

moult, would have produced a stronger red on the throat or reverted to the more ordinary black, as is now usual.

Upon the evidence I make *P. ramsayi*, Sharpe, a variety of *P. goodenovii*, Vig. and Hors.

Bird Protection.

BY FRANK M. LITTLER, Launceston.

ALL lovers of our native birds view with dread the wanton destruction that goes on year by year in every state of Federated Australia. They feel that the time has arrived when united and strenuous efforts must be made if we wish our feathered friends, and even those we count as enemies, to survive and brighten our bush wilds with their gay plumages.

Small boys, with their "catapults" and "pea-rifles," are not the greatest offenders; it is that class of persons who ought to know better against whom we have to contend. An inborn, insatiable desire to kill something is one of the worst traits of Australian youths. They take their guns into the bush and are not content with legitimate game but must try their prowess on all and sundry that come across their path. They appear to feel that it is dependent on them to "slay, and slay, and slay."

Farmers are responsible for the destruction of a great number of birds, the reason for which being that they consider birds are responsible for a large annual loss of fruit and crops.

Such being the case they (the birds) are shot unceasingly whenever opportunity offers. I do not say that birds do not commit a certain amount of havoc every year among fruit and crops, but what I contend is that their good deeds far outweigh their bad, and this is patent to all who take the trouble to investigate the matter for themselves.

Would that our farmers and orchardists studied more to distinguish between friends and foes, and understood fully that if a bird in the summer takes its share of the produce, it in the winter pays it back with interest twice compounded by destroying countless numbers of hibernating larvæ, eggs, and full-grown insects, which in the summer would perhaps ruin his harvest of grain and fruit completely.

Fortunately, in this island State birds are not destroyed for the sake of their plumage, to satisfy the vanity of the fairer sex. But this is done to a certain extent in the other States, and in an alarming degree in nearly every other country in the world.

Now to consider the case of a suburban garden, with its limited stock of fruit trees, jealously watched over by their owner, who, in his mind's eye sees the luscious fruit ready for picking when the right time comes. In due course the fruit ripens, and the owner views it with expectant eyes, thinking how well some will grace the table at next Sunday's dinner.

But, alas for human expectations! the birds come and take a share. The owner is wroth, and vows to destroy them at all costs. He sets nets, traps, poisons, and shoots them, declaring that they are interlopers and have no business in his garden.

Let him pause a moment and consider: it is he and not the birds who is the interloper. It was their right to fly wheresoever they list before he or his forefathers inhabited the earth.

He, by his action (direct or indirect) has caused the forests to be levelled, and thus partly deprived them of their chances of obtaining food. How can he, in all common-sense, expect birds to know that they have no right to touch certain food on trees enclosed by fences? But have they no right? Are the fruits of the earth to be man's wholly and solely? I think not, more especially as man, in many instances, takes away from birds the opportunities of sustaining themselves on their natural food as was given them from the first.

During a visit to a certain district in this State a few years since, I inquired if there were any Magpies in the district, as I had not seen any. I was informed that they had all been shot, as the farmers considered they destroyed the grain by pulling it from the ground while in the milk.

In connection with the foregoing, the following little incident, which happened in England may not be out of place:—

A gentleman owning land in one of the counties was passing in a train, in company with a friend, a large field of corn just springing from the ground, which he owned. On the field were large numbers of Rooks, all intent on some work.

"Look at those Rooks," said his friend; "they are pulling up every bit of corn. You won't have a bit left."

Next day the owner, who was of an inquiring turn of mind, went and examined the field in question. Sure enough there were large quantities of corn on the ground. On examination it was found to have been attacked by grubs. To get at these grubs the much-abused Rooks had pulled up the diseased corn; not a single blade of healthy had been molested.

Farmers and fruit-growers are apt to jump to conclusions too quickly with regard to which are injurious birds and which are not, without duly investigating the habits of the various ones. If those farmers who accuse the Magpies of pulling up and destroying their corn would take the trouble to examine a field after they have been foraging there, they would find that it is only the diseased corn that is pulled up, and that in search of the enemy at the roots.

It has been stated that if all birds were destroyed from off the face of the earth, in five years it would not be habitable.

A writer says:—"If the arrangements of nature were left undisturbed, the result would be a wholesome equilibrium of destruction. The birds would kill so many insects that the insects would not kill too many plants. One class is a match

for the other. A certain insect was found to lay 2,000 eggs, but a single Tomtit was found to eat 200,000 eggs in a year. A swallow devours 543 insects in a day, eggs and all."

It is by destroying the equilibrium of nature that we become overrun with pests, there being not enough birds to keep the insects in check. Birds are the best "sure cures" for all kinds of noxious insects, but if the birds are destroyed because in their endeavours to save the farmers' crops they are observed to be foraging in his trees and fields, then the pests will get the upper hand, and there will be no checking them. No hard and fast line can be drawn between friends and foes of the feathered world. All the friends do a certain amount of harm, and all the foes a certain amount of good. No two persons would altogether agree as to which birds should be placed on either list.

As an example, I shall just mention one bird which I consider ought to be counted among the beneficial species. It is the White-eye (*Zosterops cerulescens*). These birds are fairly well distributed all over the island, and often may be found in large flocks round fruit-growing districts. They are considered by the majority of orchardists as unmitigated nuisances from their depredations among fruit, especially cherries and gooseberries. It cannot be denied these birds eat their share of fruit whenever they have the opportunity. I think I can affirm with a great deal of truth that there is hardly a bird that won't take fruit if it sees it growing within easy access, as it is on many fruit farms where the trees are planted almost right up to the edge of the clearing. During the autumn and winter months numbers of White-eyes come into the gardens in towns and eat off vast quantities of aphides from chrysanthemums and rose bushes. When pear slugs are full grown they feed on these to a large extent. Numbers of Codlin Moth grubs and other noxious insects are cleared off the trees or picked up on the ground by these industrious little birds. I am sure if anyone takes the trouble to observe them for a short time he will be convinced that their good deeds more than counterbalance their evil, and that without fear or hesitation they can be counted among the farmers' feathered friends, one that in a quiet, unostentatious manner helps him in his daily fight against the multitude of pests with which he is waging continual warfare.

In concluding, may I ask those who have the preservation of our native avi-fauna at heart to endeavour to check the ruthless slaughter of our best birds (not game birds) that goes on year by year through poison and the gun of the "pot-hunter." It is only a question of a few years and many of our birds will be as extinct as the Dodo. May I ask farmers and orchardists not to be too hasty in the condemnation of any and every bird they see on their fruit-trees and in their fields of growing corn? A little time spent in observation, and one or two shot and their crops examined, would save the lives of scores.