

CULTIVATION OF MANGELS.**Value of the root—Preparation of land—Sowing—Thinning—Harvesting.**

The growth of mangels should form one of the leading items of cultivation on all farms where animals are kept, on good land with skilful management the amount of food produced is far greater in proportion to the labor and expense than can be obtained in any other way. The yield per acre, under favorable circumstances is larger than that of any other root, its feeding value is much greater than that of turnips. Three hundred and forty pounds of mangels are equal in feeding value to one hundred pounds of the best hay; eight and a half tons have the same nutritive value as have two and a half tons of hay; twenty-five tons of mangels are not an unusual crop per acre. The labor required is much greater than is required for the hay, but it bears no proportion to its superiority in feeding value. In addition to their nutritive elements, they are a fresh and succulent food that may easily be kept the whole winter. They have the effect of keeping the animals in a more healthy and better lubricated condition and greatly stimulate the thrift and growth of stock.

The preparation of the soil should be the perfection of cultivation thorough drainage, natural or artificial, deep cultivation and rich manuring, are all necessary for the best results.

The writer has found the preparation of the ground in the fall attended with the best results. Left in drills thirty inches apart, the action of the frost leaves a fine seed-bed, and as the crop requires the whole growing season for its perfection, the seed should be sown as early in Spring as possible. The crop may require a little more weeding than if cultivated in the Spring, but the extra crop will more than compensate for the labor. If sown with a machine, six or seven pounds per acre will be required, but if sown with a one half that quantity will suffice as the seed can be put in the drills about twelve inches apart and should be thinned to a single plant when two or three inches high. The only attention after sowing and thinning is keeping free from weeds, which is best done by horse and hand hoeing, as the preparation of the ground should be all done before sowing.

Harvesting should be done before heavy frost, as frost destroys the keeping quality of the root and the tops should be broken with the hand and not cut, (1) as cutting induces early decay. They should be stored in a root-house as near to the stables as possible to save labor, and kept as cool as possible but not allowed to freeze, thus kept they will be just as good in April, as when stored.

(Signed) W. H. TRENHOLME.
Langue-Pointe.

CULTIVATION OF CARROTS.**Preparation of land—Drills—Seeds—Hoeing.**

In preparing the ground for carrots, I begin to plough as soon as possible after I have finished harvesting, gene-

(1) Good.—Ed.

rally about the middle of August, ploughing from six to seven inches deep. Then about the middle of October if the weather is dry I pass the heavy cultivator around, then the harrows so as to bring all the weeds and grass to the surface, which I gather together and burn. Then about the first week in November, I plough again, setting the furrow well up on edge, so that the frost may, thoroughly pulverise it. Then in winter and early spring I draw a lot of liquid manure in a sleigh and waggon that we have specially made for it and let it run evenly all over the ground.

I find that liquid manure grows stronger tops and heavier roots than any artificial manure that I have as yet tried. About the first week in May I pass the harrows over the ground to break and level it, taking the drill plough I open the drills twenty six inches apart, filling them with well rotted farmyard manure at the rate of twenty-eight to thirty tons per acre. Then passing with the drill plough I cover the manure drawing the drills well up to a point, and pass the light circular harrows taking two drills at one time so as to get a fine mould to cover the seeds. Now I pass the drill seeder along the drills sowing from four to five pounds per acre covering the seed to a uniform depth of half an inch, then pass with a light roller so as to firm the ground, the seed. Care should be taken that the warm weather has fairly set in before seeding or else the seed will be long in germinating. I some times mix the seed with damp sand two days before sowing so as to hasten its growth. As soon as the plants are two to three inches high I thin them out four to five inches apart, then about a week after thinning I pass the light cultivator between the rows too loosen the soil and kill the weeds, taking care to single out any doubles that may have been left in the first thinning. Then I pass the drill plough putting the earth well up to the carrots, so as to keep the dry weather from getting at the roots of the carrots, I find that for horse feed I can grow nothing on the same size of ground, that equal carrots, but like all other field roots, they want thorough cultivation and plenty of well rotted farmyard manure.

ALEX. B. STALKER,
Farmer for Dawes and Co
Willows Farm,
Lachine.

Correspondence.**Orchard-grass—Hungarian-grass—Reply.**

St. Fablesphore, 8th Sept. 1896.

Mr. Jenner Fust, Esq.,

Montreal.

DEAR SIR,

As I intend preparing a piece of land for two crops for next year, I solicit your advice as to which would be the best seeds to use.

My intention was to sow Orchard Grass first, and cut in June, and then resow with Hungarian-grass.

Please advise me as to best way of preparing land and as to time of sowing and cutting.

I intend trying two crops as an experiment, and if successful will report to you. (If spared to do so.)

As a Subscriber to your Journal I

think your articles are a great benefit to those who wish to improve in agriculture.

Yours truly,
D. A. McDONALD.

REPLY: The above is a very difficult question to answer. Why sow so expensive a seed as Orchard-grass? At least three bushels an "arpent" would be necessary, if sown above, and it costs 15 cents a pound, that is, about eight dollars an acre! Would it do anything to speak of in the few weeks between May 1st and August 1st, after which Hungarian-grass is not worth sowing for hay? Again, nothing is said about the use to be made of either of the grasses! If we were sowing orchard grass, we should put it in, with the great clover, with the barley in spring, and let it stand for two or more years. The beauty of this grass is that, unlike timothy, it may be mown for green-ward, or for hay, or fed off, just wherever it is wanted, as it is never injured by close-cropping; in fact, it must never be allowed to stand too long, as it soon gets woody. We should prefer sowing a mixture of vetches, oats, and pease: say, 2 bushels of oats, 1 of pease, and 1 of vetches to the arpent. This crop may be cut green for fodder, or made into hay and follow with either white-turnips, rape, or Hungarian-grass for pasture. We hope to hear again from Mr. Macdonald.

CROPS IN METIS, &c.

Mr. Jenner Fust,

DEAR SIR,

In endeavouring to give you some information about the crops etc., I am labouring under somewhat of a disadvantage, as I have not been through the country much this year, but from what I can learn the meagre information I give you is about correct.

Hoping this will be of some use to you, and trusting you are enjoying good health I remain,

Yours truly,
S. MACNIDER.

Grain and Hay crops—Potatoes—Factories—Butter.

Little Metis, Sept. 2nd 1896.

The crops in this district, especially the grain crops, are not so good as those of 1895; the hay crop, though, is an exceptionally good one; warm showers during the month of June and July having greatly favoured its growth; on newly seeded lands especially, the yield was very satisfactory. Pease are very poor this season, wheat oats and rye doing fairly well. Potatoes are looking very fine, and from all appearances there will be an immense yield.

Notwithstanding the discouragingly low prices booked for them last year, the farmers took advantage of the immense shoals of herrings caught during the spawning season to manure their land, and planted an unusually large acreage in potatoes.

Turnips and carrots, although not cultivated to such an extent, look healthy and vigorous.

Butter factories in the neighbouring parishes are doing a pretty good business. Farmers are realising more and more that it pays to give their milk

cows better food, and they are endeavouring to keep better stock.

Butter fetches 20cts (1st class table butter) during the summer months, as the farmers find a ready market in Metis in the visitors that come here. Cooking butter sells for 15 and 16 cts.

S. M.

The Grazier and Breeder.**DEVON CATTLE AT HOME.**

(By James Wood)

"Eds. Country Gentleman"—Two weeks' coaching through Devon and Cornwall has given extended opportunities for seeing the cattle and sheep of the whole region. The Devon cattle are not by any means confined to the county from which they have taken their name, but are found in great numbers in Somersetshire on the one hand and in Cornwall on the other. (1) All these counties have excellent grass, and a smaller proportion of the land is devoted to grain crops than in most other sections. This is in part owing to the character of the soil and in part to the humidity of the climate, which is very favorable to a thick and excellent growth of grass. There is, however, great variety in the elevations and fertility of different sections. In Devon are the high, rough and poor tracts known as Dartmoor and Exmoor, and also the beautiful and most fertile Vale of Devon, often called "The Garden of England;" while in Somerset is the equally fertile Cheddar Valley, famous for the unrivalled excellence of its cheese.

On the rich pastures of Somerset, long before we get to Devon, are to be seen great numbers of the beautiful red cattle whose high quality has caused the Royal Agricultural Society to place and keep this old established breed at the head of its list. If there is anywhere a more beautiful sight for the lover of cattle than a hundred or more fat Devon bullocks in a rich interval pasture, I do not know where to look for it. Uniform in everything—size, color, heads, horns, straight and broad backs, round barrels, even the switches of their tails—they fit the landscape and please the eye as none others can. Beautiful as are the fattening animals, there is greater interest to me in the Devon dairies. The milk cows show a milk-producing quality we do not expect to see in a breed whose beef qualities have been so highly developed. But in this most American observers have been misled with this breed, as we have with Durhams, because prize show animals of the beef type have usually been selected by our importers, and because in these breeds we have almost exclusively looked to beef production, giving attention to other breeds for dairy purposes. But it is a fact that THE GRADE-SHORT-HORN, IS STILL THE CHIEF DAIRY COW OF ALL ENGLAND, except in this southwestern portion, where the Devon holds undisputed preeminence. Their quality is attested by the great reputation of the butter and cheese made from them and by the indescribable excellence and delightfulness of "Devon cream." This is a scalded cream whose prepara-

(1) The "Somerset reds" are coarser than the true North-Devon, but capital dairy-cattle.—Ed.