

I only know three sea-weeds that the swans eat, and they are the green ones. Their favourite grows in quiet places where there is a muddy bottom at low water, and is not unlike blades of grass, 6 in. long and $\frac{1}{4}$ in. wide. A variety of it grows also in fresh water, and is more abundant there, for it is very scarce in the sea. There is a little patch of it in front of my window at Pigeon Island, where a solitary swan has found it out, and comes for it occasionally. The swan often swims from the other side of the bay or from another little harbour, but I notice that it always times itself to arrive when the water is low enough to reach the weed, which requires a little thought and observation, because the times of tide are changing every day.

The next weed it eats is a sort of green moss that assumes various forms, sometimes like slime and grows mostly in back-waters near the mouths of rivers. It is much more plentiful than the other, and I think it forms the greater part of the food for the swans that live on the coast. I saw plenty of it floating about in the sea in front of the Hollyford River, and swans out there after it.

The other sort is like thin leaves of green paper, that grows plentifully among the common sea-weed on the rocks and stones; but the swans eat very little of it, and then only when it floats ashore. I never saw them fishing for it. The paradise ducks also eat a little of it.

The swan that comes here goes regularly up the beach for a drink of fresh water. A little higher up were some clumps of "cutty-grass," with a great crop of seed in little round drooping ears not unlike ears of wheat, and when they got well filled about the end of January the swan plucked everyone of them.

HAWKS (*HIERACIDEA*).

There are a good many sparrow-hawks about these islands and in the bush, though we seldom see them. They are sly, and fly late in the evening and at peep of day in the morning, when I often hear the little birds singing out their alarm-cries, and I know by the way the signal is passed along that it is the swift hawk on the hunt in hopes of taking some one by surprise; and we see traces of their work nearly as often as we see themselves.

Not once a year do we see one of them hunting a bird in the open here, probably because they get few opportunities of doing so; and their most successful plan of hunting is to fly swiftly through the trees, when, with their high speed, they have a great advantage over birds that fail to see or hear them in time to get a start. I am confident that they catch most of the pigeons this way, for they cannot catch a good pigeon out in the open, though, of course, a time will come in the life of every pigeon when the young and hardy hawk can catch her. I have often seen them start a pigeon with a great rush and clatter, but if she succeeded in getting out above the trees they nearly always gave her up.

On two occasions I have seen them catch fantails by a slight divergence in their swift flight, though the fantail is so nimble that it is the last bird in the bush I would expect the hawk to catch. Another surprise is the fact of their being able to overtake parrakeets out in the open. These are the birds that they most eagerly hunt when away from the trees, and they generally catch them notwithstanding their marvellous speed and activity. The kakas are poor fliers but demons to fight, and the hawks never appear to trouble the old ones, but they take the inferior young ones, which is all right and fair.

Recently I was up early, and over at our garden found the warm remains of a weka. There was so much of it eaten that I could hardly believe it to have been a sparrow-hawk's work, because I have often been surprised at how little they eat of a pigeon or swamp-hen. Therefore I set two traps, and next morning found a male sparrow-hawk with one foot in each trap and neither leg broken. He was as big as an ordinary female and very light in colour, which I think indicates age, for such is acknowledged in the case of the harrier. This one must have been feeding his young ones, and had come back for more food.

Late in February I saw a pair of young ones just learning to fly. They followed my boat among the rocky islets, and every time they lit on a rock they would lose their balance for want of practice. They were dark-brown on the breasts and almost slate-coloured on the backs. Their gapes were yellow and their legs of a greenish-yellow colour. I did not see their parents at all.

At Te Anau a pair fed their young ones near my camp for some time, where they were very welcome, because their game was mostly young sparrows, and I had an opportunity of seeing some of their manners. The male was only about half the size of the female, and he seemed to devote his whole attention to sparrows, which had many nests in a few solitary trees on the south-east end of the lake where there is no forest; but the female was more inclined to look after swamp-hens or wekas. The parents were like quail-hawks and the young ones like bush-hawks, so that there may be only one species that vary a little according to age and the locality they live in. I saw the pair hunt in company, and while one would be swooping down on the bird the other would be climbing up, and thus they swooped alternately, so that a parrakeet had no chance at all, and a starling could hardly escape. A sparrow is too cunning to afford a hunt, for he will not fly in the open, but will dive into any sort of cover, even in among the ferns; but the hawk used to fly through the trees where the nests were, and seldom failed to carry off something in his claws. When the parents wished to give a little bird to the young ones they would call out a scrap of their laughing scream to attract attention, and then drop the bird in mid-air, when the two young ones would race for it and easily catch it before it fell. And, as usual among the birds, the most alert and vigorous got the best and the most of the food.

Near Pleasant Creek, in Victoria, I saw a sparrow-hawk performing a very clever trick. I had taken shelter under a tree near a water-hole when I heard a rosella parrot screaming in distress, and I saw the hawk coming along close to the ground with the parrot in his claws. He flew right up to me and dropped in the water with his wings spread out on the surface. He was so close that I picked up a heavy piece of bark and hit him with it, so that he jumped