

Large or Small Farms.

Whether farming on a large or small scale is more advantageous, not only to the farmer himself, but also the country at large, is a long-disputed question. We subjoin, from the *American Rural Home*, a letter advocating the holding of small farms as more profitable. The letter is rather indefinite, giving no intimation of what the writer considers the size of a large farm is. While admitting as a self-evident rule that the farm should not be larger than the farmer's means enable him to cultivate to the greatest advantage, we cannot ignore the great profit to the landholder and still greater benefit to the community from large farms held and cultivated by men who have sufficient capital, and who are well qualified by education and practical skill to farm in such a manner as to produce the largest crops at a reasonable expenditure of time, and to set an example in the neighborhood of really good farming. Such farmers are expected to have a better knowledge of the science of agriculture, and to be more competent for its practice than men of small means struggling on a few acres. Another advantage such farmers have is, that they can always purchase the best seed and implements on good terms, and readily avail themselves of every improvement in agriculture. In the same journal we read notes of the editor "Among the farmers of Munroe," and nearly all the well-cultivated farms he visited were not less than four hundred acres. These, though not very large farms, cannot certainly be classed among small farms.

In Great Britain the capital that a farmer is expected to have available for farm purposes is from £5 to £10 per acre, and many of the farms are large. May we not reasonably conclude that the size of the farm is to be in proportion to the farmer's capital, and his cares and anxieties will be comparatively few and easily borne; and a large farm, well cultivated, the owner having sufficient means, will bring in a proportionately large income and be more profitable to the farmer and to the community?

"A natural desire seems to be implanted in the breasts of a large number of our farm population to own large farms, to add this or that adjoining tract of land to that already owned; seemingly 'no pent-up, Utica can restrain our powers,' or desires. Under certain circumstances it would doubtless be wise to add more territory to a moderate-sized farm, but in making additions the whole subject should be dispassionately looked at in all its different lights and bearings.

"To know when and where to stop making additions is of the utmost importance, and still more important to stop at the right time. Every addition adds to the farmer's cares, anxieties, &c.; taxes will be increased, expenses for fences and other items will be added, also more labor required, and withal perhaps a failure to increase the annual income sufficient to pay for the extra care and other necessary outlays. Sometimes increasing the farm area from that where a comfortable subsistence, with a small surplus, is derived, the whole becomes involved in expenses which can not be afforded. It costs so much to keep the whole up that it hangs like a millstone about the neck of the owner, dragging him down; his whole family, wife, sons and daughters are obliged to work hard constantly, and often over-exert themselves in order to keep the machine moving; oil fails and bearings grate.

"No time is had for the young to obtain more than the rudiments of an education, much less to fit themselves as ornaments among their rural companions. The constant strain of muscle power unfits them for intellectual culture at any odd or leisure hours, even if any are had, and frequently

ends in their leaving the farm, and farm-life, at the first opportunity. A farm under similar conditions becomes an incubus to its possessor and his family, and an injury to the whole community, by bringing discredit upon the profession.

"If we desire to raise the business of farming to the position it deserves to occupy, we must cultivate (own) only what can be thoroughly done with the means we can employ, improve it to its greatest capacity, interest our children in their business, give them opportunity and advantage for acquiring a good education, thus fitting them to honestly fill their stations. Pursuing some similar course, we shall live longer, enjoy more of life, save up a competency against old age and infirmity, and train up a more intelligent and a happier family."

Salt as a Fertilizer—What Quantity to be Applied.

We have repeatedly had enquiries on the method of applying salt as a fertilizer, and what quantity per acre should be applied. To the first query the answer is simple. Sow the salt broadcast, either when the seed is sown, or after it is covered with plough or harrow. To the second query, what quantity, it is difficult to name any definite quantity, as this depends so much on adventitious circumstances. Two hundred pounds per acre is the quantity generally recommended. We have, however, in a late number of the *Michigan Farmer*, a well authenticated report of ten tons of salt being applied, by mistake of the farm laborer, to ten acres of rye as a top-dressing. The field was laid down with timothy. Mr. Smith, the owner of the land, expected when he learned it that the field was ruined, and that he would get nothing from it for the next five years. However, there was no way of counteracting the effects of the salt. He noticed that the rye did not grow much during the fall, and it made very little show in the spring; but he harrowed it and rolled it, and let it grow if it would, of which he was very doubtful. He says that during the spring the water that came from the drains was so impregnated with salt that it could be tasted in the water very distinctly by dipping his finger in it.

The field when being sowed with rye was seeded with timothy. Seeing in spring that there was a fair prospect of timothy, however the rye crop might turn out, he sowed the field with clover-seed—the usual quantity. The rye grew and yielded a good crop, though late; so late that the timothy in some places got the start of it. The luxuriant growth of the timothy made it difficult to cure the rye, and mixed with the straw it was almost as valuable for feed as if it were all timothy, and there was a good second crop of timothy and clover. This year one of the finest and heaviest crops of timothy and clover hay ever grown on any field in the farm has been cut off this field. Mr. Smith says he had never handled such a crop of hay in all his experience. He estimated it at three and a-half tons to the acre. The foreman on the farm says that there is an entire absence of insects in the salted field; neither grub, worm nor maggot could be found in it. If the absence of insects be owing to the heavy salting, this is an item of considerable importance now, especially when everything that springs from the ground has its swarm of insect devourers.

We do not recommend the application of such a large quantity of salt; we give the simple facts of what has been done in one instance, and must regard it as an exceptional case. The quantity to be applied depends on the soil, its wants and its conditions, and this can be ascertained only by experiment. There have been instances of salt being used as a fertilizer without producing any

perceptible effect. The soil of the field so heavily salted is a yellow, loamy sand, with stiff subsoil from one to two feet beneath. The field had been well tile-drained, all the drains leading into one main outlet. The natural quality of the soil, and its thorough draining, may have been the means of its bearing a ton of salt to the acre without being injured, but the contrary.

We need a greater number of reliable experiments, more authoritative information on the use of salt as a fertilizer. It has too long been a question of uncertainty. Some totally doubt its value as a fertilizer, while others may be inclined to exaggerate its effects and the quantity to be applied. This is one of the subjects that the professors of the Agricultural College and Model Farm might well direct their attention to. Farmers who are heavily taxed for the support of that institution naturally expect that experiments such as this one should be carried on by it, and not left to private individuals.

Sowing Rye for Soiling.

To farmers who have never sowed rye for soiling in May and early in June, we would say try the experiment now. The expense is but light—the labor with the farm horses, and the price of seed, about one or one and a half bushels per acre, are the whole cost. Sowing fall rye is the first step in preparing for soiling cattle; the greatest difficulty in soiling cattle being the want of early green food, and rye being the earliest forage plant we can grow. Mangolds will keep good for feeding till the rye is fit to cut; and those who have not tried it will be surprised by the large quantity of fresh, nutritious food they will have on a small paddock that has been sown with rye in September. The rye may be cut in time to prepare the ground for a June crop of millet, or, if the soil be not so heavy as to require much preparation, for a crop of turnips. The rye crop when cut green for soiling is also a benefit to the ground. The great quantity of roots serve to keep the soil from binding and also enriches it—it is the seed-bearing and ripening especially that tends to imperish soil. The ammonia exhaled by the dense foliage has a tendency to enrich the soil, so that if tilled immediately after the removal of the soiling crop, it will be readily brought into good tilth for the succeeding crop. Rye, though not so close-growing a crop as clover, grows to a much greater height, so that we may safely estimate it to produce at least many tons to the acre, and to feed as much stock as long as it is in condition for soiling. It has been ascertained by actual experiment that one rood of ground, well stocked with clover, is sufficient to feed one cow for one hundred and eighty days, if cut and fed to her, while if allowed to run on it would not last more than two weeks. From this experiment an estimate may be formed of the number of cattle fed by soiling over that fed by pasture, and how great may be the value of a paddock of rye for early feeding.

There is no cereal plant hardier than rye; it is grown extensively in the most northerly agricultural countries of Europe, and this is much in its favor for our purpose for early soiling. There is no danger of rye being winter-killed if water be prevented from being stagnant or in the soil.

Nearly all the cattle in Germany are stall-fed. A traveler passing through the country rarely sees any live stock in the field or pastures. The Germans understand and practise the closest economies of cattle food and animal excrements.

A Horticultural Society of Montreal has 800 members, who pay an annual fee of \$2-\$1000 which is expended in publishing useful books and reports. That society is *sui generis*.