

lambs are weaned (at four months old), and they are put in the best pasture I have, with a couple of acres of rape near-by, to which they have free access after two or three feedings during the dry part of the day, when the dew is off, to avoid bloating, which is apt to cause death. Be careful of new green clover for the same reasons. Later they have access to a patch of turnips for an hour each day.

After weaning, we keep our ewes on our poorest pastures until they are dry. We milk them out several times to avoid injury to udders. After dry, we put them on good pastures, rape, turnips, etc., to flush up for the mating season. We consider good condition of both sire and dam at time of mating season is the secret of getting a large proportion of twins, or a good crop of lambs. If you have many ewes, better results will be obtained if sire is shut up in day time, and given a pint or two of oats morning and evening. Oats is the very best grain we have for all stock-getting animals.

I usually shear in April (very close), and try to get all ticks off. About a week after, I dip the lambs.

I have outlined my method of breeding, feeding and care. Regarding the cost, I am not prepared to say, definitely, as I am too busy a man to bother with weights and measures, although it is businesslike and a great satisfaction to the man who has time, to know where the profit and loss occurs; but, as I feed largely on roughage and cheaply-produced foods, I never lose any sleep over the cost, as I can keep five sheep on what one good dairy cow will consume which produces me about 6,000 pounds of milk per year, at about 86 cents per 100 pounds, or \$51.60 net, manufactured into cheese, all expenses for same deducted, putting the whey against the milking, extra care, etc., which the lamb does in case of the sheep. My ewes average me a lamb and a half each, one year with another, which I realize an average price of \$10 apiece on, double the price of grades. They have also averaged 8½ pounds washed wool for years, at, say, 20 cents (trade). I usually realize 25 cents by turning the finished goods from the factory over to our merchants. The total profits from five ewes would be \$83.50; profits from cow, \$51.60, leaving a balance in favor of sheep of \$31.90, saying nothing of their value as weed eradicators, ease of care, etc. Put grade sheep at half the price of registered stock against the 3,000-pound dairy cow, and profits from them will be about equal to the above example.

Hastings Co., Ont.

F. A. COMERFORD.

THE FARM.

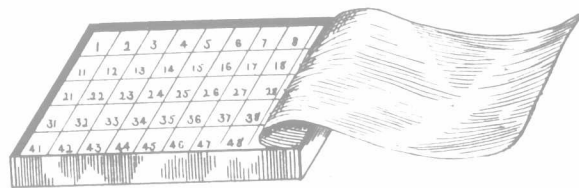
Selecting and Testing Seed Corn.

There is little use, at this date, in lecturing farmers on the importance of making careful selection of corn ears for seed. That work, however, is very important, and it is hoped that many "Farmer's Advocate" readers looked after it at the proper time. With many who husk some corn, selection is made while husking, the finest ears only being chosen. This is good practice, but a better is to go through the corn just before it is cut and choose good ears on good stalks, from hills that have the full number of plants. Such an ear is likely to be more valuable for seed than a much larger one which grew on the only stalk in a hill. The ears should not then be broken off, but the stalk should be cut, and, with others, selected, shocked separately, and husked a little later. A considerable percentage of ears will have to be discarded when husked, no matter how careful the selection has been made, so that it is well to choose at least twice as many as will be needed. For one's own seed, it is a small matter, at best, as so few ears are required to plant an acre. Never, never, put off seed-ear selection until severe frosts have occurred. The outside ears of a shock are easily injured.

Seed should be thoroughly dried before cold weather, if vitality is to be maintained throughout the winter. This can be done by hanging behind or above the kitchen stove, or under the roof of a shed or corner. For winter, it is much better, where practicable, to store in an attic or some room where temperatures are never low, than in the woodshed or barn, where the frost is almost as severe as it is outside.

Seed corn treated in this way will not only grow, but make a strong start. But even though one may feel perfectly sure about the vitality of his seed, it is very easy, by testing, to make "assurance doubly sure." And, as the great majority of Canadian corn-growers buy their seed, knowing little of how it has been cared for, this matter of testing ought to become to them imperative. If possible, seed corn should be procured in the ear, not only because some estimate may be formed of the value of the variety by the appearance of the ears, but also because tests of individual ears for vitality may be made. Let no one imagine that the making of such tests is beyond the capacity of any ordinary farmer, or that it is not worth while. With dent corn, it

is said that only fifteen ears are required to plant an acre, four grains to the hill. More, of course, would be needed where flint corn was used, but even though twice as many were required, it would still be but a small number. And when we remember that not only will lifeless ears be discovered by means of the test, but also those of feeble germination; and when we remember, further, what it means to the prospects of a crop to have a full stand of vigorous plants, such as will be the case when these others are eliminated, we realize that a difference of many dollars' worth may result from a few cents' worth of trouble. It is probably within the mark to say that less than half a day's work would suffice to test the seed ears necessary for planting a ten-acre field. The style of tester commonly recommended is a shallow box, across which, near the upper edge, wires or threads are stretched in both directions, forming a number of squares.



Seed-corn Tester.

The box is filled with moist sand up to the level of these wires or threads, and on this sand the seed grains are laid, and covered, to keep from drying out. The cut which we publish shows a shallow box, partly filled with moist sand or sawdust, which is covered with muslin, drawn tightly and tacked, on which two-inch squares, each one numbered, are marked with an indelible pencil. A box 20 x 40 inches would have 200 squares. A plain, moistened cloth is placed over the kernels, and a sack made for the purpose and partially filled with sawdust, about two inches thick, is placed on top of the cloth, and pressed down firmly (see cut). When sawdust, which is an excellent material for the purpose, is used, it should first be boiled in water to kill bacteria and molds. The tester should be placed where it will be held at ordinary room temperature, or warmer, for five or six days. The ears from which the samples—four, five or six grains—have been taken should be arranged in sections of tens to correspond with sections of tester, and where they will be undisturbed until after test is finished. It is well to place grains with the point towards observer, and the germ side uppermost. Those only which show strong upward, as well as root sprout, should be reckoned good.

Value and Culture of Rape.

Editor "The Farmer's Advocate":

The question has been quite frequently asked through your valuable columns, "How is the best way to prepare land for rape, how to sow, and amount of seed per acre?" I have had some experience in the growing of this most valuable crop, and find it excels anything else in the way of fall pasturage for putting cattle in condition, and also in gains in weight.

The preparation of the soil, if stubble land, should be the same as the old-fashioned summer-fallow, getting the soil as friable and as full of moisture as possible. If old sod, it should be plowed about the 15th of May, and thoroughly disked and harrowed through the month of June. During the first days of July is a good time to shallow-plow the field, or, if sod, to give it another disking, and afterwards roll it down well, after the surface soil is thoroughly dry. I use an ordinary grain drill, and find it a wonderful improvement over the old way of putting land in drills and using the turnip seeder. Take the rubber hose off from the grain tubes, and use every third one or every fourth, as you wish, on the clover seeder, with the lower end back into the hoe spout. If every third is used, the drills will be 21 inches apart; and if every fourth one, the drills would be 28 inches apart. I use every third spout, and find it about the right width. Then shorten the chains of the idle spouts, so as not to loosen the rolled bed. With a 13-hoe drill, five rows at a time can be sown, as the wheels measure the same distance apart as the spouts. If more holes are in the seeder than necessary for the number of tubes, close these up. With the seeder set for ordinary seeding of clover or timothy—that is, from 9 to 11 pounds per acre—it will sow in 21-inch drills about 1½ pounds per acre, which is about as near the required amount as you can expect to get, and which is abundant if the soil is well prepared.

Rolling the land before preserves the moisture, and the spout cuts to a good depth in the fine, moist soil, depositing the seed in such a way as to make a most excellent seed-bed, and bound to insure a choice stand. The land can then be regularly cultivated, which is very necessary to insure a good strong plant, and also to keep the land free of growing weeds, for it must be borne in mind, in this cultivation, that the real feeding value is in the stem and rib, and not in the leaf.

Waterloo Co., Ont.

J. H. WOODS.

A Plea for the Birds.

Editor "The Farmer's Advocate":

Although the fact that birds are among the farmer's best aids has been frequently stated, and is well known, their work is so well done, and in such an unassuming and quiet way, that we are apt to overlook and disregard them. And, though a cessation of their efforts, even temporarily, would result in certain disaster to many lines of effort on the farm, still there is not seen, on the part of most of the tillers of the soil, any intelligent interest in their protection and multiplication. It may sound odd to hear the multiplication of birds spoken of as though it were a part of man's sphere of control, but such is surely the case. When we consider that the number of birds which die each year is equal to the number of young that is fledged, it can easily be appreciated that a little protection may have a considerable result in the way of increased numbers.

Especially is this the case with birds that are resident with us during the whole year, such as chickadees and nuthatches, whose insectivorous proclivities are of the highest order. With the aid of these birds, and others, the most astonishing results may sometimes be attained, one example of which may be quoted.

The most eminent exponent of bird protection in the world is Baron Von Berlepsch, of Eisenach, Germany. This gentleman has devoted much time and thought to the encouragement of wild birds in his domain, and has accomplished results that are little short of marvellous. Such results would be more strikingly seen and appreciated if a small portion of a neighborhood were deprived entirely of the services of birds. There was recently in the neighborhood of Eisenach a plague of tiny moths, whose caterpillars fairly denuded the trees of orchard and forest alike; but when this plague extended itself towards the property of Von Berlepsch, it was found to be checked by his insect-hunting friends, so that, on his place, no damage whatever was done, although the near-by trees were stripped!

Who can doubt that this striking occurrence is repeating itself in a modified way each year, and that it is possible for each individual farmer to produce a repetition of these favorable conditions on his own farm?

Now for the methods: Two main features stand out in the work of Von Berlepsch—nesting boxes, and suitable shrubbery. He has found that the birds that nest in cavities come regularly and easily to holes resembling those made by the woodpeckers, and he has such holes reproduced in solid wood, and fastened up all over his grounds. His results show that it is desirable to procure these specially-made nesting holes; but it is likely that similar results, only less effective, could be obtained by the use of homemade boxes. If there is any considerable desire to procure the most effective style, I am sure the editor of "The Farmer's Advocate" would arrange for a co-operative purchase of them, the cost being about 50 cents each. The second part of the Von Berlepsch method is shrubbery. Every farmer should devote a small piece of ground, say half an acre, or more, to the purpose of a bird sanctuary. Such a plot should be planted with many wild, berry-bearing shrubs, comprising mainly thorn, viburnum, and cornus, with climbers like climbing bitter-sweet and wild grape, making a tangle in which the birds would have a safe retreat. The whole should be surrounded with a fence of wire netting, to exclude cats and dogs, as well as man. Such a plot would return a splendid interest on the investment, in the way of insect-eating allies, and it is safe to say that the farmer who avails himself of the assistance—ready to hand—of the birds will have no reason to regret the efforts he may put forth in their behalf.

London, Ont.

W. E. SAUNDERS.

Spraying demonstrations at ten centers, reported by the University College of N. Wales, Bangor, Agricultural Department, showed that the application of a solution of 25 pounds copper sulphate in 50 gallons of water, a five-per-cent. solution, practically destroyed all wild mustard. This is a stronger solution than has been recommended in Canada, where 10 to 12 pounds per 40-gallon barrel is usually advised.

In March 16th issue, "R. A. P." asks regards tools for joining laterals into main drains. The connections can be neatly made with a cross-cut handsaw and a coarse rasp.

Simcoe Co., Ont.

GEO. CRAWFORD.