The English Sparrow.

When it comes to a question of destructibility, English Sparrows are in a class by themselves in the bird kingdom, and equalled only by common brown rats among animals. If the person who was instrumental in introducing these cunning and destructive birds, about sixty years ago, could see the results of his experiment, he would be amazed.

Hardiness, diversity of food, fighting characteristics, extraordinary fecundity, and few natural enemies, have combined to make the spread and multiplication of the pest extremely rapid. English sparrows are omnivorous—that is, they will eat practically any thing edible—but judging from the short, stout bills, their natural diet should be of seeds, when they cannot find anything better. In the winter sparrows gather in large numbers in the cities and live on any refuse they can find in the back yards or on the streets. Oftentimes they are quite troublesome around places where food is set out for our native winter birds. When food is scarce around the buildings, they will visit vacant lots and eat seeds from the old weeds that are always present there. This habit of eating weed seeds is practically the only redeeming feature about them.

In the summer they vary their diet with insects, but as far as can be learned, they have no preference for any particular kind. The Biological Survey at Washington examined the stomachs of 522 sparrows during one investigation, and found insects in 128 of them; 47 contained injurious insects, 50 contained beneficial insects, and the other 31 contained insects that cannot be classed as either injurious or beneficial. If this examination can be taken as an indication of the tastes of these birds, their benefits from this source are very slight.

On the other hand, its evil habits are numerous. In the spring they select the best nesting places, and, not content with this, they drive away beneficial birds, such as blue birds, swallows, wrens, purple martins, catbirds, and vireos, by destroying the eggs and young and appropriating the nesting place, if it is large enough for them to place a bundle of hay and feathers in it. The song birds are forced to seek nesting places in berry patches and other out-of-the-way places, where their songs are not heard and where the benefit from their presence around the orchard, shade trees, and ornamental shrubs is lost.

When allowed to remain unmolested in the vicinity of dwellings, sparrows often give annoyance by roosting in ornamental vines around them. Repeated scarings late at night will cause them to move their sleeping quarters in a short time. On a cold evening a shower of water proves very efficacious.

Another true bill can be brought in against the sparrow on the charge of eating too freely of fruits, grains, and tender vegetables. Currants, cherries, tender lettuce, young peas, and wheat, especially when it is ripening or in the stock, are all eagerly consumed in considerable quantities. In the case of wheat, it is not what the sparrows eat (although a large flock will eat a great amount while they have a chance), but what they shell out, that accounts for the greatest loss.

In spite of the fact that there are no laws protecting sparrows, they are holding their own, if not increasing, in numbers. A crusade against this pest would mean fewer sparrows and more beneficial birds, with a corresponding decrease in the number of injurious insects and in the amount of valuable material destroyed.

Undoubtedly the best way of abating the sparrow nuisance is to prevent them breeding. At this season of the year there are no eggs or nests to destroy, but the season is at hand when the sparrows can be baited to feeding places by grain or crumbs, and when they have become accustomed to feeding in certain places, they can be easily shot, trapped or poisoned.

In preparing a feeding place for shooting them, it is best to have the sparrows feeding over long narrow areas, so that the whole flock can be swept by a charge of small shot. Where the sparrows are accustomed to feeding near poultry they can be enticed to eat off a horizontal board set up somewhere out of the reach of the poultry. The writer has known one hundred sparrows to be kil'ed by two shots on a prepared feeding ground. If some of the energy that is used in hunting owls and other large birds were directed against the smaller, but far more destructive sparrow, much good would be accomplished instead of harm, for destroying owls is certainly a great mistake.

Trapping sparrows affords considerable scope for ingenuity. One scheme that is quite successful, is to use a large shallow box, about six feet square and two or three inches deep, open on one side and covered with a fine wire netting on the other. One side is propped up by a stick 18 or 20 inches long, to which a long cord is attached. Underneath the bait is placed. The success of this plan depends on getting the sparrows accustomed to feeding under the trap for some time before it is let fall by pulling the string. After a heavy snowstorm, when most of their food is buried, they usually come to the feeding places in the greatest numbers. Sparrows are naturally wary, but many can be caught before they have time to get wise, if the trapper has patience to wait for the crowd.

Poisoning is a very sure and quick method, but it is dangerous when carelessly done, and in many places it is prohibited. When properly done and the right poison used, large numbers of sparrows can be killed in a short time, without causing much suffering, as the sparrows are quickly paralyzed and die in a short time. As in the case of shooting and trapping, the sparrows should be enticed to some spot unfrequented by poultry or other birds, and when a large flock have found the place, from 15 to 20 kernels of the poisoned grain should be set out for each bird. In this way very few, if any, grains are left lying around. Again, if the grain can be scattered after a snow storm, nearly all the flock will have eaten a fatal dose before any of the sparrows become suspicious of those that are beginning to feel the bad effects. After each dose of poison has been supplied, it is well to feed unpoisoned grain several times until the uninjured birds have regained confidence. In this way a flock may be practically exterminated.

Probably the most satisfactory poison is made by boiling one-eighth ounce of strychnia sulphate in two fluid ounces of water until it is dissolved. Then add a teaspoonful of moistened starch and heat a few minutes longer. The solution is then poured over about a quart of small wheat contained in a two-quart gem, and the mixture shaken until every grain is coated. The starch makes the poison adhere to the grains in a thin layer. If the wheat is then dried by spreading on a flat surface, it may be returned to the jar, labelled and used as required.

A crusade against the noisy, troublesome sparrow would certainly be a good thing.

Middlesex Co., Ont. C. W. S.

Erroneous Idea about Soil Analysis.

The idea that many people have, that a chemical analysis of soils will show just how to treat land to increase crop production, is erroneous, according to Professor F. E. Bear, of the Ohio College of Agriculture. "To the average farmer a chemical analysis of soils means nothing, and it is a waste of time and a needless expense," says Professor Bear. "Two soils may have the same analysis chemically and still give different returns in crop yields. The chemist can determine the total amount of the plant food elements in the soil, but he cannot tell how much of this is available for plant use. There are many conditions, other than plant food content, that must be taken into consideration in increasing crop production. The experienced soil chemist, by knowing these conditions, can often give much helpful advice without making an actual analysis. A personal visit to the chemist by the farmer seeking informatioo is always advisable. That there is a place for the chemical analysis of soils, Professor Bear believes, but it requires a knowledge of chemistry to interpret it.

Judging Competitions at Guelph Winter Fair.

The judging competition which, is pulled off annually in connection with the Guelph Winter Fair, is always an educative feature, especially for those entering the competition. Great interest is taken in this event by the O. A. C. students, who always take most of the money. The Day cup for inter-year standing adds interest to the contest, the five highest men entering from each year being totalled up, and the winning year holding the cup until the following year. Horses, beef cattle, dairy cattle, sheep and swine are judged. Contestants must not be older than twenty-five years, and are allowed to enter in two classes only. The following tells the tale for the 1912 competition :

Horses.—1, P. S. D. Harding, 184 points ; 2, G. G. Bramhill, 170 ; 3, W. J. Tawse, 167 ; 4, G. C. Duff, 161 ; 5, J. E. McRostie, 158 ; 6, H. M. McElroy, 155 ; 7, G. Elliot, 152 ; 8, P. Stewart, 151 ; 9, R. Dougall, 151 ; 10, H. B. Gerow, 150.

Beef cattle.—1, C. A. Webster, 180 ; 2, A. R. Mitchell, 179 ; 3, W. G. Nixon, 177 ; 4, E. F. Neff, 176 ; 5, C. A. Tregillus, 174 ; 6, W. J. Tawse, 172 ; 7, H. Cooke, 171 ; 8, T. F. Fairles, 168 ; 9, R. Diaz, 163 ; 10, H. M. McElroy, 161.

Dairy cattle.—1, J. C. Pope, 136 ; 2, W. Davidson, 135 ; 3, H. R. Hare, 131 ; 4, R. B. Hinman, 130 ; 5, D. R. Irvine, 125 ; 6, J. W. Lawrence, 123 ; 7, H. Riach, 122 ; 8, W. C. Hinman, 120 ; 9, G. Wilson, 115 ; 10, D. J. Benningston, 112.

Sheep.—1, W. Sheilds, 181 ; 2, R. B. Hinman, 180 ; 3, M. Keleher, 177 ; 4, J. S. Knapp, 175; 5, J. B. Grange, 173 ; 6, C. F. Neelands, 170 ; 7, W. Thompson, 153 ; 8, J. F. Lindsay, 149 ; 9, J. L. Dougherty, 143 ; 10, David McEwen, 143.

Swine.—1, J. E. Bergey, 177 ; 2, A. E. McLaurin, 135 ; 3, C. F. Neelands, 134 ; 4, J. E. McRostie, 132 ; 5, G. Wilson, 131 ; 6, J. E. Lattimer, 129 ; 7, G. C. Duff, —— ; 5, T. E. Francis, 111 ; 9, J. Allen, —— ; 10, R. H. Abraham, 107.

Totals for best five men from each of the four college years :

Year	Swine	Sheep	Dairy	Beef	Horses	Total
Third	707	798	617	751	742	3615
Fourth	382	683	556	864	810	3295
Second	412	729	596	797	723	3257
First	404	698	458	774	660	2994

The third year won the Day Trophy for 1912.

How to Kill Quack Grass.

The process of killing quack grass in sod or pasture lands, beginning in midsummer, is a very simple one, concludes a bulletin on this subject by J. S. Cates, and published as Farmers Bulletin 464 by the United States Department of Agriculture. The bulletin is thus epitomized by the author himself :

The first step is to plow the sod, cutting just under the turf, which is usually about 3 inches deep. To thoroughly turn over a stiff quack grass sod as shallow as 3 inches it is advisable to use a special type of plow (Scotch bottom) having a very long, gradually sloping moldboard. It has been found that with this type of plow the sod can be turned very shallow. The next step is to go in a week or ten days later with a disk harrow and thoroughly disk the sod. Repeat this treatment every ten days or two weeks until fall, when the quack grass will be completely killed out.

It sometimes happens that with certain kinds of soil during drier periods in the summer the ground becomes too hard to plow. With the type of plow suggested, however, it has been found that very hard and dry soils can be turned. In case it is not possible to turn the sod on account of dry weather, the treatment can be given with the disk harrow alone. We have been able to thoroughly kill the grass with either the disk or the combination of plow and disk treatment. Where plowing is possible, however, it is usually cheaper to kill the grass with plow and disk than with the disk alone.

If the disk alone is to be used, it should be set practically straight, well weighted with bags of dirt, and the field gone over three or four times. The first two cuttings should be at right angles and the other cuttings diagonally across. The sod in this way is divided into small blocks. Then the disk is set at an angle, when it will be found that the first 2 or 3 inches of the sod, which contain practically all of the quack grass roots, can be cut loose from the soil below. The exposure to the sun and the breaking loose from the lower soil soon kill out the quack grass. This ground should be gone over at intervals of ten days or two weeks throughout the remainder of the season.

The following spring the infested land, on which the grass has been killed either by the disking method or by the combination of plowing and disking, should be plowed to a good depth in order to bury the mass of dead roots thoroughly. This will facilitate the cultivation of the spring crop. If the work has been carefully done the quack grass will not show up at all in the spring crop.

Cedar Block Flooring.

Editor, "The Farmer's Advocate":

On behalf of a correspondent who enquires about the practicability of using cedar blocks bedded in cement-concrete, the Editor requests the experience of readers. We have had cedar blocks in constant use for about 25 years in a passageway some 75 ft. x 7 ft. behind a row of cattle with satisfaction. Compared with a cement floor, it is easier to drive over with the manure wagon or sleigh, though not so smooth. Sound, round blocks, cut six inches long, were used. The ground was a yellow hard pan, and the blocks were laid close together on a couple of inches of sand well tramped down and the interstices thoroughly packed full of gravel. The gutter behind the cattle is 20 inches wide, sloping down from the block passage towards their heels, so the liquid does not reach the blocks, which must be kept perfectly dry, as they will decay as I have learned. The outer circle of sap wood will wear more quickly than the red centre. The posts or poles should be stripped of bark and well dried before being cut. Whether cementing in the blocks would prove better and more permanent than gravel-packing, I could not say, but it would be more expensive.

ALPHA.