percentage of seed wheat is fertile? That is just what the farmer should know before he starts seeding.

The three prime factors in wheat production are weather, soil and seed. The farmer is compelled to take a chance, always, with the weather, but soil and seed can be analyzed down to thorough mathematical determinations. For example, a grain of wheat is, or is not fertile. If not fertile, it will not grow. A bushel of seed wheat can be 100 per cent fertile, but a great percentage of seed grain is not 100 per cent fertile—some may be only 30 per cent fertile, or less.

Now for example: Supposing a farmer should sow seed only 30 per cent fertile from which he harvested a crop of 15 bushels per acre, would he not have harvested a crop of 48 bushels per acre had his seed been 100 per cent fertile? Or had he known that his seed was only 30 per cent fertile he could of sown enough more seed to bring his yield much higher than 15 bushels per acre. Every extra bushel of wheat you can produce is just that much gain.

The money that has been lost by sowing dead seed wheat will never be known, but will figure into the millions. Wheat will probably be higher this coming harvest than has ever been experienced before. Today \$1.41% is the quotation on the Chicago market of July wheat. At this price, or half a price every extra bushels per acre counts up mighty fast. But to raise these extra bushels it is absolutely necessary to sow fertile seed.

The farmer should not guess or take a chance when sowing his spring seed wheat, as crops will be curtailed in proportion to worthless seed sown. Montana soil is generally so productive that a poor crop will be a reflection against the farmer's ability to properly prepare and seed his land.

Wheat growers are in the business for the money they hope to make. The average farmer has a thorough understanding, no doubt, of his land and climatical conditions. He works hard to prepare his soil for the crop. His future hopes are at the mercy of the coming harvest. Then with all of this and more at stake, it does seem strange that so much seed of which not a thing is known is sown.

If there is any better wheat grown than is raised in Montana, no man knows where it is; and the best of these are the spring wheats. We are continuously testing wheats and flours from all parts of the world so know whereof we speak.

To thoroughly understand the full value of soil and seed, it is necessary to rely upon chemistry. Those farmers who are chemists seldom have proper equipment or time to make determinations. To be worth a rap, among the many determinations beneficial to the farmer there isn't any that assures him so much success as the fertility test on seed grain.

WILL AID FAIR DISPLAY

Helena, Montana, February 11th.—The \$50,000 appropriation which the present legislative assembly made to defray the expenses of the Montana exhibits at the San Francisco and San Diego expositions will enable the Treasure State to make a creditable showing at both these big fairs. David Hilger, chairman of the Montana Exposition Commission, and Frank A. Hazelbaker, Secretary of the Commission, as well as the other members of the commission, were extremely grateful for the support given them by the legislative members in the matter of the appropriation.

"Had Montana been compelled to stagger through the expositions without this appropriation," said Mr. Hazelbaker before leaving for San Francisco, "the best we could have done would have been very embarrassing and mortifying to the people of Montana who will visit the expositions. They would have seen magnificent exhibits from our neighbor states, and, without the appropriation, a makeshift from Montana.

"The \$50,000 which the legislature has appropriated to carry through the

Big 4

Will sell our "Big 4" plowing outfit or will trade for land.

See me for terms and other particulars

Chas. E. Behner

Phone 126 L. or at St. Clair Jewelry Store

Montana exhibits will enable us to make a showing which will be a credit to the state; one of which every Montana visitor to either fair will be proud and which will give this state more advertising than could have been purchased with five times that amount of money spent in any other way."

NOTICE OF SALE
NOTICE IS HEREBY GIVEN that at my Warehouse on the Great Northern Right-of-Way, First Ave. So., Glasgow, Montana, at 2 o'clock p. m., March 8th, 1915, I will sell at public auction, to the highest bidder for cash, the following property:
5 Sanitary Closets.
The said property was stored with me by J. J. Mullins and the storage charges have not been paid. There is now due me on the property, Thirty-Five and Fifty Cents (\$35.50).
40t4 THOMAS H. MARKLE.

The Courier for first class job work.



Scene taken from Jack London's "An Odyssey of the North." At the Optheum, Sunday, February 14, afternoon and evening.



THE MESSENGER SURPRISES THE GOOD JUDGE

JUST by the taste and the way it keeps you tobacco satisfied, you can tell that "Right-Cut" is the Real Tobacco Chew.
For the first time in your life you'll get the satisfying taste of pure, rich, mellow tobacco—seasoned and sweetened just enough.

Ready chew—the taste comes steady all the while right from the start.

Take a very small chew—less than one-quarter the old size. It will be more satisfying than a mouthful of ordinary tobacco. Just nibble on it until you find the strength chew that suits you. Tuck it away. Then let it rest. See how easily and evenly the real tobacco taste comes, how it satisfies without grinding, how much less you have to spit, how few chews you take to be tobacco satisfied. That's why it is *The Real Tobacco Chew*. That's why it costs less in the end.

It is a ready chew, cut fine and short shred so that you won't have to grind on it with your teeth. Grinding on ordinary candied tobacco makes you spit too much.

The taste of pure, rich tobacco does not need to be covered up with molasses and licorice. Notice how the salt brings out the rich tobacco taste in "Right-Cut."

One small chew takes the place of two big chews of the old kind.

WEYMAN-BRUTON COMPANY
50 Union Square, New York

BUY FROM DEALER OR SEND 10¢ STAMPS TO US

AUTOMOBILES

We have several Automobiles for sale, that are almost as good as new. Call for a demonstration or if you have one for sale list it with us.

We are also in the Livery business and will take you any place, at any time and for almost any price, as we love to drive a car, especially about midnight when it is 40 below, and we will do it and appreciate your call.

Night Call, Phone 107

ADAMS & CROSS

It will pay you to see

Otto M. Christinson Land Co.

For Deeded Lands, Homesteads, Relinquishments, Insurance of all kinds, Loans and Bonds.

UNITED STATES LAND OFFICE ATTORNEYS
Glasgow . . . Montana