

The Farmer's Advocate AND HOME MAGAZINE.

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DOMINION.

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more work. Again we say the horse will stay, but breeders must remember that the day of the "scrub" is past. Breed the right kind and do not worry about sales or about tractors either. This is saying nothing disparagingly of the tractor, a great and coming machine for the work it can do and the conditions under which it can be used to advantage, but it cannot do all the work, neither can it overcome all obstacles. The tractor man and the horseman must each realize that the other has a necessary and useful commodity.

Have Governments any Money for Better Plowing?

Better plowing generally means better farming. The man who plows well farms well, in so far as cultivation is concerned, and he who plows carelessly generally cultivates, harrows and sows in the same happy-go-lucky manner. No one can estimate the value of good plowing to Canadian agriculture or the loss caused by carelessly "blackening it over." It is to stimulate a desire to do better work with the plow that plowing matches are held and in so far as they do increase interest in better work with the plow they are of value. We have pointed out many times during the past few years the shortcomings of the plowing match as carried on in this province where the competitors in sod, plow at the rate of one acre every 20 hours and those in the jointer class and in stubble at the rate of one acre in 14 hours, and where all are allowed to tramp their strike-out marks and set up their crowns by hand and also to finish with one horse. This is plowing for show purposes and not for practical results. No farmer could spare the time to do so much unnecessary "wrestling" with his plowing. Sod is set up instead of the better method of turning down. And, worst of all, the plowing is all done on one farm in one place. This fall we suggested that the value of prize plowing be carried to the various farms of the competitors by a scheme which would greatly increase the number taking their place in the line-up for better plowing. The scheme is simple and entirely practicable. It could be worked out on a basis very similar to that upon which the Field Crop Competitions,

so familiar to all, are held. Each farmer entering the competition should be obliged to plow five or ten acres, more or less as thought advisable, but preferably the larger acreage. Scarcity of labor would make it necessary for competitors to do a day's work each day and the whole could be judged on its merits. Thousands of acres would get the best plowing they ever had and plowmen and farms would be improved. We have had many letters and verbal expressions of approval of the scheme from practical farmers and men connected with agricultural work. Canada's young farmers are interested in it. There is only one thing lacking—the money to carry out the scheme. Governments have done very little, financially, to encourage good plowing. Now is a good time to start and there is no surer means of increasing production than by appropriating sufficient funds to encourage good plowing by taking the plowing match to the plowman's own farm.

Thoughts for Fair Boards.

In another column, under the heading: "Side-lights on Fall Fairs," a correspondent gives Fair Boards and others a few seasonable hints regarding ways and means of increasing the educational value of their annual Fall events. With what our correspondent says we most heartily agree. A Fall Fair, to fill its place in the life and agriculture of any country community, should first of all be recognized as a place to exhibit the farm and other products of that community. We have no quarrel with the man who enjoys a horse race or a fake show. The majority of humans are thrilled by close trials of speed and we are sorry to say too many seem to enjoy being humbugged by the fakir, but the point is well taken: Is the Fall Fair the place for fakirs and horse races? If so there is something wrong with the country districts. Either they get too little amusement and must have these "attractions" at the fairs, or the remainder of the show is not worth very much. The Fall Fair at which the races and fakir row are the main features deserves to die.

One point more. Our correspondent mentions a horse race at a school fair. Such a mistake as staging a horse race at the annual event for school children is scarcely excusable. If this is the aim of any of those managing school fairs they had better change their minds very quickly else the school fair will degenerate.

Nature's Diary.

A. B. KLUGH, M. A.

Not long ago the Dominion Government received complaints that the Salmon fisheries of the Gaspé coast were being damaged by the depredations of the Double-crested Cormorant, the complainants desiring legislation which would reduce the numbers of these birds. P. A. Taverner, of the Victoria Museum, a most efficient field ornithologist, was sent to Gaspé to investigate the charges against the Cormorant, and his report which embodies the results of this investigation is of much interest and importance.

The Double-crested Cormorant is a rather large bird, about the size of a large domestic duck, but slimmer in build and more graceful in outline. When sitting on the water it has quite a loon-like appearance. The adult is solid black with green reflections over most of the body plumage. The back feathers are vaguely margined with brown, making each feather appear to stand out as if in relief. Spaces about the eyes, and at the base of the bill, and the small throat pouch, are bare of feathers and colored bright orange. The younger birds are dull brown, a little lighter below, and have the facial colors much reduced in brightness. The Cormorants nest in colonies on isolated rocks along the sea-coast. They lay from three to four eggs, but there is a great mortality in the early stages of the nestlings. The eggs hatch one by one at considerable intervals of time and the eldest is a large strapping youngster before the youngest is out of the egg.

Mr. Taverner found that the Cormorants of the Gaspé Basin fed almost entirely on fish, that a full meal for a Cormorant consisted of about a pound and a half of fish. He estimated the number of these birds feeding in the basin at 700, and allowing two full meals per day for each bird, it would require 600 pounds of fish to feed them one day, or 45 tons would be consumed in the five months, from May to September, which they spend in the basin. This, as Mr. Taverner says, would show "that should the Cormorants of Gaspé seriously turn their attention to fish of economic importance their possibility for damage would be considerable." Mr. Taverner found that the Cormorants, however, instead of feeding in the fresh water of the river where the young Salmon live, feed in the tidal waters of the river's mouth, or along the coast. In order to see exactly what the Cormorants were eating he collected thirty-two of the birds and examined their stomach-contents. Of these five were empty,

one so nearly so as to make the contents unrecognizable and two were from nestlings, which having been fed by regurgitation from the parent's throat, contained doubly digested and therefore unrecognizable material. Of the remaining twenty-five, sixteen contained Sculpins, five Herring, one each Capelin and Eels, and two Tom-cod. The Sculpin, which is thus seen to form the main food of the Cormorant, is entirely unimportant economically, as it is not used at all as food by man. Mr. Taverner sums the matter up as follows:—"From the evidence on hand it is, therefore, evident, that the Cormorants in the fresh waters of the river are few, that those in the tidal mouths feed on bottom-haunting fish, and that as a whole the influence of Cormorants upon the number of Salmon can be disregarded as too slight to be of economic importance."

It is not, however, the result of this particular investigation which interests us mainly, but the general considerations which underlie it. The thing which stands out clearly as a guiding principle is the fact that here we have a case of charges brought against a species, and legislation against that species demanded, and when these charges are investigated by an expert they are proved entirely false. Mr. Taverner very wisely concludes his report with a very lucid discussion of the general principle involved in legislating for the destruction of species supposedly harmful, in the course of which he says "innumerable examples can be cited where disturbing the balance of nature has resulted disastrously, in cases of both adding to and removing from a fauna. Under changed conditions, some of the most innocent seeming species have developed unsuspected harmful traits, and others apparently the most worthless have been seriously missed when removed. The balance of nature is too delicately adjusted to warrant our interference, until after exhaustive investigation and careful weighing of evidence pro and con. Even then, the problem is too complicated for any one to confidently predict the final result, and a certain amount of doubt always remains until practical result test the conclusions."

Leaving out the practical economic questions altogether, common humanity prompts us to destroy life only when necessary. Man having great power for good or evil has consequently great responsibilities. It is not enough that a species is useless to justify its persecution; it must be proven actively harmful before such a course is justified, not in a slight degree, but in a manner that seriously threatens our welfare. Even then the edict of extermination should only be pronounced when all other remedies fail. The neglect of this responsibility invariably reacts upon our heads.

As it is, the slaughter of non-game life that goes on in certain parts of our country is deplorable. The sight of hundreds of dead and wounded Gannets shot near Percé during the summer of 1913 for sport(?) and left to lie where they fell, indicates not only a wanton and unnecessary waste of innocent life but looseness of moral fibre among certain people that is a danger to the country at large and should be curbed. The attitude of our laws should instil a wholesome regard for the rights of lower life and the taking of it uselessly should be discouraged in every possible way. This does not mean that a sentimental quixotic stand should be taken. Whenever the end justifies it, no weak sentimentality should be allowed to stand in the way of human welfare; but the spirit of our laws and people should be such that no creature should be destroyed without a good, sufficient and well-considered reason."

THE HORSE.

Suggestions for the Coming Winter Feeding.

In most districts fall work with the team is almost completed, and for the next five months many horses will practically remain in idleness. There is not so much teaming to be done as there used to be, consequently wintering of horses comes to be a problem that requires serious consideration. Horses are an absolute necessity during spring, summer and fall, and one team must be kept in condition for trips to town, hauling manure, wood, etc., during the winter. Probably there is sufficient work so that they earn their board. The other horses are wintered for their services during the seven or eight months of the year. On the average 100-acre farm, four horses are kept besides one or two colts. The young animals grow into money and thus pay their way the year round, but how can work horses be most economically fed and cared for during the period of enforced idleness? With the present price of feeding stuffs there is greater need this winter than previously to devise a ration that will be adequate, but at the same time economical. Some horsemen seem to keep their horses in good condition on a smaller quantity of feed than others. A good deal of the success in feeding and caring for all classes of live stock, horses in particular, depends on the art of the feeder. Some men are born horsemen and experience little difficulty in keeping their favorite class of stock healthy and in condition. Others, in spite of their best endeavors, are a failure at looking after horses, but have greater success with the bovine or porcine classes of stock. However, there are certain points regarding feeding that should be considered in order that the requirements of the animal body may be met.

Feed consumed undergoes changes in the digestive tract which prepares it for absorption into the system,

and finally body waste work. The more feed protein, recognized the suppo obtained certain rel requires tein, the than does forming nut requirement portions so ration, or nourish th one. The a mainten feeding in performs.

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