

REPORT
OF THE
ROYAL AGRICULTURAL SOCIETY.
For the year ending 7th March, 1856.

The period having again arrived when it becomes the duty of your Committee to render an account of their stewardship for the past year, they have much pleasure in submitting the following records and accounts for your approval. They consider it their duty, however, in the first instance, to testify their gratitude to a kind Providence for his mercy and beneficence in blessing the labours of the farmers generally throughout the Island with abundant crops.

In taking a retrospective view of the general agriculture of the Island, your Committee observe a steady progress in the development of the soil, which, with steady industry on the part of the farmer, fostered by the Society, and the proper application of manures, and a sensible rotation of crops, is capable of bringing any description of grain and roots to maturity.

Reports of Agricultural Committees and Boards of Directors are usually confined to dry details of Meetings, Cattle Shows, &c. but your Committee are of opinion that a few observations on farming generally may not be amiss in this and future reports.

The necessity for constant exertion on the part of the farmer is too obvious to require discussion. Nothing should be left undone on the farm till to-morrow that could possibly be done to-day, for on a farm every succeeding day will bring a sufficiency of work for itself. Days are succeeded by weeks, weeks by months, and months by seasons in rapid succession. Active and unwearied industry in the autumn especially, so long as the weather keeps open, is of the utmost importance, in order that every thing may be properly arranged for the winter, and as much of the ploughing completed for the following year as possible, deep ploughing, is highly essential to good farming for deep soils, possesses many advantages. They retain moisture in dry seasons much better than those of a shallow description, and allow the wet to escape readily in rainy weather. Almost every plant desires depth of soil, deep soils, under the same management, will furnish a much greater amount of food than shallow ones. The deepening of a thin soil should be effected gradually, unless the farmer has a very large supply of manure, which, in this country, is seldom the case. Attention to this subject although necessary at all times, is possibly more so at present, when, from the high prices of produce, farmers may be induced to crop a little harder than usual. An inch or two of virgin soil will relieve the surface.

The preparation and proper application of manure is a subject which your Committee look upon as of the highest importance, and they consider it their duty to call the attention of the farming public to the matter, in consequence of the breadth of turnips now grown in the Island, and the difficulty of providing a sufficient quantity of farm-yard dung for all the purposes of the farm. In the preparation of farm-yard manure, it should be borne in mind that manure produced by cattle, fed on turnips and straw, is much superior to that from cattle fed on hay alone, and of nearly 50 per cent more value than the droppings of stock wintered on straw itself.

It would, therefore, as regards the manufacture of manure, and for many other reasons, be greatly more to the advantage of the farmer to winter a smaller number of cattle, and feed more liberally. As urine is the most valuable portion of farm-yard manure, stock of all kinds should be amply supplied with litter. The different kinds of farm-yard dung should be regularly mixed in the heap, and great attention paid to its preservation, by keeping it in a compact heap, and adopting other means to prevent the virtue being washed out of it by heavy rains. The regular mixing of the different kinds will prevent the too rapid decomposition of the heap, and the escape of the various gases, which constitute its value.

Burnt clay is a valuable manure when properly prepared and applied. It will benefit almost every description of soil, and very good crops of turnips, barley and grass, &c., have been raised with it alone.

Peat and marsh mud are also of much importance, and when well rotted by being mixed with a certain quantity of farm-yard dung, in alternate layers, as directed by Judge Peters in a valuable little work called "Hints to Farmers," (which is to be had gratis at the Society's Store, in town, and at all branches and depots in the country), form a very superior manure.

Guano, which is the produce of sea fowls of that name, on the coast of South America and Islands on the coast of Africa, is a very valuable and powerful fertilizer of every application. Two hundred weight of Peruvian Guano, which will cost in this Island about 22s. will, if properly applied, raise a crop of turnips equal to forty-five loads of farm-yard manure. The objection taken by some persons to the use of Guano is, that the whole of the manure is consumed by the first crop, and that the after crops are deficient. This can be obviated, however, by giving the crop which may be

seeded the turnips, a second dressing of half the quantity, mixed with burnt clay or wood ashes. The use of Guano is very much on the increase in Great Britain. In ten months, ending the 5th of November, 1854, 170,607 tons were imported; and in the same period of 1855, 235,723 tons were imported—thus showing the value attached to it after a trial of twenty years. It is principally applied in Great Britain in growing turnips, but it is applicable for other crops. It has been used in this Island for a number of years, and the following extracts, relative to the quantity used and mode of application, taken from an authentic source, your Committee are of opinion may be of use to those who have not already given it a trial. The first extract points out the method of applying it for turnips:—

"The land had borne two crops of oats in succession, previous to being ploughed in the fall. It was cross-ploughed twice in the spring, and the stones and weeds gathered clean off. It was then drilled with a double-moulded plough, the ridges being twenty inches separate, from centre to centre, and the furrows not so deep by some inches, as on the part of the field intended for farm-yard manure. On this being done, one of the men took a bucketful of manure, and with his hand strowed it along the bottom of the drill, at the rate of two cwt. per acre. This is a very simple operation, the only difficulty being at starting, when the men are apt to spread it too thick—two cwt. (about two bushels), being a very small quantity over an acre of ground. On the manure being spread, it was covered about five inches deep with the same plough, and the seed sown as usual with a turnip barrow or drill, a light roller having been previously passed over the drill's to flatten them a little. The piece intended to be dressed with farm-yard manure, was treated in the same way, only substituting forty-five cart loads of the latter, well rotted, for the two cwt. of Guano."

"The after cultivation consisted in keeping the crop clean, by the occasional use of the hoe and cultivator. As to the result, I cannot say that the difference in favour of the Guano was great, but the crop was more regular, and the young plant grew with much greater vigour, which would tend in a great measure to counteract the fly. But even had the result been greatly in favour of the farm-yard manure, what an immense saving of labour alone would be effected—amounting, as nearly as possible, to the whole expense of the Guano, without taking into consideration the value of the farm-yard manure."

The evidence thus given as to the value of Guano, as a turnip fertilizer, appears to your Committee of considerable importance, and although they would not wish to see it used as an entire substitute for dung, yet its easy application, in a short and hurried spring, must render it a valuable auxiliary to the farm-yard.

The following experiment relative to the use of Guano, as a top-dressing for wheat, may also be of service in showing the benefits resulting from a moderate outlay of capital:—

"I had a piece of potatoes, after oats, in front of my home, containing an acre and one-eighth manured with fifty-one horse cart loads of mixed manure from the farm-yard, which produced a very good crop. The land was ploughed and sown during the first week of May the following season, with two and a quarter bushels of red wheat. About a fortnight afterwards, when the plant was pretty well up, it was top-dressed, during damp weather, with Guano, at the rate of two cwt. per acre, being sown broadcast with the hand, in the same manner as grain. Very shortly after the application, the Guano grain appeared of a much darker green, and made such a strong growth, that it very soon overtopped a narrow ridge which was left in the centre of the piece undressed—a marked difference being observable during the whole summer. The grain was not at all affected by the rust, and previous to being cut, that which received the Guano was fully eighteen inches taller than the other, measuring nearly six feet in height. On being thrashed out and measured, the result, in good marketable grain, fit for seed, was at the rate of thirty-eight bushels to the acre for the Guano, and twenty-seven or nearly for that portion omitted, &c., &c." Many similar statements could be given, but these may be sufficient to induce a fair trial.

In relation to the crops in the Island for the past year, your Committee have to report, that, owing to the ravages committed by the wheat fly, the wheat crop generally has been below the usual average. Many remedies have been tried of late to counteract this growing evil, and the most popular and effective has been that of late sowing, but in some situations this has failed, and it is very possible that the insect may also change its habits to suit the lateness of the grain. Although the habits of this insect are well known, yet your Committee have to report, that no effective remedy has been discovered, to counteract the ravages of this destructive little insect. Deep ploughing in the autumn has been tried, the object being to cover the grub dropped from the wheat ears in the autumn so deep, that it could not force its way to the surface in the spring; but this

has its objections. Large fires lit to windward of the crop in the summer, about the time the fly appears, hovering over the fields, have also been suggested, without any very beneficial result. Your Committee would recommend the farmer to be most particular when dressing his grain, to have all the siftings and sweepings of the barn floor carefully destroyed, by burning, or boiling for the pigs; but after all, the best method of getting clear of the pest permanently would be to starve them out by ceasing to grow wheat for a season or two entirely. If this plan were adopted in the districts most affected, and barley substituted, the farmers would gain by the change.

The barley crop has been good, and prices highly remunerative. The soil of this Island generally is better adapted for barley than wheat, the latter crop requiring a stronger soil than we possess.

Oats have yielded a fair return this season, although small patches of those sown late in unfavourable situations, suffered from the early frosts. Your Committee being of opinion that a change of seed would be beneficial, purchased eleven and a half bushels Imperial of the black Tartarian variety from their Seedsmen in Liverpool last spring, which were divided into two equal portions between John Lyall, Esq., of the Warren Farm, and Mr. George Smith, of the Society, on the understanding that the Society were to receive back the original quantity, and take the remainder of the produce at 3s. per bushel. Mr. Lyall sowed his portion upon a field of two acres of old sod land, and the result was ninety bushels of marketable grain. Mr. Smith sowed upon an acre of land of the same description, and the result was forty-eight bushels. The grain is now in the store of the Society, and will be sold at 3s. 6d. per bushel, in quantities not exceeding twenty-five bushels to one person.

A change of seed being at all times very desirable, it is hoped that the public will avail themselves of this opportunity. It is a common practice with farmers of experience in Scotland, to change their seeds of all kind once in three years. This system your Committee would wish to see more generally adopted in Prince Edward Island. In the change, care should be taken to procure seed from a considerable distance, and from a soil inferior to your own.

The turnip crop of 1855 was not generally so good as that of the previous year, in consequence of receiving a severe check from a few days of cold bleak weather when about half grown, from which the plant never recovered. In the neighbourhood of St. Eleanor's, the farmers must have escaped this visitation, for nothing could be more satisfactory than the crops this season, as indicated by the returns sent down. The average of ten competitors was 1,202 23 bushels of fifty-six lbs.—the highest being 1,417 bushels per acre. These are crops perfectly unknown in general cultivation in Great Britain; and it would be very satisfactory if some of the competitors published an account of the method adopted to obtain such a large average.

Your Committee congratulate the country on the steady and progressive increase in the growth of this most valuable root, and hope that the great demand for improved stock of all kinds, from the neighbouring Provinces, will prove a still farther stimulus in extending the cultivation of the turnip, for without it very little can be done in the way of successful farming.

In offering turnip prizes for competition, your Committee have confined them to the best acre; but the cultivation of this the most valuable of all roots, having become so extensive, they would recommend a deviation from this rule, and would suggest the propriety of looking to the number of acres sown, in proportion to the extent of land under the plough, as well as to the excellence of the crop.

It is to be regretted that in consequence of a misunderstanding having arisen between some of the turnip competitors, this season, and the inspectors, your Committee deem it necessary to investigate the subject thoroughly.

[Here follows the Report which has been already published in our paper, which it is unnecessary to insert.—Ed. H. Gaz.]

Previous to entering upon the subject of stock, your Committee may be allowed to state, that they imported from Liverpool last fall, 1,000 lbs. of Swede Turnip seed, and have ordered a further supply of 3,500 lbs. Swede, and 1,050 lbs. of Yellow and White Turnip seed, which will leave Liverpool about the 1st of April next. 12,000 lbs. of Red and 3,000 lbs. of White Clover seed, were also imported in the Fall, and a further supply of 1,500 lbs. Red and 500 lbs. of White, are ordered for Spring arrival.

Of these seeds the following quantities have already been sent to the Branch Societies in Prince County, viz:—

To St. Eleanor's, 2,894 lbs. Red Clover, 718 lbs. White do., and 896 lbs. Turnip seed.
To Casumpepe, 1,072 lbs. Red Clover, 158 lbs. Turnip seed.

And to Tryon 1,526 lbs. Red Clover.

Your Committee regret that the price of clover is higher than last year; but this is met by a decline in the price of turnip seed.

Your Committee will now proceed to give an account of the Stock imported and purchased in the Island, and distributed in various sections of the country. They, however, regret that their means of doing good in this respect are so restricted in consequence of the difficulties attending the importation of improved stock of all descriptions; and they will, previous to closing their report, have to make a few suggestions, the carrying out of which will be of the most vital importance to the future success of the Society and the agricultural interests of the Island.

Towards the close of the Session of 1855 the Legislature granted £1000 for the importation of Entire Horses; one half to be expended in England, the other in the United States. The season being far advanced previous to this sum being placed at their disposal, your Committee deemed it injudicious to make any endeavour to procure horses from England at that time, consequently they did not draw the £500 granted for the purpose; this sum is therefore still at the Society's credit with the Government. After careful consideration, your Committee entered into arrangements with Charles Hazard, Esq., a gentleman highly qualified for the task—to proceed to the States to purchase horses, and they are happy to say that Mr. Hazard was eminently successful in his mission—having procured and safely landed in this Island three horses of a superior description, costing, all expenses included, about £560. These were sold on arrival, one to each County, for the total sum of £342.

There are now in the Island nine Stud Horses imported by the Society, although this number is still very far short of the demand. Two of these horses are thorough bred; and the three bought by Mr. Hazard in the States have a good deal of English thorough bred blood in their veins. Your Committee are therefore of opinion that farther importations of this style of horse, are not necessary at present; and they would recommend the next Committee of Management to turn their attention to the South of Scotland Clydesdales, than which it would be almost impossible to find a better farmer's horse.

A little attention to this breed would, in a short time, improve the class of mares, which, crossing with thorough bred, may have rendered weedy, and too light for a horse-of-all-work, which is the horse wanted by our farmers.

The value of, and advantages to be derived from the possession of a breed of cattle coming early to maturity, being obvious, the attention of the Society for years past has been directed to the subject, and your Committee are now convinced that the pure Durham is better adapted for this purpose than any other breed. Acting under this conviction, they ordered their agent in Liverpool to purchase a young short-horn Bull, and they are glad to say, that Mr. Spinks was fortunate in obtaining one of very superior size and symmetry. He was bred by Wm. Bland, of Knock, and calved in June 25, 1854, so that he is now a little over twenty months. The following is the pedigree from the herd book, and he cost the Society altogether £24 12s. 3d.:

Red and white, calved June 25, 1854, bred by Thomas Bland, of Knock, was got by Sir Richard by old Tommy Bates, 10,581. Dam Sonnie, 9th by Leopold, 4,219. G. Dam Sonnie, 8th, by Monsieur Vestres, 6,220. C. g. d. Sonnie, 3rd, by Sultan Selim, 2,710. G. g. d. by Prince Edward, 2,462. G. g. g. d. by Sultan, 1,465. G. g. g. g. d. by a son of Prunell, 659. G. g. g. g. g. d. by Middleton, 1,235. G. g. g. g. g. d. by a son of Ben, 70, or Punch, 531.

The Durham breed of cattle is much valued on account of their great size, and their arriving at maturity at a very early age, being fed off for the butcher frequently at two years old. This description of stock are not considered so applicable for dairy purposes as some smaller breeds; but in the London dairies the Yorkshire Durhams are so much appreciated that it is rare to meet with any other. It is generally supposed that the Durhams will not stand the winter or rough it so well as the Island cattle. This is probably true under the management usually adopted, nor would it be at all fair to try the experiment; but put them into a comfortable cowhouse and give them in relation to their size a proportionate quantity of food, and they will compete with almost any breed in existence. However, as it is the object of the Royal Agricultural Society to make such importations and adopt such measures as will benefit the small farmer, as well as those of a more advanced class, your Committee would recommend that the Ayreshire breed be kept up for the advantage of the country districts. They are a superior class of cheese producers, although much inferior to the Durham as a butcher's beast. This, however, could be improved to a certain extent by crossing once with a Durham Bull, and then returning to the original breed. A first cross is often advantageous in breeding, but a second very rarely. Any great improvement must, in a young country such as this, be the work of time; and although much money is sunk in the distribution of stock generally, yet your Committee are of opinion that in the course of time, a spirit of emulation will spring up, when farmers will find it to their advantage to give good prices for well bred animals. Your Committee during the winter sent a Durham Bull to Lot 5, and another to New London—the farmers in that section of the Island being,