

sel used, be properly scalded so as to be kept perfectly sweet and pure, for without this precaution it is impossible to make good butter or cheese. The time has gone by when one hundred pounds of butter or two hundred pounds of cheese was considered a fair yield from a cow in a season. With a good selection of cows and good management, from one hundred and fifty to two hundred pounds of butter, or four to five hundred pounds of cheese may be made in a season from each cow. This has been done, and what has once been done can be done again, and there is no part of the country more favorable for the production of butter and cheese than the central and northern counties in this State.

From the American Farmer.

PROTECT THE BIRDS.

The season is now come when the birds begin their labors in our fields and orchards. Many amongst us are well satisfied of the usefulness of these little fellow laborers, whilst some are not aware of their value and permit them to be disturbed or destroyed. For the benefit of such, the following facts are stated, and every one is urged, as he values his fruit trees and looks for a plentiful harvest, to extend to the birds the protection they so richly merit. Let those who may still doubt, compare the orchards in Medford, Cambridge, &c. in June, with those in West Cambridge, and Lexington, where shooting and bird's-nesting are not permitted. Our most intelligent orchardists are satisfied that the absence, in these last named towns, of the canker-worm, that pest which has cost so much labor and expense, and has ruined so many trees, is owing mainly to the great number of birds which breed, undisturbed, in our fields and orchards.

Let the mischievous loafers, of whatever age, size, condition, or color, who roam about our fields with a musket in their hands, be dealt with according to law, or driven out like vermin, and we shall hear no more complaints that orchards are laid waste by insects and trees destroyed by mice.

FACTS.

"The common Cuckoo is almost the only bird which feeds on the caterpillar: he destroys them in great numbers, eating them voraciously when they are full grown. The numbers of these destructive insects that a few Cuckoos, with their young, will destroy, is incredible."—*Conn. Herald.*

"When the Martins and Swallows were protected," says a Herefordshire farmer, "the hops blustomed in great beauty, and the crop was abundant, whilst there was a general failure with my neighbors, who allowed these birds to be shot and their nests destroyed."—*Jesse.*

"Every Crow requires at least one pound of food a week, and nine tenths of their food consists of worms and insects; 100 Crows then in one season destroy 4780 pounds of worms, insects, and larvæ; from that fact some slight idea may be formed of the usefulness of this much-ersecuted bird, to the farmer."—*Magazine of Natural History.*

"The Blackbird destroys great numbers of grubs, &c. &c."—Last August, I observed eight or ten Blackbirds busily engaged in the grass-plot front of my house, and the grass where they were seemed dying, as was hinted, from their mischievous operations—and the gun was suggested as the remedy. Suspecting the object of the bird's search, I turned up a piece of turf with the spade, and found it literally swarming with grubs of various sizes. I need not say that they were allowed to pursue their game undisturbed, and that the grass-plot soon regained its verdure. This is another instance of the utility of preserving birds on farms and in orchards and gardens."—*Ibid.*

"The owl renders essential service to the farmer, by destroying mice, rats, and snails, which infest houses and barns; it also catches bats and beetles.

"To those who seem inclined to extirpate the Blackbird, Wilson justly remarks, as a balance against the damage they commit, the service they perform in the spring season, by the immense numbers of insects and their larvæ which they destroy, as their principal food, and which are of kinds most injurious to the husbandman. Indeed Kalm remarked, that after a great destruction made among these and the common blackbirds for the legal reward of three pence a dozen, the Northern States, in 1749, experienced a complete loss of the grass and grain crops, which were now devoured by insects."

"Up to the time of harvest, I have uniformly, on dissection, found their food to consist of these larvæ, caterpillars, moths and beetles, of which they devour such numbers, that but for this providential economy, the whole crop of grain, in many places, would

probably be destroyed by the time it began to germinate." "At this season, to repay the gardener for the tithe of his crop their natural due, they fail not to assist in ridding his trees of most deadly enemies which infest them, and the small caterpillars, beetles, and various insects now constitute their only food, and for hours at a time they may be seen feeding on the all-despising canker-worms, which infest our apple trees and elms."—*Nuttall's Ornithology.*

The Doblincolin is perhaps next to the Cedar bird or Canada Robin, the greatest destroyer of the canker-worm. Building her nest and rearing her young under the apple trees, as this bird often does, she requires an immense number of worms for their sustenance just at the time they are the most destructive. "I have observed one of these birds," says a neighbor, "go round the limbs of an apple tree in a spiral direction, and destroy in this way every worm on the tree, in an incredibly small time. No man can calculate the value of birds on a farm. I have no doubt but they save me equal to the labor of one man for the season, besides preserving my trees from destruction."

It may be safely said, that in a country so thickly settled as this there are no birds, not excepting the hawks and owls, but are vastly more useful than injurious to man. None of them should, under any pretence, be destroyed.

It is not generally known, that a few only of the hawks and owl destroy poultry. The rough-legged falcon may be observed the whole winter long seated on some small tree watching for mice, which he destroys great numbers. Those who shoot him, or suffer him to be shot, deserve to have their trees "girdled," by these vermin. The marsh hawk, the common Harrier, and indeed all this family of birds that comes so fearlessly to our fields and meadows, are equally harmless and useful.

From the Eastern (Maine) Farmer.

SALTPETRE—AS A MANURE.

Much interest is being taken in the use of Saltpetre as a manure—though no experiments seem to have been made in this country of any extent or decisive character, with it. In Europe, formerly, it seems to have attracted attention, with favorable results.

George Rimmerly communicates the result of experiments made with saltpetre to the Royal Agricultural Society, as follows—

"As to my own experience, it was in the year 1827 that I first used saltpetre in any quantity, and as it is my constant practice to try every artificial manure by some standard of known value, I manured part of 14 acres of seeds in the autumn of 1826 with cart-loads of good dung per acre, leaving a portion in the centre of the field to be dressed with saltpetre in the following spring. The decomposition of the dung, and the protection it had afforded during the winter, caused the clover thus manured to be very rank at forward in growth, and far superior to the unmanured parts, which looked weak and bare. I however waited till the clover had just begun to grow, and then, after having reduced the saltpetre to fine powder, it was sown by hand on the land left for that purpose. In about a fortnight from that time I went to examine it, and could see distinctly where the saltpetre had been used: it already surpassed the part manured with horse-dung in the breadth of leaves, and richness of its color, which was changed to a very dark green, and it continued through the season to grow with a luxuriance of vegetation that produced a very large crop of clover, quite equal, if not superior to that of the horse-manure; nor could I distinguish any difference in the value in the succeeding crop of wheat. The saltpetre was used at the rate of 1 cwt. per acre; cost 26s. 6d. in London, carriage and sowing included, about 29s. per acre. The expense would have been much increased had not the field been near the farm. The trial was on sandy land of moderate quality. I could add a great number more experiments, which would be but a repetition of the above, and I have used it on spring corn with equal success. I also recommended it to a friend, who tried it on oats, barley, and grass, and a few weeks after the application I had an opportunity of inspecting the crops, which were considerably higher and of a much darker green where the saltpetre had been used than the other parts of the fields, and were judged to contain from 8 to 12 bushels of corn more per acre. Its effects were equally striking on the meadow. It was used at 1 cwt. per acre."

Another experiment is given by the Earl of Zetland, he says— "In May last I sent a ton of the nitrate of soda from London to Upleatham, in the North Riding of Yorkshire. I directed that