

## THE FARMER'S ADVOCATE AND HOME MAGAZINE.

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### Grain Growing Without Stock a Failure.

What shall we do to preserve the fertility of our soil? is the question often asked by our pioneers who still hold their original homesteads, and having broken up the whole of their virgin prairie, with all the once vacant land about them bought up and settled on, and having made extensive improvements in buildings, fencing, etc., and living in close proximity to churches, schools, and markets, with good roads, etc., are loth to again go through their pioneer experiences and move further west in quest of new land. In the days of the boom the emigrant's one idea was only the *Almighty Dollar*, without thought of making a home. In most cases he would locate land, erect a shanty, and break up as much as he could, thinking that with the advance in the price of his property and the wheat he could raise, in a few years to make enough money to be able to leave this country and retire to a warmer one. But, fortunately, few have realized their dreams, or else the country would not be what it is to-day—settled with a happy, contented people, who have outlived the day when it was thought *too cold* for a white man to live in. Homes that compare favorably with any elsewhere are evident in nearly all districts of the Province.

Stock-raising is carried on with great success, without which no farmer can hope to succeed. Grain-growing without stock is a failure, as we all too well know. More especially in the older settled districts, where the land has been cropped for years, do we require to keep cattle, pigs, etc., to help us to preserve the fertility of our soil. If every farmer would summer-fallow a part of his farm each year, sowing his summer-fallow with wheat, at the same time seeding down with Bromo or timothy, the following year it could be cut for hay, manured and pastured for one year, when it would be advisable to break up and sow with wheat or other grain. By this mode I believe the fertility of the soil could be sustained; at the same time a handsome return will have been derived from the stock. The expense of fencing would be more than repaid by saving the worry and loss of running up cattle in a district where cattle are often seen running large.

The cattle in this country are mostly grade Shorthorns, and of a well-sorted up-bred, so-called lands, and of the high range land in a district growing a very early and tender and broken up the gain for a few days on good grain and land would be increased. (Continued on page 89.)

Red River Valley, Man.

### Stock Raising the Natural Adjunct to Wheat Farming.

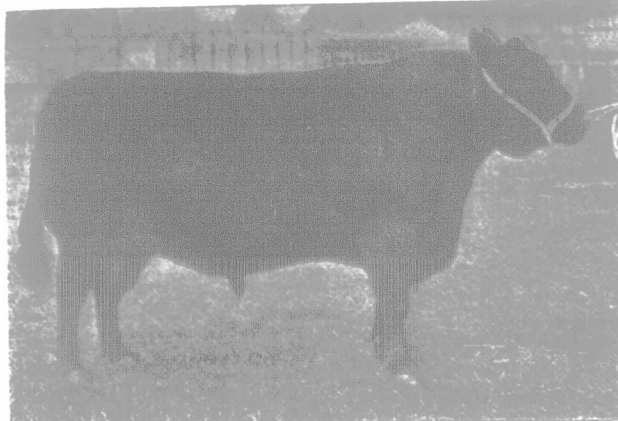
To the Editor FARMER'S ADVOCATE:

Of the many problems confronting the Manitoba farmer, none are more vital or far-reaching in effect than the "Maintaining of soil fertility." Practical agriculturists, as well as scientists in other countries, have given this question much attention, and as the result of experiments and the teaching of science, have made many valuable demonstrations of the injurious effects of depleting the soil of its fertility, as well as the best means of retaining its normal condition, or restoring lost fertility.

A cursory glance at these demonstrations and experiments reveal the fact that the most practical as well as the most effectual way of retaining and developing soil fertility is, in addition to the usual cultivation, restoring to the soil the elements extracted from it by the growth of the plant, by using some parts of the plant itself. This is nature's plan. A plant grows, discharges its functions, and if not interfered with returns to the soil whence it came, to replenish the soil and fit it for the growth of more plants.

Very few will object to the above theory as being correct in principle, but as a matter of practice in Manitoba we find that by a well-defined course of procedure an attempt is being made to overrule this principle. Many of the men who have hitherto made the most money out of farming, in practice follow the theory that the land will from year to year produce profitable crops by a thorough system of good cultivation, summer-fallowing and certain rotation of grain crops, and in not a few instances are we pointed to land which has successfully stood this process for many years without any artificial restoration of plant food.

While I question the utility and have doubts of the ultimate success of that system of farming, and while I do not for a moment admit that Manitoba, though very much favored by nature in the fertility of her soil and favorable season for plant growth, is exempt from the operations of natural laws that are applicable to all other countries.



ABERDEEN-ANGUS BULL, EQUESTRIAN 9953.  
Winner of H. R. H. the Prince of Wales' Gold Medal, Highland Society Show, 1899.

THE PROPERTY OF MR. GEO. SMITH GRANT.

Hitherto it required a good deal of "nerve" to suggest that stock-raising on a "wheat farm" was anything else than a "weariness to the flesh," "a source of annoyance," "a waste of energy," and "a loss of money." Much disgust has been created by men unacquainted with local conditions, "preaching and teaching" that *mixed farming* was the sure panacea of all our ills, whether natural or artificial. But old things are passing away. The man who a decade ago undertook to transform a section or half a section of land from its primeval conditions to a grain producing farm, has accomplished his object. He sees his acreage in a well-tilled condition, his land worked to its full capacity, well cultivated, on the orthodox system of grain rotation and summer-fallow. He may have made money, secured a competence and a good home, but finds himself in this condition: His farm has reached the limit of its production, his family, hired help and himself are one half the year with little or nothing to do. If he is a thinking man, he sees much of the annual yield of his land wasted. He sells the *grain* and burns the *straw* and everything else that the farm produces which in its *raw* state has no commercial value, but of value if manufactured into a finished product. He may for a time increase the yield per acre by more intense cultivation and more summer-fallowing, but the more of the latter the less acreage under crop, hence the total output is not increased; besides, there is a limit to this increasing yield—it cannot be carried on indefinitely without a change of system. If he is a progressive man (and progress is characteristic of the average Manitoba farmer), he looks for relief, he studies how to augment this annual output, and to most men who think along these lines the most feasible solution, and the one offering the greatest inducement, is stock-raising. It is no longer considered heresy to suggest that animal husbandry is the natural, rational adjunct to wheat farming; it is now an established fact that the best results can only be obtained in grain-growing when associated with stock-raising in one or more of its departments. Experiments are being demonstrated in Ontario, where to-day the most fertile, best cultivated, and most productive farms are the homes of the best dairy and

beef herds. The same thing is exemplified in Manitoba, but to a lesser extent.

If we inquire into the philosophy of the close relationship that exists between these two branches of the same industry, and the reason why they reward the husbandman so handsomely when systematically operated together, we find it in part, first, in the fundamental principle that underlies the success of all industries, the proper utilization of waste material, manufacturing it into a finished product; and secondly, in the law of nature which requires the restoring of plant food to the soil. The cow, for instance, takes the grass, straw, or any other food, manufactures some elements of it into milk, which is either used as such or made into butter, the residue being returned to the soil.

To illustrate this point: There are two or three hundred steers being fed in Brandon this winter on wheat straw and a grain ration, to be finished in the spring with hay and grain. These men buy the steers and everything they eat, pay \$2 a ton for the straw, pay for the labor of attending them, and the manure is of no value to them. Scientists tell us that straw has a manurial value of \$2 a ton. Thus we have it demonstrated that the straw we burn so readily is worth at least \$1 a ton when fed to the steer in conjunction with other food. A third reason is the increased revenue derived from the same acreage of land. Much of the land now fallowed could be used for the growth of succulent foods to be fed with straw and other roughage. Some could be used profitably in meadows and pastures, in this way preparing the land for grain crops without the loss of a season's crop. This also suggests the advantage of having the labor of production distributed more evenly over the season.

The question may be asked, Is it feasible to have some branch of stock-raising on every farm? I favor an affirmative answer to that question, providing there is an ample supply of water within easy reach. True, not every one will make a success of stock, no more than of wheat culture, and it is also true that one may have succeeded in grain-raising that may prove a failure in stock-raising, but that does not affect the principle that the best system of agriculture is when the two systems are operated conjointly.

Space will not permit to enter into the merits of what branch of animal husbandry suits best or is the most profitable. Every farmer must decide that to suit his tastes and circumstances; every department has its merits. Feed the hen as near as possible to her natural inclination, keep her warm while the snow is on the ground. She will pay for her keep, and in the summer will scratch for her living and manufacture what would otherwise be waste into a marketable commodity. Take good care of the young turkey till he "dons the red," after which he will rustle for himself over meadows and stubble, roost on the end of any projecting pole, and be big, plump and fat for your Thanksgiving dinner, if in the meantime the prairie wolf has not got in ahead of you. If you have no better building, furnish your brood sows with a big stack of straw for winter quarters, feed on the snow some coarse grain that you cannot sell, and treat gently, then when farrowing time comes, which should be in March, provide a comfortable place; feed liberally till the young ones are weaned; give both sows and pigs the run of a pasture in the summer, with a shelter from sun and rain, and a plentiful supply of water. You may have another litter in August, and after harvest they can be given the run of the stubble fields till snow comes. Do not forget to thresh a setting in some convenient place for the brood sows' winter quarters. Hogs will convert a lot of straw into manure, and managed in the way above indicated they will make dollars at less trouble and expense than anything else I know of. But if kept summer and winter in a small, dirty pen—well, you are not likely to get many dollars from this branch of stock-raising. R. MCKENZIE.

Elton Municipality, Man.

### A Light Winter Ration and Plenty of Exercise for Idle Horses.

I take this opportunity of giving some practical advice on wintering idle horses. What I am about to say is, I think, practical, because it has been successful in keeping the horses in health and in having no losses from death in fourteen years in Manitoba. When the work is over in the fall, they are not likely to be fed so early in the morning, so I put them on two feeds of grain a day. I have mostly fed threshed oats and bran, about equal proportions, from 3 to 6 quarts each night and morning, according to the requirements of the horse, with what straw they will eat at night and a little straw in the morning. If we have hay, I would feed it in the morning. I think a variety is best, if it is only from wheat to oat straw. About ten o'clock a. m. they are turned out, and given what water they want, and left out until three or four o'clock. During this time they will help themselves to salt, which should be provided, and exercise. If there is any grass, they will likely stay on it all day. There is scarcely a day that is not fit for them to stay out a few hours. Horses and colts so cared for will only need a few days of gentle work in the early seeding before the rush of work comes, as they will have kept quite hard. They should get the third feed when they start to work, but not fed heavy for a few days, increasing the feed and work gradually.

DONALD MCBETH.

Woodworth Municipality, Man.