

of some of those animals killed the past season:—

Fourteen Pigs raised by F. Ferguson, Esquire, killed last fall, weighed, viz:—One of two years old, 693lbs.; one of eighteen months old, 570lbs.; one of same age, 525lbs.; one of fifteen months old, 460lbs.; ten of fourteen months old, averaged, 300lbs.

Four Pigs of the same breed, raised by Mr. Mulloy, of Saltash, weighed together 1,800lbs.; none of them were over eighteen months old. This breed should therefore be encouraged, as they possess that quality so essential in cattle raised for food—a capacity for feeding and fattening beyond any other description known to your Committee.

Your Committee would recommend the importation of a good breed of Ayrshire Cattle, and a good Horse, together with the Sheep heretofore proposed, next season.

A quantity of Tares might judiciously be imported by the Society, and recommended for general trial. Experienced farmers consider them excellent food for cattle when cut green, and that they likewise improve the land in which they are sown.

Several instances of exceedingly large returns of grain from last year's crop, have come to the knowledge of your Committee. F. Ferguson, Esq. sowed seven and a half bushels of Black Oats in a two acre field, and reaped one hundred and thirty bushels, weighing forty-two pounds to the bushel. Mr. Michael O'Brien sowed three gallons of four rowed barley, on a small patch of land, perhaps about the fifth of an acre, and obtained therefrom sixteen bushels of clean grain. Other instances of equally favorable returns on a much more extensive scale, have been represented to your Committee, but they have been unaccompanied by sufficient particulars to justify your Committee in recording them.

The best precaution that can be adopted against loss by early frosts, is that of sowing winter grain. This has been tried on a large scale by Mr. Woolner, of Bathurst, two seasons ago, and the result has satisfied him that the practice may be very generally adopted with great advantage, if proper care only be taken in preparing and selecting the ground. As Mr. Woolner is the only member of the Society who has cultivated winter grain to any great extent, or persevered in it with system, your Committee think it well to introduce some of the practical advice collected from him on this subject.

The ground for winter grain should be prepared by summer fallowing, which can be done after the spring crop is in, and before haying. The subsoil to be disturbed, but not exposed during the first process, in firm or clayey soils—in old or worn soils, plough to the depth of nine or ten inches. About the middle of July, plough into ridges of twelve or fifteen feet wide, with a rounded surface; after harrowing, apply a top dressing of compost, in which lime predominates; avoid stable manure at this time, and in this situation, if possible. Adopt the drilling process in sowing, it is generally followed in the Mother Country, and is quite as applicable here, particularly to winter wheat, the horse rake to precede the sowing, may be substituted, but not with equal advantage; either is better, however, than the ordinary method of broad cast sowing. After sowing, harrow in the direction of the furrows, then use the roller across. After this, carefully open the main and head-land furrows with a double mould board plough, to give a free passage to the water in the fall. Sow in the last of July or beginning of August, if the weather permits, the plant will thus acquire strength before

the winter sets in, and be enabled to resist the effects of frost called “winter killed.” Winter killing is occasioned by the action of the frost upon the water lodged by winter thaws, and proves often fatal to grain when the plant is weak, therefore sow early, and if the plant is considered too far advanced before the winter sets in, feeding off, or rolling will be a remedy; clear the furrows and drains in the spring, and let the water off completely, then when dry, cross roll.

Prepare the seed grain by soaking for twenty-four hours in strong pickle, and drying it in newly slacked lime; if not sowed immediately, turn the heap occasionally. The best winter grain for seed, proves to be that from the Baltic, *not* that from the United States or Canada.

In selecting ground for trying the experiment of raising winter grain, the situation or “lay” of the land should be carefully considered, as it must be capable of being drained effectually in fall and spring. The simplest method of testing the soil most suitable for this crop, is that of washing a small handful of soil in a tumbler of water, and if it requires more than three hours to settle, it may be considered liable to injury from winter frosts.

A crop of winter grain may be advantageously introduced into a rotation system, (which should always be followed,) thus: after winter wheat, potatoes with manure, and limed at second hoeing; then spring wheat, with timothy and clover; next, hay—and next pasture, to be followed by winter wheat again. It is no objection to this system, that but one crop of hay is taken off, as the land is improved by it, the grain receives the benefit, and it is more favorable to the farmer than summer fallowing without a winter crop.

With regard to spring grain, our farmers have already had a tolerable share of experience in the mode of cultivation, and your Committee only consider it necessary to keep in view the propriety of collecting and applying manures freely, but at the same time judiciously. The formation of composts, the trial of sea-weed, and lime and marl, all of which fortunately are to be found around us in great abundance, are becoming very general, with marked success, and to the liberal and judicious use of these manures, we may in a great measure attribute the fine quality of our wheat and barley the present year. Some of the cultivators of these grains have used swamp mud and stable manure, while others have only used lime, harrowed in with the seed.

The proper application of these manures, seems to be lime for the clayey soil in the district north of the harbour of Bathurst, and for the upper part of the Parish of New Bandon; and salt mud from the coves for the sandy soil of the town and vicinity, including the Big River. But it is evident that lime cannot do injury in almost any situation, and is particularly favorable for growing wheat. In some instances the French people last season gathered the mud from the coves, and applied it directly to the land with the seed, and the result has surprised many who considered this substance too cold, unless as a component of a compost, to have any effect in nourishing the seed.

Your Committee conceive the Society has had ample cause for satisfaction the past season, and quite sufficient encouragement to induce them to prosecute their efforts still further in promoting Agricultural improvement. Farmers generally should be aroused to a sense of the importance of the work, and should by all means contribute a small sum towards its support. The produce of the soil will soon perhaps be the only resource