

sees pursuing, worrying or wounding any sheep or lamb; or (b) any dog giving tongue and terrifying any sheep or lamb on any farm; or (c) any dog which any person finds straying between sunset and sunrise on any farm whereon sheep are kept. Provided, always, that no dog so straying, and which belongs to or is kept or harbored by the occupant of any premises next adjoining the said farm, or next adjoining that part of any highway or lane which abuts on said farm; nor any dog so straying, either when securely muzzled or accompanied by or being within reasonable call or control of any person owning or possessing or having the charge or care of said dog, shall be so killed unless there is reasonable apprehension that such dog if not killed is likely to pursue, worry, wound or terrify sheep or lambs then on said farm."

PROTECTION IN NOVA SCOTIA.

The protective measures in Nova Scotia are similar to those of Ontario. The essentials of The Sheep Protection Act are:

1. A person may shoot any dog which he sees (a) worrying sheep or lambs; (b) giving tongue or terrifying sheep or lambs; (c) straying between sunset and sunrise on a farm where sheep or lambs are kept, unless the dog belongs to the neighbor whose property adjoins.

2. In the case of sheep destroyed by dogs, the owner can, by redress to common law, obtain the value of the sheep if he can prove the owner of the dog that did the damage.

Increased prices for sheep and their products in recent years, and a more general recognition of the adaptability of Nova Scotia for sheep-raising, developed a growing sentiment in favor of further legislation. A bill introduced into the House of Assembly and given two readings, by which the Sheep Protection Act was to be amended, stipulated that: (1) All municipalities should impose a tax of not less than \$1.00 on dogs and \$2.00 on bitches. (2) Taxes so collected to constitute a separate fund, from which losses are to be paid to owners of sheep destroyed by dogs, the owners or harborers of which are not known. (3) A statement as to the legal procedure necessary to secure this indemnity. (4) Incorporated cities and towns to pay 15% of the total dog tax collected into the common municipal fund for above purposes. (5) This law to apply to the whole Province, but subject to be voted down for a period of one year in any municipality by the municipal council, the law to come automatically into force the following year, unless again rendered inoperative by a vote of the municipal council. Lack of knowledge of the feeling of the people resulted in the bill being given an indefinite hoist.

The Municipal Act of Nova Scotia allows a municipality to impose a tax on dogs, and to collect such tax as part of the ordinary revenue of the municipality. One municipality passed a law imposing a \$1.00 tax on dogs, and the report is that the results have been very satisfactory, so far as reduction of the number of dogs is concerned. However, there has not been a corresponding increase in the number of sheep. A partial reason for this, apart from general considerations, may lie in the fact that wild animals are often a more serious menace to sheep than are dogs.

NO LEGISLATION IN P. E. ISLAND.

Sheep-owners are in no way protected from dogs in Prince Edward Island. No legislation is in force dealing with the sheep and dog question.

PARASITIC DISEASES OF SHEEP.

There is no doubt but what parasitic diseases of sheep have done much to discourage this very profitable industry. It is hardly probable that any sheep-grower can go on for any great length of time without encountering losses from some of them, unless he makes intelligent use of the necessary preventive measures. The man who goes blindly into the sheep-raising business and fails to guard his flock against infestation by the various parasites is almost certainly foredoomed to disappointment, and, in many cases, rank failure. Sheep have been considered delicate animals. This may be true to some extent, but the reason that they are considered so is largely due to the fact that they are exposed to so many diseases. If subject to the attack of the same number of enemies, any other animal might be considered delicate. Altogether, sheep have sufficient vitality to make their raising very profitable if reasonable intelligence and forethought is used in guarding them against diseases. It is not, as a rule, either prudent or profitable to practice the promiscuous feeding of live stock with condition powders and patent preventive medicines. In a majority of cases, too much is paid for these products; they are used when not necessary, and are not used intelligently. But sheep must be guarded against disease more closely than any other animal, and in order to keep sheep free from the mal, and in order to keep sheep free from the parasitic diseases, it is often necessary to resort to the use of preventive medicines. When used, however, they should be used with a definite object in view, and with system and regularity.

By way of general care of sheep, they need well-ventilated or open-shed shelter in falling weather. They do not need shelter in dry weather, no matter how cold. They should never be crowded into and shut up in a close barn. They need the shade of trees and bushes in hot weather. They ought to have running water. That from a well or cistern in a clean tank is very good. Pond water is objectionable, especially when any disease is present. The pastures ought to be rolling, or, at least, well drained.

As to the use of remedies, whenever there is any sign of scab or sheep ticks in the flock, all the sheep and lambs ought to be dipped twice at intervals of 10 days in some reliable sheep dip. From the time there is any indication of annoyance by the bot fly, their noses ought to be kept smeared with tar until after light frosts. Sheep ought to have a course of treatment through the winter to rid them of the internal parasites. This is especially true when there is any indication that any of these parasites are present. It is probably advisable for every sheepman to give his flock, during the winter and spring, a course of finely-powdered tobacco, or the bluestone-copperas-salt mixture. Of the tobacco he should use about 20 pounds for each 100 sheep, and begin giving it, in small amounts at first, with the feed late in the fall, and continue until after lambing is over. The bluestone-copperas-salt mixture, advised for the prevention of stomach worms, may be used instead of tobacco. It can be kept before the sheep, allowing them what they will eat. These directions, carefully followed out, will almost certainly protect the sheep owner from the common losses, and render it unnecessary for him to make a detailed study of the different parasites to which the flock is liable.—(Missouri State Bulletin.)



Home of J. H. M. Parker, Sherbrooke Co., Que.

THE FARM.

VITALITY OF SEEDS IN MANURE.

Experiments conducted to ascertain the vitality of weed seeds after passing through the digestive tract of an animal, led E. I. Oswald, of Maryland Agricultural Experiment Station, to report as follows:

In experiments in which the manure remained (1) for six months in a barnyard heap, and (2) for a short while in piles, it was found that in the first case there was no danger, and in the second case little danger of distributing germinable weed seeds. In the experiments in which the weed seeds were fed to yearling steers, and the manure handled in various ways, it was found that:

1. When the manure was hauled directly from the stable as a top-dressing, an average of only 12.8 per cent. of the seed fed to animals germinated.

2. Where the manure was hauled directly from the stable upon the land, and plowed under, 2.3 per cent. of the seeds fed to animals came up.

3. Where the droppings remained on the pasture fields, unadulterated as they fell, an average of only 3.1 per cent. of the seeds fed to animals germinated.

The results indicate that, in general, it is safe to assume that the vitality of weed seeds is destroyed in well-rotted manure, but that many pass unharmed through the digestive tracts of animals, and may be carried to the land if the manure is not well rotted before use. The feeding

stuffs comprised about 50 of the most dangerous weed seeds found in the State.

The above conclusions, however, would be misleading and unfortunate if unaccompanied by the reminder that serious waste of fertility results from the decomposition of manure. Roughly speaking, it may be said that experiments have shown that it requires two loads of fresh manure to make one load of rotted, and, for most purposes a load of rotted is worth little if any more than a load of fresh. The true policy is, therefore, so to arrange the system of farming that most if not all the manure may be applied in a fresh state to land intended for corn and other such crops, the cultivation of which will incidentally destroy the seedling weeds.

COLOR IN BLACK OATS.

Owing to the higher price in Ireland for jet-black seed of the Black Tartarian variety of oats than for seed which is brown or mahogany, and to the prevailing opinion that color of product depends on color of seed, rather than on soil or climatic conditions, the Department of Agriculture conducted experiments along this line during the past two seasons at their Agricultural Stations at Ballyhaise, County Cavan, and Conakilly, County Cork—five experiments in all. In each test, a quantity of the best-colored seed of Black Tartarian oats procurable was purchased, and also a similar quantity of light-brown-colored seed. These two samples, differing as widely as possible as to color, were sown side by side under similar conditions of soil and cultivation. In some cases both lots of seed were purchased in Scotland, and in other instances both were bought in Ireland. The plots were harvested in the usual way, and, without exception, the produce from both lots of seed was almost identical in color, and of equal value.

This result is taken to indicate that the importance of good color in the seed of black oats may be exaggerated, and that the color in black oats depends far more upon the soil, climate and local conditions than upon the color of the seed sown. It is generally believed in Ireland that heavy, cold soils will produce blacker oats than warm, sandy soils, and that a better color is obtained when black oats are sown after potatoes or roots, than after grass.

While this experiment might be regarded as conclusive, the Department advises those whose custom it is to pay high prices for color in black oats to make trials on their own land with good and bad colored black seed. In buying seed oats, purity, germination and maturity of grain are mentioned as factors to which every attention should be given.

ON BEHALF OF THE SPARROW.

Editor "The Farmer's Advocate":

Though it has been said "we are all born savages," never did I think to find a correspondent of "The Farmer's Advocate" enforce and endorse such an academic involvement of savage cruelty to our hardy, homely, imported, twittering sparrows, even to a bestowment of public honors and school adornments by robbery, a la Indian wigwam, all because they must thrive to live through our arctic winters. They do have little that get the good of it all; sure it's better to get the blessing with the rest, and never miss't, as Poet Robbie rhymed it. My earliest and nearest-heaven recollections are of lying awake in the summer mornings, to look out at my nearly ivy-covered window to see them and hear their most deafening chorus. Why, it's little more than a score years since we hailed their arrival in Montreal, and their adaptability to new circumstances and conditions. Surely we can rise above the "daimen icker" in our thrives. A youngster (sure fit to be a colonel in the new brigade) got into the barnyard, and was doing a bit of polite swearing, as them sparrows would not rest to be shot at, when the chickens' owner, with dog, appeared on the scene, and made as