

# TALKS ABOUT BIRDS





E X L I B R I S

IRENE D. PACE

J. Johnson.

The Grange







TALKS ABOUT BIRDS

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# TALKS ABOUT BIRDS

BY

FRANK FINN, B.A., F.Z.S.

AUTHOR OF 'BIRDS OF THE COUNTRYSIDE,' ETC.

CONTAINING THIRTY-SIX ILLUSTRATIONS  
SIXTEEN OF WHICH ARE FULL-PAGE IN COLOUR

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## PREFACE

IN this book I have made an attempt to talk over with young people who are fond of birds the points which have always interested me in my studies of them—and I have studied birds ever since I can remember. What I have always cared about in connexion with them has been their ways of living, their habits and tricks, and their minds and thoughts, so far as we know them to have any. I have also always paid particular attention to the distinguished and remarkable birds of all parts of the world, and not to the birds of one country only. I find that most people who are not specialists in ornithology, young people especially, share my tastes in bird-study, and this has encouraged me to pen these chapters,

hoping that some bird-lovers who sympathize with me, but have not had my opportunities, may find in them some interest and instruction. The illustrations have been especially selected to give some idea of birds which are either found in many countries or are remarkable in some way; the black-and-white ones in the text are from Newton's *Dictionary of Birds*.

FRANK FINN.

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# TALKS ABOUT BIRDS

## CHAPTER I

### WHERE OUR POULTRY CAME FROM

I EXPECT it has occurred to a good many of my readers to wonder where all the poultry-yard birds first came from, and what they were like when they were wild, for one can hardly imagine them as always having been tame. Some savage tribes keep fowls, but a great many do not, and there is nothing about poultry-keeping in the Old Testament, so that the early Jews did not know anything about poultry-yard birds.

One does not see wild fowls living in our woods, so it is pretty obvious that they are foreign birds, although even Julius Caesar, when he landed here, found the ancient Britons keeping fowls for pleasure—which meant cock-fighting, I strongly suspect, as

that is a very favourite pastime among more or less uncivilized races, and always has been. At the same time, a friend of mine who has travelled in New Guinea told me that he had found one chief there who kept fowls simply as pets, though they were unknown in most places in the island, so that Caesar's early Britons may have simply been the first of the poultry-fanciers.

As a matter of fact, the real home of our fowls is India and Burma, and there are any amount of wild fowls—jungle-fowl people call them—there still. They are quite tropical birds, for you find them chiefly in the hot plains, and they do not go high up in the mountains where you find a temperate climate ; and, as there are not many birds suitable for shooting in the plains of India, except in the winter when wild ducks and snipe come in from the north, sportsmen find the jungle-fowl very useful indeed.

In fact, they go out regularly to shoot jungle-fowl as we shoot pheasants here, and the birds give quite as much sport, for they fly just like pheasants do, and are about the same size ; only it seems to newcomers rather like

raiding a neighbour's farm-yard when an old cock or hen gets up with a desperate cackle and flutter. To look at, too, jungle-fowl are just like some tame fowls, especially game bantams, for the cocks are black and red, and the hens brown, but they are smaller than most tame fowls, though not so small as bantams ought to be, being about as big as pheasants, as I said. They have single combs—the upright sort with notches—and the hen's comb is very small, like a young pullet's. The little chickens are striped with chocolate and cream-colour, just like game chickens; you do not see any yellow or black ones.

Jungle-cocks crow just like bantams—you know how a bantam always ends up his crow with a jerk—but they do not crow so much as tame cocks; I never heard of a jungle-cock doing anything so silly as crowing in the night, which would advertise his roosting-place to all his enemies, such as wild cats and the great horned owls. They have tremendous spurs, about two inches long, and tapering most beautifully to a point, and they know how to use them. An old friend of mine in

India, who knew a good deal more about cock-fighting than he ought to have done, as it is illegal there just as it is here, told me that a tamed jungle-cock will generally beat any game-cock, as he is so much more clever with his spurs, but he said the wild bird has not the courage of the game-cock, and will run away if he finds he is getting the worst of it.

However, these wild cocks do kill each other in the forest at times, for one has been picked up dead with such a wound as the spur would give, and they seem to have regular "cock-pits" of their own. Mr. Hume, who is one of the greatest authorities on Indian birds, once had the good luck to find one of these fighting-places. Some native gipsies told him they could show it to him, and took him to an open place in the forest where there was a mound all littered with fowls' feathers, and said if he climbed up into a tree near by before daybreak he could see what went on. He did this, and heard the wild cocks crow and answer each other, and presently one ran out on to the mound with his tail up, which showed he was in a warlike frame of mind, for the wild fowl usually trails his tail like a

pheasant and does not stick it up as the tame ones do. However, before his enemy could meet him and come to blows the warrior was frightened off by one of Mr. Hume's dogs, which had got loose and tracked his master, and arrived just in time to spoil the fun.

The natives catch these wild cocks in a very simple but clever way. They peg out a tame cock with a string to his leg, and all round they set nooses; the decoy bird is sure to start crowing before long, and when a wild cock comes to fight him, of course he gets caught in these nooses before the fight has gone very far.

The sort of country you find jungle-fowl in is very much like what suits pheasants here; there must be woods for them to hide amongst and roost in, and water must be not far off, so that they can easily get a drink. They particularly like wooded islands in a river, as these make the safest roosting-places. If there are cornfields near, it is all the better from the wild fowls' point of view, for they like corn just as much as tame ones do, though hundreds and thousands of them live all their lives without ever tasting any, and feed entirely

on wild seeds, grass, berries, insects, and so on. They cannot go very far away from the woods for their food for fear of eagles, which are always ready to pounce upon them if they catch them in the open.

The wild hen makes a very rough sort of nest on the ground, like a hen pheasant, and only lays about half-a-dozen eggs. However, I expect she finds that number of chickens quite as many as she can look after, although she is a very brave and careful mother, for what with hawks, crows, snakes, mongooses, jackals, and half-a-dozen other enemies, she has plenty to do if she wants to bring up any of them. No one knows exactly when these wild fowls were first tamed, but they are quite easy to tame, whether you catch them young or old; I used to know of a jungle-cock which had been caught full-grown, and which went about a yard with the tame fowls quite at liberty, though he disappeared in the end. All we know is that, as one would expect, the Persians had fowls before the Greeks, for the Greeks call the fowl "the Persian bird"; then the Romans must have got them from the Greeks, and one or other of these two nations

would have taken them all over Europe. Our own people most likely got them from the Greeks or the Phoenicians, who carried on trade in this part of Europe long before the Romans found it out. The fowl has always been kept more widely than any other tame bird, as it is so useful and so easy to manage, so that it is not surprising that many savages were found keeping it when Europeans first discovered them, just as Caesar's early Britons were doing in his day.

But there was another tame bird that he found in their possession as well, the goose, and this is one of our own British birds, for wild geese still breed in a few places here, mostly in the North of Scotland, and no doubt in those old days, when so much of the country was marsh land, they were quite common. But it may not have been these geese that the Britons had tamed, because the Greeks in Homer's time, who were much more civilized than the ancient Britons were, seem to have looked on tame geese as something valuable, and we hear of them being white. Now, wild geese are grey, and when we hear of white ones we may be pretty sure they had been

tamed for a long time, for such varieties are always rare at first. The Egyptians seem to have been the people who first tamed geese, for they kept a great many, and there is a very ancient picture in the British Museum showing a flock of tame geese, some grey, some grey-and-white, and some all white, just as you may see them on any common to-day. So I expect the Greeks got their white geese from Egypt, and they and the Romans carried these tame birds about as they did the fowls, until they were spread about everywhere. Caesar says the Britons kept the geese, as they did the fowls, for pleasure, for they did not think it right to eat either of them. Very likely they found the geese of some use for sentinels, as you will remember the Romans did when the Gauls nearly took the Capitol, and the sacred geese kept there gave the alarm. The goose looks very stupid, but it is really the cleverest of all our tame birds, and it will give warning of a stranger even better than a dog; and this is a great consideration to people living in a state of constant war, as savages so often are. There is a peculiar sort of wild goose in Hawaii, and in the old days

when the natives there were savages, they used to keep this bird specially to give warning against a surprise attack.

As Homer mentions tame geese and says nothing about fowls, we must suppose that he did not know anything about cocks and hens, and the Egyptians seem not to have done so, as there are no pictures of them in their sacred picture-writing or "hieroglyphics." It is true that one often comes across a little bird which is very like a young chicken among these signs, but it is just as much like a young quail or a young moorhen. As they certainly did have tame geese, as we have seen, it would seem that the goose was the first of poultry birds, and there is none so easy to tame and keep, for a goose is so sensible that it soon knows when it is well off. Mr. Hume, in his book on game-birds, says that a wild grey goose, only a short time after it has been captured, by its wing being damaged by a shot, will follow you about like a dog; and a goose lives on grass and needs no shelter, so it gives no trouble and is in every way a likely bird to be tamed early. But although the wild grey goose is found in India in the winter, that is

not the ancestor of the tame geese you see there. All over India and China the tame geese are of the sort with a knob on the beak, and with brown plumage instead of grey—when it is not white—which are always called Chinese geese over here. These come from a different sort of wild goose, which is found in China and was tamed there long ago, and brought into Europe some centuries back. To any one who has lived in the East it seems strange to see these geese kept as park ornaments, just as it seems funny to see the Indian cattle with humps kept in the Zoo in yards like wild bisons, when in India you see them in every road and field drawing carts and ploughs.

There is some reason to suppose that pigeons were tamed in very ancient times, for they are often mentioned in the Bible; but pigeons may have lived half tame about towns, like sparrows, for a long time before people ever tried shutting them up; and the ordinary blue pigeon, with two black bars on the wings, is found building on the sea-cliffs in this country, and on mountains all across Europe and Asia. In India it often builds in ruins and in the

walls of wells, and even in inhabited buildings. It does not care about trees, and you hardly ever see a tame pigeon settle in one, while wherever pigeons are seen living a free life about towns you are certain to see plenty of the original blue black-barred sort. As Herodotus says that when the Persians invaded Greece white pigeons were first seen there, we can be sure that pigeons had not been much looked after in Europe at that time, for so pretty a bird as a white pigeon, when one did appear, would have been taken care of and bred from by pigeon-fanciers.

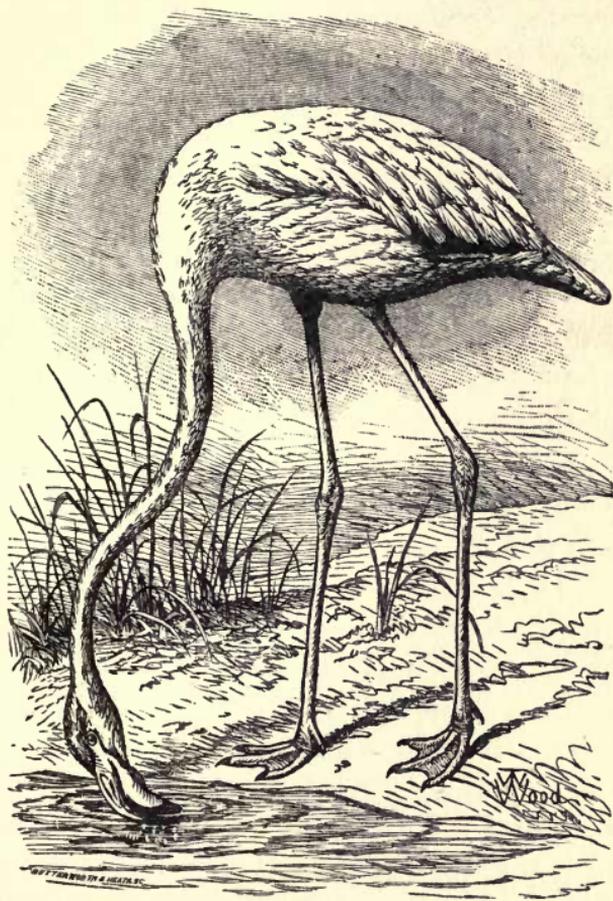
The Romans, we know, thought a great deal of pigeons, both for eating and as fancy birds, and they used to build towers for them to live in, no doubt the original patterns for the old stone pigeon-houses which are now and then to be seen in old farms in the country.

One naturally thinks of ducks next to fowls as poultry, but ducks are not such very ancient tame birds as history goes. In a description of a Roman poultry-yard which has come down to us there is nothing said about ducks, though flamingoes and peacocks are mentioned as well as fowls and geese and

pigeons, and another writer says that you should keep ducks in a special yard netted over, for fear they should fly out. This shows the Roman ducks must have been pretty wild, for the ordinary tame duck can hardly fly a foot off the ground ; and besides he goes on to say that if you want to increase your stock of ducks you should get wild ducks' eggs and put them under hens. This was at about the beginning of the time of the Roman emperors, and the duck they were taming was no doubt the ordinary wild duck which is still so common in this country, as our modern tame ducks are certainly its descendants.

The flamingo seems a strange bird in the poultry-yard, but the Romans do not seem to have bred it, but only kept it to eat, no doubt fattening the birds which had been caught wild. Flamingoes are still common all along the Mediterranean coasts, and are still caught for zoological gardens and the collections of people who like keeping rare and beautiful birds.

Peacocks were very important birds to the Roman poultry-keeper, for they took the place that the turkey does now, and were kept



FLAMINGO.

quite as much for eating as for ornamental purposes, though one Roman poet says how hard-hearted one must be to kill such a beautiful creature. The real wild home of the peacock is India, where it is still common in many places. You can get a good idea of the wild peacock's appearance and habits from our tame birds, for tame pea-fowl still look just like wild ones—except the few that happen to be white or otherwise unusually coloured—and they are usually allowed to roam about and live naturally. Peacocks were first seen by Europeans when Alexander the Great invaded India, and he was so delighted with them that he made an order that none should be killed. Not long afterwards they were brought to Greece, and were first kept in Athens, which was the great city for all that was new, beautiful, and strange. The owner of the peacocks was so bothered by people asking to see his wonderful birds that he had to appoint a special day for seeing them, and this is not surprising, for though we are so used to peacocks that they are too often looked down upon and made fun of nowadays, they are really the most wonderful and splendid

birds in the world, and we shall never see anything better in feathers.

Solomon, by the way, had them, so the Jews were acquainted with peacocks long before the Greeks were, but no news of his birds seem to have reached the West. Peacocks were never forgotten, and were kept and cared for somewhere or another from Roman times onwards; but guinea-fowls, which the Romans and Greeks also knew, seem to have disappeared altogether during the Middle Ages, for an Englishman writing two hundred years ago says that when he was a boy they were shown as a curiosity, though they had since become common poultry. The wild guinea-fowl is found in West Africa, and, like the wild fowl, has much the same habits as the pheasant. The ordinary dark ones, covered all over with little white spots, are very like the wild bird still, but there are several sorts of wild guinea-fowls which are quite ordinary game-birds all over Africa, and the Romans seem to have kept another sort besides the one we know; ours has red wattles, and they seem to have also had one with blue wattles, like some of the kinds which

we do not keep, but which are well known as wild birds.

I have said that the peacock took the place of the turkey among the Romans, for the turkey, in spite of its name, did not come from Turkey, but from North America, and so, of course, the ancients could not know anything about it. But when America was discovered it was found that the natives had tamed turkeys and were keeping numbers of them, so turkeys were soon brought over here and found to be much easier to rear in quantities than peacocks, so that peacock on the table soon went out of fashion. Wild turkeys are still found in America, and very wild they are, for of course they have been very much shot down, and those that remain are not at all easy to get at. The wild turkey is of a glossy bronze colour, very like the best tame ones, and it is mostly found in the woods, coming out now and then to feed, very like a pheasant; in fact, all our ground poultry have much the same ways as pheasants have, when they are wild, and, like pheasants, feed on all sorts of food.

The only other bird that the natives of

America were keeping and breeding tame was what we call here the Muscovy duck. This, like the turkey, has got a wrong name, for Muscovy was the name given to Russia in those days, and I do not know how it got fixed on to this American duck. Muscovy ducks have very different habits in some ways from our ducks; when they are wild they roost in trees like fowls, and you can even see the tame ones fly up on to walls or roofs. The wild ones also lay their eggs in holes in trees. You can always know a Muscovy duck because it has a bare red skin round its eyes; people only keep them as curiosities here, but over a large part of the world in hot climates, in Africa as well as in their proper home in the warm parts of America, they are the ordinary tame ducks that are kept. The wild ones are black with white patches on the wings, and are bigger than our wild ducks, especially the drakes.

So we see that to trace back our poultry to the wild state takes us into quite a lot of geography and ancient history; and the story as to how some of them came to be so different from their wild relations is also a very interesting

one. It is easy enough to see why most of them fly so little ; in a wild state a bird must fly well or it may easily lose its life, but this is not so when it is protected and looked after, for then a lazy bird which does not use its wings has a better chance of being kept than one which flies about, because when people are killing their poultry they would naturally make sure first of those which were likely to fly away—if they could catch them ; and if the birds could not be caught they would simply go back to the wild state, and so again those that did not fly would remain. It is natural, too, that such birds and their young ones would be more inclined to get clumsy and fat, and that is why most tame birds look so awkward beside the wild ones, as you may often have a chance of seeing with tame and wild ducks, since both sorts of ducks are common here.

The reason why tame poultry are of so many colours is very similar ; it comes about through their living under our care. We may be sure that the colour of the wild bird is the best it can have as things go. It may be harder for enemies to see, or it may be the

colour that goes with the strongest constitution—there is some reason why the black and white and variegated fowls and ducks and pigeons do not get common in the wild state, though single ones may appear among the wild birds, just as we see white and pied sparrows and blackbirds. But when men tame and protect these birds, those which may have strange colours have as good a chance as the rest, and are very often kept in preference, since fanciers like a novelty, even if it is not as pretty as the original sort; for instance, many people value white peacocks very much, though they certainly cannot compare in beauty with the coloured ones. And, of course, the more odd-coloured birds are reared the more chance there is of their finding mates of a strange colour, so that the varieties keep on increasing until all possible colours for that kind of bird are produced. Some colours seem to be impossible for certain birds; for instance, we have black fowls and pigeons, but although the goose has been tame so long, no one seems ever to have heard of a black variety of that bird. Peculiarities in shape in our tame birds get a chance to

arise in the same way ; for instance, some fowls and ducks now and then appear with crests, and if the owner likes the look of them, he will preserve the crested ones, and even try to get them with as big crests as possible, so that what we call a breed is formed. And so things have gone on, till at last we have got the great variety in our tame birds that we see in a poultry show ; and there is no telling when these changes will stop, as nowadays we hear of a new breed of poultry almost every year.

## CHAPTER II

### BIRDS IN TRAINING

WE do not hear so much about trained birds as we do about educated beasts, but it is quite possible to teach birds to do things which are either useful or amusing, and some very wonderful things have been done, and still are done, in the way of bird training.

The British bird one most often sees trained to do tricks is the redpoll, a little bird of the finch kind, smaller than the sparrow, and not uncommon with us in some parts of the country. The trick he is usually made to learn is that of fetching his food and water by pulling up a truck and a bucket. The cage is arranged with a slanting board at one end on which the truck runs, and a glass at the other into which the tiny bucket drops. When the bird wants seed or water, he takes hold of the string attached to the bucket or truck

with his bill and pulls at it, putting his foot on the string as he hauls it in, until he has got the food or water vessel up to the hole through which he reaches it. When he has had enough he lets go the string, and the bucket drops, or the truck runs back, by its own weight.

As a rule he has to learn this trick by degrees; the seed and water vessels are at first fastened close up to the cage, and then the string is lengthened a little, so that he has to give a peck at it. When he has learnt to put his foot on the string it can be lengthened by degrees, till he has to pull in several feet of it to get what he wants. This is, I think, rather too bad, as it is not fair to sentence the poor little fellow to continual hard labour; and it would be better to give him canary-seed and water in the cage, and confine his pulling to a truck of hempseed, or a bunch of green food, so that he would only have to work for these extras. The goldfinch will also learn this trick, but some birds never understand it; for instance the canary, who cannot be got to see that he must keep on pulling and holding the string with his foot as he goes on. Some redpolls, too, are cleverer than others;

there is a case of one very bright bird who learnt the trick simply by watching another bird doing it.

In India there is a very clever bird, the baya, or weaver-finch, which seems to be able to learn almost anything you could teach a dog. It has been taught to fire a toy cannon, to pick a leaf off a tree and bring it to its master, and to twirl a stick burning at each end, so as to make a ring of fire. But the baya is naturally very clever, as one may judge from the wonderful nest it makes; this is woven of grass or palm-fibre, and hanging by a sort of rope, while the entrance is underneath and lengthened out into a sort of spout hanging down, up which the bird shoots, while it is hard for snakes or other enemies to get in, especially as the nest is always hung at the end of a thin twig or the leaf of a palm. I have had young weavers myself in India, and two of them which got away recognized me in the street after being away a day and night, and came down and let me catch them, so that they must learn very quickly, as I had only kept them a day or two.

But the cleverest Indian bird I ever saw

was one of the common green parrakeets of that country, which had been brought to England by the gentleman who showed it to me. It did not talk at all, but its tricks were almost more than one could have believed without seeing them done, as I did, for it was put through a performance for my benefit. It began by twirling the fire-stick; then a little model of a native temple was put on the table, and the bird, at the word of command, rang the bell for service, pulled up a bucket for holy water, and placed flowers on the altar before the idols. On the altar it also placed a shilling, and a small watch of its master's, when this was given to it. But it was more wonderful to see it shoot an arrow from a bow; the bow was fastened on a stand, and the bird put on a perch opposite it. Then, when the arrow was given to it, it fitted the notch of it on the string, pulled the string, and shot the arrow off.

It also threaded beads, by means of a needle which had been cut down to about a quarter of an inch from the eye. It took this in its bill, and picked up the beads in its bill too, one by one, threading them—I sup-



REDPOLL. Page 21. FEMALE (above). MALE (below).



pose with its tongue—more quickly than one could have done it oneself, although some of the beads were hardly bigger than pins' heads. It is very hard to understand how the bird could have been taught this trick, and it seemed to me the most wonderful of all.

It is true the final performance *looked* more wonderful, because this consisted in the parrot being told to pick out the ace from several cards which were put, face down, on the table. It turned them up one by one, and when it found the ace, took that card and showed it to its master. But I was told that this trick was done by signs; the owner raised his finger when the bird had got the right card, and he told me that the Indian native who had trained the parrot did not even do this, but sat with his arms crossed and gave the sign with one of his toes, which the bird watched all the time.

The parrot's owner told me he had seen these tricks done by other parrots, but had never met with one which knew them all, and it must have been an exceptionally clever bird, with a very good memory, to have learnt as much as this. These parrakeets

are very common in India, and it is quite easy to get them very young and unfledged, while they are easier to rear than any other young birds I know, so that there is no difficulty in beginning their education early in their lives, which, of course, makes a lot of difference.

Birds can be trained not only for amusing people, but to perform real services, as I said at first; and of these the most wonderful are the Chinese fishing cormorants, which earn their masters a living as well as themselves. These cormorants are bred and reared in confinement, but they do not bring up their own young, for their eggs are taken from them and put under hens. Then the little cormorants have to be reared by hand, for, although the cormorant is a water-bird like the duck, the young ones do not take to the water at once and look for their food like ducklings, but remain helpless in the nest till they are full-grown, like young pigeons.

When they are fit to learn fishing they are put into training, and they become almost as docile and intelligent as dogs. They go into the water at the word of command, dive for fish, and when they have got one, come with

it to the raft where their master stands. It is true that they are prevented from swallowing what they catch by having a cord tied round their neck so that nothing large will pass down, and so the fish would be of no use to them, but still it is wonderful enough that they should be taught to "retrieve" in this way; two birds will even unite to land a fish which is too large for one. When the bird comes to hand the Chinaman makes him disgorge the fish, and when the fishing is over, the collars are taken off the necks of the cormorants and they have some of the fish given to them to swallow for good; these are, of course, small and valueless ones, the best fish being kept for sale.

Naturally, the wild cormorant, greedy though he is, soon catches enough fish to satisfy himself, and then roosts on a rock or tree till he feels hungry again; but John Chinaman makes him work overtime, and, I fear, wears him out in the end, for it is said that the birds show signs of old age at about ten years, while cormorants kept in captivity at St. James's Park in London, but living as they liked, lived for twenty years.

The Japanese fishermen also work with trained cormorants, but their birds cannot be so well trained as the Chinamen's are, since they are not allowed to go loose, but are held by a cord attached to a sort of harness, something like what is often put on pet dogs instead of a collar; this not only keeps them from getting away, but serves to haul them in when they have made a catch. Although this shows that the Japanese birds are not so docile, their masters need great skill in managing them, because each man works with several birds at once, sometimes as many as a dozen, and has to look out to avoid their lines getting tangled, to say nothing of hauling them in every now and then.

The cormorant that is used in this way in the East is the same kind that is found wild in this country, and a few years ago, at the London Hippodrome, a Chinaman with his trained birds went through the whole performance. It was very interesting to see the way in which the bird which had got his fish jumped from the water on to a pole which the fisherman held out for him, so as to bring him

on board, and how well they all knew what was going to happen when the fishing was finished, when they crowded round him on the raft to be uncollared and fed. In fact, they were the only performing animals I ever saw which seemed to enjoy their work, which, after all, was quite natural, as it was what they did every day in the ordinary course of things.

Cormorants have been trained in England by Englishmen, and the sport was practised in James I.'s time; and, although a full-grown wild-caught cormorant is a most spiteful and unpleasant bird to handle at first, it is found that he can be tamed and trained, though no doubt hand-reared ones would be much easier to manage.

But, generally speaking, Europeans have given up the custom of making birds work for them, and so even hawking, which is a much more generally popular sport than cormorant-fishing, is very little practised among us nowadays. In the olden times the sport was so popular that one can hardly understand Shakespeare, for instance, unless one knows something about the language of

hawking, for he so often makes allusions to it as an everyday affair; the hawk in those days was to sportsmen what the gun is now. Hawks, however, were never so well trained as the Chinamen's cormorants, for they would not bring in the game; in fact, it needs a good deal of care to keep a hawk from carrying off anything it has caught, which it is very likely to do if not treated gently and carefully. Hawks were also very likely to fly off altogether and get lost, and this is not to be wondered at, for a great many were full-grown wild-caught birds, though some were also hand-reared from the nest.

When at home hawks were kept in a place called a "mews," on perches or blocks, to which they were tied by a leather leash, which was fastened to the ends of short straps or "jesses," tied one to each leg. These were always left on, but the leash was slipped when the bird was let loose after its prey. To keep them quiet when at home, or when being carried on their owner's wrist to the place where they were used, they had hoods placed over their heads, covering their eyes completely, and when it was necessary to

call them back after a flight, a "lure" was swung at the end of a string; this was a heavy pad with a pair of wings fastened to it, and on this the hawk's food was often fastened also. From this comes the expression, still so often used, to "lure" any one, meaning to entice them.

In order to tame a newly caught hawk, which was, of course, very fierce, it was usual to keep it awake for several nights till it was subdued and worn out for want of sleep; then it was taught to take its food while sitting on the owner's hand, and to come to him for it. When once tamed, many hawks will get quite affectionate with their owners, and they were greatly valued as companions. The female birds were most esteemed, being bigger and stronger than the males, and the peregrine falcon and the goshawk were the most general favourites. The peregrine flies high and fast, and was used to hunt the heron, wild duck, and other strong-flying birds, more for sport than anything else, for to work with the peregrine one needed to ride a good horse to keep the birds in sight, and plenty of space, for the peregrine likes to rise high and come

down with a swoop, and does not care about dodging among trees or coming near the surface of water, so that a place had to be found where the hawk could have a good long fly after the victim before this could get near wood or water. It is particularly important at starting the hawk's training to make sure it catches the birds it is let loose after, for it is easily made sulky by failure, and often the poor birds used for practice were tethered or had their eyes sewn up to keep them from escaping.

The favourite hawk with boys and ladies was the merlin, a very pretty little hawk hardly as big as a pigeon, and looking very like a miniature of the peregrine falcon; it was particularly used for flying at skylarks, and is very bold and persevering.

With birds that fly high, like herons and larks, it was usual to use a "cast" or couple of hawks, so that when one had missed a swoop the other could cut in, as two greyhounds do when they are chasing a hare.

Sport with the goshawk, which is like a giant sparrow-hawk, was rather different; this bird cannot fly fast for any distance, and





takes its prey with a short sharp rush, if it can. If it misses, it does not make another attempt, but either gives up, if the prey has flown off, or sits and waits for it if it has hidden itself. So hunting with the goshawk was not fine picturesque sport like that one gets with the falcon. But, on the other hand, there was no need of riding, or of keeping to open country; you could take a goshawk anywhere, and, if the prey had not too long a start, she would take almost any game, being good for rabbits and hares as well as birds. For this reason goshawks were much used for practical purposes as well as sport, and it was reckoned that a good bird would keep her master as well as herself. This is not surprising, for a strong hen goshawk can even hold and kill a hare, although the animal is several times bigger and heavier than herself; but if she is to take such large prey she must not be allowed to do easier work, such as catching rabbits. Goshawks were always considered rather hard to manage, for they easily turn sulky, and are so fierce that they cannot be flown in couples, like falcons. Indeed, if a goshawk manages to

unpick her jesses in the mews and get loose, she will kill all the other hawks, not sparing even her own mate. In spite of this, the goshawk was always a very popular bird, and is so still in those parts of Asia where hawking is still carried on ; these are chiefly the central portions, from Turkestan to China, for in most parts of India very little hawking is done nowadays.

The fact is, that a hawk requires so much training, and needs to be kept in such constant exercise, that it is almost one man's business to look after one bird, so that it is not wonderful that in our times hawking has been mostly given up for shooting.

A few people, however, have always kept up the ancient sport even in Europe, and for them the wild hawks are still caught at one place, Valkenswaard in Holland, where this has been done for hundreds of years past. The great time for it is the autumn, when hawks, like the other birds they feed on, are on their travels ; and they are caught in a net baited with a live pigeon. The line by which the net is pulled over is carried to a hut where the falconer sits, and he has

a very clever device to save the trouble of constant watching.

He tethers out a shrike, or butcher-bird, where it can see the net and the bait, making a little hut of turf for it to run under when the hawk comes. The shrike, although it feeds on other birds itself, is much smaller than a hawk, and much afraid of the fiercer kinds, and so it can be relied on to give warning by its cries and movements when a hawk is coming. Not only that, but it will give some idea of the kind of hawk, and how near it is. It will see a hawk of any kind long before the trapper can; but if this hawk is only a slow, lazy buzzard or kite, it does not upset itself much. But it is much more excited over a falcon, and is wild with fear when the terrible goshawk is seen. When it darts into its little turf hut for shelter, the falconer, who is watching from his own hut, knows that the hawk has pounced on the pigeon, and makes ready to work the net. But—and this is a proof that the shrike is a very clever and observant bird—it can only be used for one season as watchman, for after it has by many experiences found out that

whatever happens to the poor pigeon it is quite safe itself, it leaves off bothering about hawks, and then it cannot be depended on to give the alarm ; so that the hawk-catcher has to catch a fresh shrike every season to undertake this duty.

Falcons and other hawks are not the only birds that have been and are used for hunting ; their big relations, the eagles, have also been trained like them. When the Spaniards invaded Mexico, they found that the natives trained the great harpy eagle for hunting, and Cortez, the conqueror, himself was presented with a trained harpy which was called "Prince of the Air." Cortez was a cruel man, and in a fit of temper he mortally wounded the eagle ; but it did not die without revenging itself, for with its dying strength it seized its master's finger, and crushed it with its bill, and this, curiously enough, was the only wound which Cortez received during his conquest of Mexico.

Powerful as the harpy's bill is, however, its feet are still more so, for it has toes as thick as a man's fingers, and can give a really terrible grip ; but I have never heard that it

will attack such powerful animals as our golden eagle sometimes will. This splendid



HARPY.

bird is trained by the Tartar tribes of Central Asia even at the present day, and will even attack the wolf. It seems hard to imagine that the eagle could hold so strong a beast as

this, and one which can bite so terribly ; but at any rate the bird can hold a fox, and even if it only swooped at the wolf and knocked him over, this would be of great assistance to the hunters who are following him. A trained eagle is, of course, very much harder to manage than a hawk ; it can go long without food, and has to be starved some days to make it really fierce, and it is far too heavy to be held up on a man's wrist, so its owner has a sort of crutch-handle fastened to his saddle, which he holds in one hand, and this supports the arm on which the eagle sits. Another difficulty about the trained eagle is, that if it is disappointed in catching the animal it is sent after, it is very likely to come back in a rage and try to knock its master over, so that hawking with the eagle is not exactly a sport for boys. However, it is certainly the finest sort of hawking, and putting the king of birds into training to help us against one of our greatest animal enemies, the wolf, is the most remarkable thing that has ever been done in the way of bird management.

## CHAPTER III

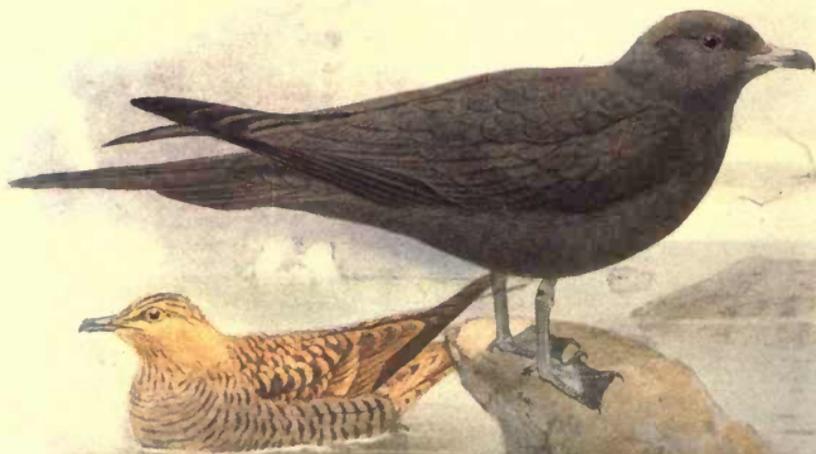
### FAGGING IN THE BIRD WORLD

THERE is a very common idea that birds, as they have wings, can do just as they like, and are under no sort of control, and so one often hears of people who wish they were as free as the birds ; but really birds have their restrictions and their troubles just like any one else, and in some cases they actually have to work for the benefit of others who are stronger or more clever than they are.

You can see this even in London in the winter time ; when the gulls are being fed by people along the Thames, the small black-headed gulls will come up and take the bread sometimes even from their hands, but the big herring-gulls are afraid to do this, so they take advantage of the small gulls by letting them get well out into the river with a big bit of bread and then taking it away from them.

But this is just an incident in gull-life, and herring-gulls generally get their own food for themselves. When one gets out into the wilds, though, one finds the professional pirate-gull at work, a bird who spends most of his time in making the other gulls give up what they catch, and does not mind attacking one which is bigger than himself. This is the skua, a gull which is only about as big as the small black-headed gull, but flies much faster; you can recognize him by his dark colour, for he is sooty-brown instead of grey-and-white or speckled, and by his tail being pointed instead of square at the tip. He seems to have a very good idea of when a gull is "full inside," for he does not waste his time in chasing one that has nothing to give up; no doubt he can tell by the style of flight whether his victim has had dinner or not. So he goes straight at the bird he selects, and hunts him as hard as he possibly can; the poor gull does his best to get away, but his pursuer flies so much faster, and seems so fierce, that he loses heart altogether, and throws up whatever he has swallowed lately; this the pirate snaps up, and goes gaily off to find some one else to





RICHARDSON'S SKUA. Page 40.

ADULT (above). YOUNG (below).

whom he can call "stand and deliver." There are several different kinds of skuas, found mostly in the northern seas, but the sea-birds in the tropics do not escape from pirates because there are no skuas there, for there are much worse ones in tropical seas; in these warm regions lives the frigate-bird, which is a very desperate character indeed. He is only about as big as a fowl in the body, but the body is only a small part of him, as he has a long forked tail, wings each more than a yard long, and a long neck and long hooked bill. His feet are quite small, like a swallow's, for he hardly ever walks, and still less often does he swim—almost all his life is spent in the air, where he glides and soars like an eagle, with his wings spread out and motionless. His home is generally on some tropical island, and in such places you always find sea-fowl; not ordinary gulls, which are rare in the warm seas, but terns or sea-swallows of some sort, and boobies, which are a kind of gannet, very like our own "solan goose."

The frigate-bird treats these just as the skua here does the gulls, hunting them till they throw up their food; but he has a

greater advantage over them, for he is bigger, and no bird in the world is such a wonderful flyer. But when there are no other birds handy to work for him, the frigate-bird is not so well off as the skua, for the skua can swim or run about and pick up plenty for himself like any other gull, but the frigate-bird must depend on what he can snatch up while he is on the wing. He is so helpless when he is not flying that the boobies sit side by side with him on the trees—for in the tropics the sea-birds often perch in trees—and a photograph has even been taken of a frigate-bird and booby having a rough-and-tumble fight on the ground. So the frigate-bird is often hard up for food; he is glad to pick up scraps about a harbour, and even devours his own neighbours' young ones if he gets the chance. He catches some fish, of course, and also young turtles; flying-fish are his especial favourites, and the frigate-bird seems to be almost the only sea-bird which catches them. Of course it is particularly convenient for a bird which does not care about swimming to have the fish come out of the water and fly!

In the islands of the Pacific the natives

often take young frigate-birds out of the nest and bring them up as pets; perches are set up for them on the shore, and they fly out and return home again just like pigeons. Indeed, missionaries out there have often sent letters by them from one island to another, just as one uses carrier-pigeons here.

Although they may not be professional pirates like frigate-birds and skuas, the gulls themselves do not mind doing a little piracy when it comes convenient; not only does the herring-gull rob the black-headed gull, but the black-headed gull itself, when it is feeding on the meadows and marshes along with the peewits, will rob them of the worms or grubs that they find. A South American gull does the same thing with the peewit of that country, and in New Zealand the common gull there follows the long-billed oyster-catcher about and takes away the crabs that he digs up.

It is just the same with the birds of prey; many of my readers have most likely come across the description of how the American white-headed eagle chases the osprey, or fishing-hawk, and takes away the fish it has caught; in fact, this habit has long been so

well known that the great Benjamin Franklin said he did not think that the eagle should be taken as the emblem of the United States, because he was such a dishonest bird. But he is not worse than many other eagles; in our poet Spenser's works there is a fine passage describing how an eagle swoops down and snatches away prey even from the fierce goshawk, and falconers in India well know that the wokhab, or tawny eagle, is one of the worst enemies of their trained hawks, and is always likely to chase these birds, so that they are often driven away and lost. Even if the hawk is not carrying any game, it is wearing the "jesses" or leg-straps, and the eagle, seeing these trailing behind, naturally thinks the hawk has got something which can be taken from it.

One does not expect sober creatures like the duck tribe to have wits enough to take advantage of other people's work; but they do it, and the wild swans when they are feeding are often surrounded by a crowd of ducks, who will snatch a share of whatever weeds the big birds can reach and pull up from the bottom with their long necks. I have never

seen or heard of this being done by ducks to the tame swan; but he is a very crusty-tempered bird, and perhaps the wild swan has more patience. One duck will even rob another; in America there is a diving species of duck, the canvas-back, which is very like the duck known over here as the pochard; it feeds much on a weed called wild celery, which it gathers at the bottom, and this weed is also liked by the widgeon of America, which, like our widgeon, is not a diver. So it hangs about round the canvas-back, and snatches what it can when the diving-duck comes to the top with his mouth full, thus making him work for the two of them.

There is even a bird which makes people work for him, but in his case it is a fair exchange, as he simply takes a "commission" on what the man gets, and helps him to get it. This is the honey-guide of Africa, which is constantly being mentioned in books of African travel. It is quite an ordinary little bird to look at, like some brown finch or sparrow, though it is really more nearly related to the woodpecker, and has its toes in two pairs like that bird, not three in front

and one behind as usual. Its favourite food is the combs of the wild bees' nests, especially those which contain the young bee-grubs, and it has somehow found out that the way to get at this food is to have human assistance. So whenever it comes across a man anywhere near a hive it knows of, it comes and calls him by chirping, and, if he pays attention and follows, it will lead him to where the bees have their store; then it waits quietly till the hive has been robbed, knowing that a piece of comb will always be left for it in payment. The natives have a great respect for this clever bird; in fact, they are afraid not to treat it fairly, for they think that if they do not give it some of the honeycomb it will wait its opportunity to lead them away again—only this time it would be not a bee-hive, but a wild beast, or a poisonous snake, that the bird would lead them to!

Whether there is any truth in this it is hard to say, but one has to be careful how one disbelieves the stories natives tell about animals, for sometimes very unlikely-sounding ones turn out to be right; and at any rate, many animals are well known to show feelings

of revenge, and the honey-guide must be a very intelligent bird, for it has to learn its trade quite by itself, since it is one of the birds which are brought up, not by their own parents, but by other species of birds, as our cuckoo is. The habits of these "parasitic" birds, who put their young ones out as boarders, give another example of the way in which some birds make others work for them, but they are so curious and remarkable that they must have a chapter to themselves.

## CHAPTER IV

### BIRDS THAT ARE BOARDED OUT

THE history of birds which begin their lives as boarders in the nests of other kinds is a particularly interesting one, and especially so as it is not nearly yet understood altogether, although one or other kind of these "parasitic" birds is found in every large country in the world, and many countries have more than one.

Far the most celebrated is, of course, our own welcome spring visitor the cuckoo, who is such a familiar bird all over Europe that it is not surprising that the circumstances of his disreputable youth were well known even to the ancient Greeks and Romans, while our own poets, even as far back as Chaucer, naturally mention the subject.

Indeed, the old writers were so much impressed with the wickedness of the young



CUCKOO. ADULT (below). YOUNG (above).



cuckoo in throwing his bed-fellows overboard, that they exaggerated his misdeeds, and made out that when he grew up he even went on to kill the foster-parents who had so devotedly reared him instead of their own children.

The hedge-sparrow fed the cuckoo so long  
That it had its head bit off by its young.

It is quite likely, all the same, that the young cuckoo does at times ill-treat the little birds which have cared for it, for one kept in a cage has been known to peck out the eye of a thrush which had been kind enough to feed it—although also a young bird itself—just because the poor thrush ventured to eat a worm given it, instead of handing it over to the lazy bully it was silly enough to fag for. And then the cuckoo, in its young plumage especially, is so easily mistaken for a hawk that people have often made the opposite blunder of mistaking the hawk for the cuckoo, and seeing it kill and eat a hedge-sparrow or other little foster-parent of the cuckoo, have put the crime down to the cuckoo's account, as if he had not enough to answer for already.

This likeness of the cuckoo to a hawk, and

its disappearance from Europe in the winter, is, of course, the origin of the old fable that the cuckoo actually turned into a hawk at that season; this is so old a mistake that it was corrected by Aristotle, the tutor of Alexander the Great, and yet some people believe it still!

The little birds also are always making this blunder, for they "mob" the cuckoo as if it were really an enemy which they would like to drive away; and in the aviaries at the Zoo the keepers do not like to have a cuckoo loose among the other birds, as these are very likely to get frightened at finding themselves shut up with what they imagine is their worst enemy.

Very likely this hawk-like look is useful to the cuckoo when she comes near a small bird's nest to put her egg there, for it may make the little birds afraid to drive her away; but in any case she almost always chooses the nests of birds much smaller than herself, so that they have not much chance of fighting against her. If she simply took the easiest nests to find we should discover plenty of cuckoos' eggs in thrushes' and blackbirds'

necks, but, as a matter of fact, they are very rarely put there; no doubt these birds are too much for the wily cuckoo, and give her no chance.

The bird that gets most of the cuckoo's eggs is probably the little titlark, or meadow-pipit, and this is because it is so widely spread, as you can find it everywhere in open country; the hedge-sparrow is also a very common foster-parent, and, as this is such a well-known little bird, and so often builds close to houses, it is not surprising that it gets the reputation of being the most usual foster-parent of the cuckoo. But, as a matter of fact, almost any little insect-eating bird gets a cuckoo's egg to take charge of at times, and sometimes even the finches; while in some places the fierce little butcher-bird is quite often favoured, in opposition to the cuckoo's usual rule of only oppressing the weak birds. Her method of proceeding must surely be very different in this case, and it would be interesting to know how she manages to dodge birds which are so fierce that they will kill others bigger than themselves, as the butcher-bird often does.

The most wonderful thing about the young cuckoo is, of course, its habit of pushing out its bedfellows ; this is literally a blind instinct, for the little cuckoo, like other birds that are born helpless, has its eyes closed during the first few days of its life, and yet it is at this time that it empties the cradle of the real owners. Its back is quite hollow at this time of its life, and very sensitive ; if it feels anything there it cannot help trying to push it out backwards, and so the murder of the other little birds is done unconsciously, so to speak.

There is one comfort, they cannot suffer very much, for naked little birds require a great deal of warmth, and soon become insensible and then die, when left out in the cold, so that they do not die a slow death from hunger. The old birds do not care a bit what happens to them, for most birds seem to think that if a young one can't keep in bed it is not worth bothering about, and they also usually give the food mostly to the chick that squalls for it most. So it is really quite natural that they should devote all their care to the greedy young cuckoo, while he is in the nest ; and by the time he has

grown up into a bird several times as big as themselves and looking suspiciously like the hated hawk, they have got so used to him that they never notice points of that kind.

Another very strange thing is the power that the young cuckoo has of exciting the sympathy of birds that have not brought him up, even if they can never have seen such a bird before. Not only will British birds feed a strange young cuckoo, but a case happened some time ago at the Zoo in which a black tanager—a small bird from South America, a country where there are no parasitic cuckoos—squeezed through the bars of a parrot-cage in which a young common cuckoo was being kept, inside the aviary, and fed it there.

There has long been an idea that the cuckoo's egg is apt to be like those of the birds in whose nests it is placed, but this does not hold good in every case, by any means. The cuckoo's egg varies a great deal, and on the whole is more like the skylark's than any other British bird's; but then the cuckoo does not particularly favour the skylark's nest, and, though its egg is a fairly good match for the

titlark's or the wagtail's, it is not at all like the robin's or the hedge-sparrow's, which are also favourite foster-birds with it.

Then it has also been suggested that the same cuckoo sticks to the same sort of nest to put her eggs in, and even that she hands down the custom to her daughters; according to this idea a hen cuckoo which had been reared in a hedge-sparrow's nest would make a habit of putting her own eggs there; but this would be very hard to prove, and in some cases the cuckoo's egg has been found in nests of birds which certainly could not rear a young cuckoo—even the wood-pigeon's and the dabchick's—so that it would seem that even if a cuckoo does prefer some particular bird's nest, she will in case of need put her egg in any nest she can get at.

The egg is usually laid on the ground, and the cuckoo then takes it in her mouth and places it in the nest; this, and the young cuckoo's habit of turning out his bed-fellows are the most wonderful parts of the whole history of the cuckoo, for the mere going to another bird's nest and laying in it would not be so very remarkable, for birds often lay in

each other's nests, and so long as the young got brought up somehow a bird which simply took up this habit would get on all right; but it is difficult to see how these other strange ways of the cuckoo arose. At any rate, it seems plain that we ought not to call the cuckoo a silly bird, as is often done—every one has heard the expression “you silly cuckoo”—for it certainly knows its own business very well, and some people who have reared and kept young cuckoos have found them very intelligent pets.

There are some stories about the cuckoo having been known to lay its eggs on the bare ground and sit on them itself; but there is always the chance, in cases like these, of people having mistaken the nightjar for the cuckoo, since the nightjar lays on the ground without making any nest, and in size and shape and flight is not at all unlike the cuckoo. But any one with any experience ought to be able to tell the two birds apart; the nightjar is a brown bird, while the cuckoo is grey, except when it is young, when it would not be laying at all.

It seems natural to speak of “the” cuckoo,

but really there are very many kinds of cuckoos, though, as they mostly live in the tropics, and are very seldom brought over here alive, they are little known to people who have not been abroad.

But those who live in India know one of them, at all events, very well ; this is the koel, or black cuckoo, a bigger bird than ours. Only the cock is black, the hen being speckly brown, rather like a hen pheasant. This bird lives mostly on fruit, not on insects and worms like our cuckoo, and it lays its eggs in the nests of crows. This, of course, is a very different matter from placing the eggs in the nests of little helpless birds as the common cuckoo does, for the crows, although they are cowardly birds, are bigger and stronger than the koel, and do their best to hunt it to death when it appears. Fortunately the koel can fly much faster than the crows, and her mate helps her by leading them away after him while she slips to the nest and lays her egg there. My friend Mr. D. Dewar has very carefully studied the habits of the koel and the Indian crow, and he finds that the young koel does not try to throw the young crows out of

the nest, but that they all grow up together ; and also, that though the koel's egg is very like a small crow's egg, this cannot matter much, for a crow will even sit on a fowl's egg and hatch it ! It is rather a pity that the young crows are not turned out, for most people who have been in India will agree that there are a great many more crows there than are wanted. Every garden is full of them, even in towns ; and as its foster-parents are so common, the koel is common too, and is much more often seen than our cuckoo here. In fact, it is commoner than many people wish, for it is a terribly noisy bird, and sometimes insists on keeping up its call at night, when, in the terrible Indian heat, it is hard to get to sleep, and even the nightingale would be put down as a nuisance !

The call is really very pretty, though not at all like our cuckoo's ; it is something like "kuk-kuk-ko-eel, ko-eel, ko-eel," running up the scale ; the natives think the koel is one of the sweetest of singing-birds, and keep it for a pet as often as our people keep thrushes and blackbirds. Because of this it is easier to get alive than most foreign cuckoos, and is

often to be seen at the Zoo. Another Indian cuckoo which is now and then brought here alive is one which has the curious name, among English people living in India, of "crow-pheasant"; it is really not at all unlike a small pheasant with a crow's head, as far as shape goes, and, like a pheasant, it passes much of its time in running about on the ground, and does not fly much. As you may judge from this, its habits are very different from those of our cuckoo, which flies a great deal and can only hop awkwardly when on the ground. Indeed, the crow-pheasant is more like our magpie in its ways; it kills small animals and young birds, and, when taken young, makes a very tame pet. The reason why I mention it here is that it builds a nest for itself and rears its own young; all these large magpie-like cuckoos do this, and there are many kinds of them, but only found in warm countries; none are European.

There is a story of an American who had read about the habits of the common cuckoo, and was so indignant at the existence of such a wicked bird, as he thought it, that he shot every cuckoo he came across. Of course he

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was quite wrong in this ; in the first place, we ought not to blame the cuckoo for following its natural instincts, which it cannot see to be unjust, as we do ; and in the second place, the American cuckoos, whatever their shape and habits may be, always make nests and look after their own families.

This is very strange, because the common cuckoos of North America are just like ours in very many ways, though the colour is not the same, as they have not the barred markings ; they even agree in such a small detail as being very fond of eating hairy caterpillars, and in getting the inside of their stomachs covered with hair in consequence of this habit. There is always something strange and interesting about the ways of cuckoos, even when they are not parasitic on other birds ; their note, or their feeding-habits are strange. The "crow-pheasant," for instance, will eat toads, which, like hairy caterpillars, are creatures that few birds will touch.

The American cuckoo builds a flimsy nest of twigs, very much like a wood-pigeon's, and lays blue eggs ; and these eggs are laid at such long intervals that, as the old bird begins

sitting at once, some of the young are hatched out long before the others, and so the brood are of various ages, and there may even be eggs and well-grown young in the nest at the same time. Here again is a cuckoo custom which is strange; for though some other birds, such as the barn-owl, also bring up their family in this straggling way instead of waiting till they have a full set of eggs and hatching them all at once, the custom is not a common one in the bird world, as every one knows who has been bird's-nesting.

Indeed, if any one wants to take up a natural history hobby that would give plenty of employment for a life-time, they would find one in the study of the cuckoos; our own bird would give them plenty of puzzles to work out, and if they kept in aviaries the few foreign cuckoos they would be able to obtain, and read all that is written about cuckoos in various countries, they would at last be able to write a most interesting book.

Just as, if the gulls which are persecuted by the robber skuas in our seas were to go south they would be attended to by the frigate-bird, so any of our little birds which wanted

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to avoid cuckoos and emigrated to America would find themselves no better off there; for though all the American cuckoos are honest, other American birds have taken up the idea of boarding out their families.

These are the birds which are known as cow-birds; they are something like starlings in appearance and ways, but have thick, short beaks, more like those of finches, and, like finches, they eat a great deal of seed as well as insects. The common cow-bird of North America quite takes the place of the cuckoo here, depositing its eggs in the nests of various little insect-eating birds. The result is very much the same; only the young cow-bird is reared, and the other little birds disappear; most likely they are starved to death and thrown out by the old ones, as the cow-bird does not seem to throw them out like the young cuckoo. But some of these American foster-birds do not see the fun of rearing cow-bird chicks if they can help it, and these get out of the difficulty, not by throwing out the strange egg, as one would expect, but by building another floor to the nest on top of it, and sometimes, if they are unlucky enough to

have another cow-bird's egg dropped in the nest, they will build over it yet again. As this cow-bird lays only one egg in each nest it visits, it thoroughly understands its unprincipled business, but there is a cow-bird in South America which goes about its affairs in a very slovenly and careless way, as has been described by Mr. Hudson, in his charming book on the birds of Argentina.

The glossy cow-bird, as this bird is called, the cock being of a splendid silky purple-black, goes about in flocks; the hens often drop their eggs on the ground and do not bother about them at all; several of them will lay in one nest of another bird, and they are very fond of breaking any eggs they may find there, not only the eggs of the real owner of the nest, but those of their own kind as well. Yet a great many of their young must be reared, for this is a very common bird, and many are sent over here and are often kept in aviaries; some fanciers have even had them lay eggs in other birds' nests there.

Then there is a brown cow-bird in Argentina which builds its own nest—when it cannot

steal another bird's—and always rears its young itself; but, what seems rather hard, this kind has another cow-bird imposing on it; for there is a third sort of cow-bird in that country of which both cock and hen are black, and this one lays in the nest of its brown relation! This is carrying things very far, for there seems to be no case among the cuckoos in which a parasitic cuckoo lays its eggs in the nest of one of the hard-working cuckoos, though in Africa and India the honest and the lazy cuckoos live side by side; but it only shows how very remarkable the habits of these parasitic birds are.

I said in writing about the honey-guide that this strange and clever little bird lays in the nests of other birds, and the birds whose nests it chooses are the barbets, which are birds rather like woodpeckers, and peck out holes in trees to lay their eggs in, as woodpeckers do. The honey-guide goes into the hole to lay its egg, and often has a tough fight with the barbets in its attempts to do so, as they are as big as it is itself. The young honey-guide is believed to throw the young barbets out, not by shoving them out

with its back like the cuckoo, but by the use of its beak, which, when this bird is quite young, is hooked at the end of both jaws, and so is well shaped for taking a tight hold of anything. But so far very little is known about this part of the honey-guide's history, and there is a great deal left to be found out about it; the most interesting thing to discover would be how it gets the idea of leading people to bees' nests, for the barbets certainly would have no idea of teaching it that!

This is probably the trouble of the parasitic birds' lives; they never get properly educated, and have to find out everything for themselves, as the foster-parents, however devoted they may be, cannot teach them so much as parents of their own kind would be able to do. Mr. Hudson says that the young cow-bird in South America is often carried off by the slow and clumsy carrion-hawk, because when it is out of the nest it sits on exposed perches, and that it does not understand the warnings its foster-parents try to give it; and any one may see here how the young cuckoo, in the brown-barred plumage of its first year, sits in places where it is easily seen,

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while it is not often that one sees the old grey bird, although its call sounds everywhere in the country. No doubt those young cuckoos which live to moult into the grown-up dress and come back to us in the next spring have learnt a great deal when they were in their winter quarters in Africa; and especially, what their real parents have never taught them, that it does not do to be too tame, a lesson which even the London sparrow takes care to give its little ones as soon as they leave the nest for the wide world.

## CHAPTER V

### BIRDS AT PLAY

ALTHOUGH birds seem to be such busy creatures, it is not by any means a life of all work and no play with many of them ; only it sometimes takes a good deal of watching to find out whether a bird is really playing or earning its living ; a swallow, for instance, chasing the tiny flying insects, looks as if it were merely at play when it is really hunting for a dinner. But when you see your pigeons, which get their food on the ground, flying round and round and trying to sail and glide without flapping their wings, you can tell that this is only play ; besides, when a pigeon is really travelling it goes straight ahead in quite another fashion.

It is not always the lightest and most active birds that are the most playful ; geese and ducks, which look so clumsy, play

in the water a great deal when they are washing. Every one has seen how even fat tame ducks flap along the water, chase each other, and dive with a noisy splash to come up with a jerk some way off. And geese, which look so much more solemn than ducks, have an amusement which the ducks have not thought of; they turn somersaults in the water, and, as they are not quick in their movements, even in play, you get the ridiculous sight during the performance of the clumsy bird on its back in the water, waving its legs in the air.

Fowls and turkeys do not seem to care about playing as a rule, though little chickens get up sham fights, or what look like them, but perhaps they are only practising for real fights later on; but these birds have not the sense of the water-fowl, and it is generally the cleverer birds that are more inclined to play, as they have the sense to keep themselves amused.

Cockatoos are very clever birds, and I have even seen them play with toys; in the big parrot aviary at the Zoo there are a lot of the small grey-and-pink cockatoos called in Australia "galahs," and now and then

one of these birds can be seen rolling on its back on the ground, and holding a piece of stick or a stone in its bill or feet, as if trying to juggle with it.

Then one day at the Zoo I saw a white-necked crane practising drop-kicks; it had got hold of an empty paper bag, and was tossing it up into the air and striking it with its feet as it fell. This was quite in keeping with crane character generally, for cranes are intelligent birds, and fond of dancing among other amusements; they may often be seen bowing and skipping and spreading their wings in the most absurd way.

Some birds get a great deal of amusement out of a sham fight; this is generally the custom of playful parrots. You may see a pair of macaws chewing at each other's great beaks, and trying to push each other off the perch, and at the same time making the most awful growling screeches, which sound as if they were trying to murder each other; but nothing is plainer than that the whole thing is meant in fun, and I knew a macaw that would play with his master, of whom he was very fond, in just the same way. The

beautiful scarlet lories are also very fond of wrestling matches, and when a pair are kept in a cage you will constantly see them hanging from the roof or a perch by one foot, and skirmishing together with their bills and the other foot.

The most playful birds I have ever seen are those horrible New Zealand parrots, the keas, which have taken to gnawing meals of raw mutton from live sheep; not that they want to kill the sheep, but of course the poor beasts generally die from the shocking wounds they get, and there is a reward paid for the heads of the destructive birds.

Some of them are kept at the Zoo in a fine large aviary on a sloping bank, and they are always having some game or other. At one time they got a lot of fun by rolling a barrel-shaped wire rat-trap, which had been put in their aviary, as far as they could up the bank, and then jumping out of the way as it rolled down again. A football, if they did not succeed in tearing it to bits, would give them any amount of fun.

One very miserable afternoon in December I remember noticing that they were quite the

jolliest creatures in the gardens ; I found one of them rolling on its back, while another jumped on top of it with screams of glee, in spite of the dull cold day, which was enough to take the spirit out of anything. It seems strange that such jolly birds should be so cruel ; but they must attack the sheep from real want of food, for at the Zoo it has been found that they soon get tired of the raw mutton chops which are given them at first, and like the ordinary parrot-food better.

The crow tribe are well known as very funny fellows, and I have seen them have some very amusing games. At the Battersea Park aviary they had at one time a raven in one compartment and a crow in the adjoining one, and one day there was quite a got-up game between them. The raven picked up a quill-feather and laced it into the wire-netting of the partition ; then he seemed to " dare " the crow to take it, for he would walk up and down as if he had forgotten it, and the crow, quite entering into the spirit of the thing, would sneak up to steal it, but just as he nearly touched it, the raven would make a fierce-looking rush at the wires and drive him

off. Thus the game went on until the big bird got tired of it and let the crow win the prize, which he did not really want, as the quill had belonged to a magpie which lived on his side of the wires.

But the great place to see crow games is in India, where a small kind of crow, much like our jackdaw, lives in the towns like the sparrow, and is very easy to watch. As he picks up most of his food in the shape of scraps thrown out from houses, he has plenty of time to spare, and always seems ready to spend the hour before bedtime in having a game. At the Museum buildings in Calcutta, where I lived, the great evening game for the crows was very like "I'm king of the castle." There were lightning-conductors on the building, and some crows used to try to perch on these straight pointed upright rods, which, of course, was not easy, and the others did their best to push them off while they were doing their utmost to balance themselves on these uncomfortable perches.

Another game they played was to swoop down on the backs of the kites as they soared and circled about; for the kite, although a

big hawk, is a very cowardly one, and the crows do pretty much what they like with him. For instance, if a kite was busy in getting hold of a big heavy stick for its nest, or went down to the pond to have a drink, it would often occur to some crow that now was the time to pull his tail, and of course he went and did it.

Tail-pulling is a great idea of the Indian crow's, and I used to see some very funny scenes at the evening playtime between the crows and a little striped squirrel which had a nest under the eaves of my quarters. The crows would get on the edge of the roof and caw insultingly at the squirrel's front door; out would rush the brave little beast, and they had to jump up in a hurry to save their toes. Then, when she had driven them off, she would bolt for home, while the crows did their best to grab at her tail, and, judging from the scantiness of the hair at the tip of it, they succeeded pretty often in getting hold.

I was pretty sure, also, that these crows had their fun with people; during the hot days it was a common thing for a crow to come and

perch on the shutters and caw till one got up to throw something at him, when he departed in a hurry, and I strongly suspect that all this was done for, was to make one move when one wanted to sit still.

Most of the crow's jokes, as may be seen, are quite of the practical kind, and bird play is often very much on the lines of practical joking. One of the first queer habits I remember noticing in any bird was the sparrow's trick of chasing a flying pigeon in the streets ; it seems to do its best to peck it, and it is funny to see how fast the pigeon flies and how it twists about to escape the nips. Any bird will do for this game from the sparrow's point of view, so long as it is not dangerous ; I have seen a sparrow chase a starling, and even a wild duck in Hyde Park.

Even the dignified peregrine falcon will play in this way ; one of these fine birds used to make the Museum buildings his home during the winter in Calcutta, and the other birds got used to him in time, as he did not attack them, but went away to kill birds for food. But I have seen him swoop down on a tame pigeon, and stop his swoop at the

moment when he was just about to strike it, a kind of joke which the pigeon probably did not think very amusing.

Another solemn bird I have seen play a trick which looked very like a practical joke, though it might have been in earnest—the peacock. At the time they had several peafowl, cocks and hens, loose in Regent's Park, and one day when a peacock was spreading out his train and doing his best to display his fine feathers before the ladies, another peacock crept behind him and gave him a fearful kick in the middle of the fan, which, of course, was folded up in a hurry. As peacocks, although they are not timid birds, very seldom fight, it is quite possible this was only a bit of fun; very unbecoming fun, too, for so dignified a bird as the peacock generally is.

One would naturally expect young birds to be more playful than old ones, and they certainly are so sometimes. The sports of pigeons and geese, and the tricks of cockatoos and crows, are the fun of grown-up birds, but I have seen some birds play when they were young, and become quite sober when they

were older. A young dabchick I turned out on the pond in the Calcutta Museum grounds was very fond of playing practical jokes on the ducks I kept there; it would dive under them, especially under any fresh one I turned out, and, from the way in which the ducks would jump and splash, it must have pinched their toes; but after a few months it gave up this amusement.

Then at the Zoo here they had, some years ago, a young gull of a rare kind, Scoresby's gull from South America. This bird used to think it funny, when the other gulls were sitting down and dozing with their bills snugly tucked in their back-feathers, to rush among them and wake them all up; but it left off this amusement when it was in full plumage. I ought to say that in neither of these cases the bird was in the down, but in its first feather dress; it is at this time that young birds are playful, for when they are downy, like human babies, they are not old enough to play properly, and of course those kinds which live in nests and are helpless at first could not do so even if the nest were big enough to play in.

I said at the beginning of this chapter that it was the clever birds that were most inclined to play, but they do not have the fun all to themselves, for some quite stupid birds have their games as well. A very common bird in South America is a kind of tinamou, which, though it does not belong to the same family as the partridge, is so like one in appearance and general habits, that it is always called "partridge" there. These tinamous are often caught by being snared with a noose at the end of a stick, carried by a man who rides round and round them, getting closer at every ring, until he is within touching distance. Birds which will stand this sort of thing cannot be very clever, yet, Mr. Hudson tells us, they have their amusements; although they do not live in company, they will now and then meet for a game, darting out at each other from the grass, and chasing each other; the bird that is chased either dodges, or crouches to let his pursuer jump over his back, so that the game is a sort of combination of hide-and-seeK and leap-frog.

We see, then, that the idea of having games crops up here and there all over the

bird world, and no doubt, as the habits of birds are more studied, we shall find that there is a great deal more sport and recreation in their lives than has ever been dreamed of.

## CHAPTER VI

### GIANTS AND DWARFS

ALTHOUGH there are not the great differences between the sizes of birds that we find among beasts, there are enough to make the subject of size interesting, for there is always an attraction about something very big or very small. It has long been known that the ostrich is the biggest of all birds, and none of the other giant birds, all of which, like the ostrich, are runners and cannot fly, are nearly so large, neither have any of them such handsome feathers as the ostrich bears in its wings and tail—the celebrated ostrich plumes.

The true ostrich, as most people know, is mostly an African bird, though it is also found in Arabia and Syria, and since it has been tamed and bred like cattle on farms, it has been carried to many parts of the world. The wild ostriches one hears about in South



OSTRICH.

America, however, are not real ostriches, but rheas, birds of quite a different kind, and not nearly so big. A fine ostrich may be as much as eight feet from the ground to the top of his head, but a rhea would not be more than five. Besides, the rhea has no noticeable tail, and three toes instead of two, the ostrich being the only bird there is which has as few as two toes.

It has, indeed, several other peculiarities as well as its great size ; for one thing, though its plumes are so fine, it has less feathers on its body than any other bird, for the sides and the big muscular thighs are quite naked, and the head and neck are nearly so. This gives the ostrich rather an unfledged, undignified appearance, and it is not so stately as many much smaller kinds of birds. No one would ever think of making the ostrich king of birds, even if he were able to fly.

It may seem strange at first that all the biggest birds have to live on the ground like beasts ; but it seems to be the case that a very big bird gets too heavy for its wings to be of much use to it. There have been bigger birds than the ostrich which could not fly,



RHEA.

like the moas of New Zealand, which were exterminated only a few hundred years ago, so that we still find plenty of bones, and even feathers and eggshells ; they had hairy-looking plumage like the emu and cassowaries, which are living now, and come next in size to the ostrich. But there is no proof that any bird ever lived, and was able to fly and at the same time was as big even as Darwin's rhea of Patagonia, which is smaller than the common rhea of Argentina, and so ranks as the smallest of our giant birds now living.

And with our tame fowls and ducks, which we know have descended from wild ancestors which fly well, we see that the big fat breeds, like Cochin-Chinas and Aylesbury ducks, have wings much too small for them and cannot fly, or only a very little, while the little bantams and the dwarf ducks called call-ducks can use their wings well, and have good-sized ones. So we see that a bird's body is inclined to grow too big for its wings, and if a bird once got too big to have much fear of enemies on the ground, it would not want to fly, and so it would not matter to it if the wings were too small to be of any use ; while it is quite possible

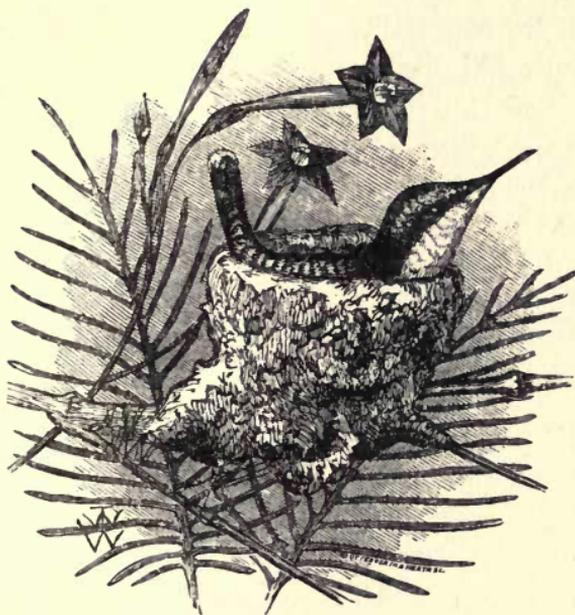
that however big and strong the wings of a bird as big and heavy as an emu or rhea, to say nothing of an ostrich, might be, it could not rise into the air, for the biggest of the flying birds we have nowadays have a good deal of trouble in rising into the air ; in spite of their great wings, they cannot easily lift themselves straight up, though they go fast when they are once started.

A wild duck will spring straight up off the water to several yards' height, but a swan has to take a long splashing, flapping run before he gets started into the air, though when he is once well up he will pass the duck, in spite of the slowness of the strokes he gives with his great wings. Very few birds that can fly are heavier than a fine male swan, which may weigh thirty pounds, and he is now the giant among our British birds, the smallest being the gold-crested wren. The great bustard, however, which used to live on our open downs and plains, and is still common in parts of the Continent, such as Spain and Russia, is a rival to the swan among the land birds, and the great bustard of Africa, which the Boers call the paauw, is

much bigger than either, for it may weigh fifty pounds, more than any turkey. This great bird is eight feet across the wings, and though some birds, like the condor and the albatross, are broader in span than this, they are not so heavy, so that the paauw is the biggest flying bird we know of, either living or extinct.

For a long time, of course, people always thought the wren, or at any rate the golden-crested wren, was the smallest bird ; but that was because they only knew the birds of Europe and countries near it. When America came to be discovered, people were not long in making the acquaintance of the humming-birds, most of which are smaller than wrens ; indeed, the giant of all the humming-birds is not bigger than a swallow. The smallest of the humming-birds is the smallest bird there is ; this is the bee humming-bird of the West Indies, of which you may see a specimen in the South Kensington Museum, under the scientific name *Mellisuga minima*, which means "the smallest honey-sucker." This midget bird is very little bigger than the big queen humble-bees which you see in

the spring buzzing along the banks in search of a place to form a hive, as can be seen from the illustration, which is of the natural size.



BEE HUMMING-BIRD. (After Gosse.)

There is another humming-bird nearly as tiny as this, the bumble-bee hummer of Ecuador (*Chaetocercus bombus*), which you will also see at the Museum, so that the smallest known bird does not stand well

away from all the other competitors so well as the ostrich does from his rival giants ; and he is not very brilliantly-coloured for a humming-bird, being only glossy-green and white. Still, he can claim to be a distinguished and remarkable bird quite apart from his size, just as the ostrich can ; he is the only humming-bird that can sing, and a very tiny squeaky performance his must be, one would think. The giant birds, being big like beasts, go further in the same direction, and have plumage of black or brown or grey, like a beast's coat, to say nothing of living on the ground all their lives.

The family of tiny humming-birds, on the other hand, go to the extreme of being as " lively " as possible ; not only do many of them have the most brilliant and glittering plumage of any birds, while hardly any are quite dull, but they are more truly flyers than any other birds. It is not that they remain long on the wing at a time, but that they use their feet so little, and are so clever in their flight. When they perch they sit still, or if they want to move along the twig, they whizz their wings to help themselves ; and they

seem never to hop or walk at all. When they fly, their wings, in most kinds, move so quickly that, like a bee's or moth's, they cannot be clearly seen, and they go up and down, from side to side, with the greatest ease, and in quite a small space; a humming-bird searching under leaves or up a trunk for insects, will not settle anywhere, but keep moving about on the wing, and when sucking honey from a flower, will hang motionless in the air till it has drunk all it can.

It is quite possible to observe all these beautiful movements in humming-birds in confinement, and I was never tired of watching two they had at the Zoo some years ago, which lived for a month, while most of their unfortunate companions died in a week or two. The kind to which these belonged must be one of the more hardy ones, and perhaps some day when people understand keeping humming-birds better, it may be possible to see them as a regular thing.

At the time one used to hear a good deal about the poor little creatures pining for the tropical sun; but it is quite a mistake to think that all humming-birds live in hot

climates. Two kinds come up as far north as Canada in the summer, one lives in the cold miserable climate of the straits of Magellan at the other end of America, and some keep high up in the Andes close to the snows of the mountain-tops. The real difficulty in keeping them is in finding some food which will take the place of the tiny insects they eat, for they cannot live long on nothing but honey; condensed milk suits them fairly well, being animal food, and no doubt some one will succeed with humming-birds sooner or later. At any rate one was once kept in Italy for eight months.

Some people seem to think that because humming-birds are tiny like insects, and fly like them, they have not more intelligence than these creatures; but I feel sure that this is wrong, and that they are quite as clever as any other little birds. They certainly are not nervous or easily upset; one of the smallest kinds they had at the Zoo escaped in the Insect House and buzzed all round it for some time, never bumping against the glass as any other bird would have done; at last it became tired out and fell down on to a cage where

two marmosets lived, and one of these little monkeys seized it by the head, and it was only rescued just in time. In spite of this exciting adventure, it had not been put in with its companions a quarter of an hour before it was hovering in the front of the glass-fronted cage, and trying to peep into the lens of a camera which was being used in an attempt to photograph some of these birds.

But this very cool behaviour has been noticed in humming-birds when they are wild; they will attack birds of any size when these come near a nest, and they show very little fear of people. Most likely this is because very few enemies can get at them; no hawk has any chance with such little dodgers on the wing, and when perched they are so small that they do not attract much notice from other enemies, so that they really do not know what it is to be afraid.

The giant ostrich, on the other hand, is very nervous; he is very hard to shoot, as he is so tall and can keep such a good look-out, and he is naturally so timid that a very common cause of death among tame ostriches is their being scared and bolting off madly

until they come to grief against a wire fence. It is true that in the nesting-time the cock ostrich is fierce and dangerous, but on the whole he is not at all a brave bird.

So far, I have been talking about birds of very different groups ; but you will sometimes find giants and dwarfs in the same family, and in these cases it is often to be noticed that the little bird has much more spirit than the big one. Eagles seem grand and noble birds, and some of them really are very fierce and brave ; but on the whole the sparrow-hawk and goshawk, and some of the falcons, show more spirit, and some of the fiercest birds of prey are the pigmy hawks called falconets, which are found in South-Eastern Asia. These are only about as big as sparrows, and mostly black-and-white in colour ; and there is not much that they are afraid of, for though you will see one in the South Kensington Museum set up in the act of pouncing on a butterfly, they kill other birds as well as insects, and sometimes very big ones for their own size. One was once captured in India which had killed a bird bigger than itself, and, having got its feet entangled with the feathers of its

prey, could not fly away. When this little hawk was put in a cage, and any one came near, it would try to fly at their faces, instead of dashing to the other side of the cage, as most newly-caught birds would do.

The late Mr. Rutledge, who was the leading animal-dealer in Calcutta in my time, told me that the natives say this tiny hawk will kill the great Sarus Crane, which is one of the biggest birds that flies, being four or five feet high. They say that the falconet flies at the crane while it is on the wing, fastens on to its side, and gnaws its way into the big bird's liver! This sounds very incredible, but there are pigmy owls as well as pigmy hawks, also about the size of sparrows or not much bigger, and in Chili the people tell a very similar tale about one of these tiny owls and a large ibis. In this case they say that the owl sneaks up close to the big bird when it is on the ground, and then rushes at it with a shriek. The big bird lifts his wings in alarm, and the owl fastens on his side, and clings to him as he flies madly through the air, until he falls dead to the ground.

It seems hardly likely that these tales,

told about quite different birds in different parts of the world, can be quite without foundation, but it would be interesting to know exactly how much truth there is in them.

The small bird may attack the big one simply for fun and mischief, as the sparrow chases pigeons; and the big bird, in his wild terror, may simply overbalance himself in the air and come down like a damaged aeroplane and so be really killed by the fall. At any rate even the eagle cannot do anything when a smaller but more active bird attacks him, as is done by the flycatcher called the king-bird in North America, though in this case no harm happens to the giant who is being bullied by a dwarf.

Even in the case of birds which are all of one species, like fowls, we can see giants and dwarfs, but in this case the great differences have been developed to some extent by fanciers selecting the biggest or the smallest for keeping; in this way very great extremes in size may be obtained, as one can see at any poultry show. The biggest fowl I ever heard or read of was a Brahma cock mentioned by

Mr. Wright in *Cassell's Poultry Book*, which weighed just over eighteen pounds—a great contrast to a tiny bantam, which weighs less than a pound and a half.

But with fowls, as with wild birds, we often find the small ones have the most spirit; many of my readers have no doubt seen a big lumbering rooster forced to run by a lively, spiteful little bantam; in fact, a bantam I once knew wrenched off his only spur—he had lost the other in a previous fight—in beating a cock bigger than himself.

It seems, on the whole, that the little birds have just as good a time as the big ones; they have more enemies, as a rule, but they can dodge them more easily, and they have not the same difficulty in finding enough to eat. If they do not live so long, their lives are most likely more merry than those of the big birds.

## CHAPTER VII

### BIRDS IN THE NURSERY

THE bringing up of any young creature is very interesting to watch, and this is particularly so with young birds, for these belong to different types according to the kind of birds their parents are, and so one has a good chance of finding out interesting things about them.

Even among our few kinds of tame birds we can notice many important things about young birds; in particular, they show us the two leading types of baby birds, which we may call the active and passive, the runabouts and the lie-abeds. Every one has seen how very lively are young chickens and ducks, very soon after they have been hatched; they are covered with a thick coat of very pretty down, and are very much interested in finding their food and in the world about them generally. Nearly all the care they want from the old bird is to be

defended from enemies, to be warmed up every now and then under her feathers, and to be "brooded" in this way at night, when the air is cold.

But young pigeons and canaries are of a quite different type; they are hatched blind and nearly naked, and can only lie in the nest and cry for food, so that they must not only be almost constantly warmed, but every bit they eat has to be found and brought and given them by the old ones. All through the bird world we shall find these two styles of young birds, but we never see the two sorts of youngsters in the same family of birds. For instance, the guinea-fowl and turkey and peafowl all belong to the same family as the fowl, and their young ones are very like young chickens; it would be a wonder, indeed, if a young peacock, for example, were helpless like a young pigeon. On the other hand, wherever we go, we shall find different kinds of pigeons, but these always have helpless young ones like our common pigeons; even the "squatter" pigeons of Australia, which always live on the ground and look very much like partridges, have

helpless "squeakers," not active little runners like the chicks of the real partridges, which belong to the fowl family.

So it is with the water-birds; one would expect all the web-footed birds to hatch out lively little swimmers like young ducks, or goslings, but when one comes to know the different families one finds it is not so; the cormorant, which belongs to a different family from the duck and goose, has, as I said in a previous chapter, helpless young ones like young pigeons, which are brought up in a nest, and never take to the water till they are full-fledged.

If you come across a bird of a family you do not know, you can generally guess what its young ones would be like by looking at its feet. This sounds strange, but the explanation is simple enough. Birds which have helpless young ones generally build their nests high up, and such birds have large hind-toes, so that their feet are suited for grasping and holding on to a perch, as you can see with pigeons and canaries; therefore, if your strange bird has a grasping foot like this, you can be pretty certain that its young ones will be hatched blind and helpless.



MOORHEN. Page 100.



Birds which live most of the time on the ground, and build their nests there, have downy, lively young ones which run or swim about almost at once, and as such birds perch only now and then, or not at all, they do not need a large hind-toe so as to take a good hold or move about easily among boughs, and so we find their hind-toe is small and hardly touches the ground, or not at all. Such toes you will see in fowls and ducks; and some wild birds have gone further, and have no hind-toe at all, such as the golden plover, which never perches anywhere.

You can see this difference quite well even in the web-footed birds; the cormorant's foot is different from the duck's, as it has a big toe behind, which makes its foot suitable for perching as well as for swimming, though there is a loose web stretching from the back toe to the front ones. Among the wading birds, the heron perches and builds its nest in trees, and people often wonder at this, for wading birds generally keep to the ground and shallow water. But if you can get a look at a heron's foot, you will see that it is as well suited to hold on to a perch as a crow's

or a sparrow's, the hind toe being large and strong.

Of course there are exceptions to these rules ; sometimes a bird which seems meant to



HERON.

live and make its nest on the ground will nest up in a tree, as I mentioned was the case with the Muscovy duck, but this duck comes from a hot climate, and most wild ducks in such countries build up in trees, perhaps from fear

of the alligators and crocodiles which live in the water, and would soon snap up a duck which made her nest on the ground near the shore. Then, on the other side, we have some birds which have a foot suited for perching and yet build on the ground, like the Australian squatter pigeons and like our skylark.

There are also a few whole families of birds which form exceptions, such as penguins, which do not fly and of course do not perch, and have quite a small hind-toe, and yet have helpless young ones; but on the whole the rule is one quite worth remembering.

There are interesting differences also between the birds which have active young ones; most of these downy chicks find their own food with but little help from the old birds, or none at all. The hen picks up food and shows it to her chicks, but they find most of it for themselves, and ducklings look after their own food entirely, each one running or swimming on his own account. So do young plovers, but young moorhens expect their parents to find the food and hold it for them while they are only a few days old, though

they run and swim about all right. Young sea-gulls can also run and swim, but they do not do so much, and the old ones find nearly all the food, and throw it up from their stomachs for them, when the little gulls either take it from their beaks or pick it up from the ground, and this goes on till the young gulls can fly well. So the young gulls are getting into lazy ways ; but it is the best thing they can do, for gulls generally build close together, so as to be able to join in defending their eggs and young, and with such a number living in the same place the young ones would never be able to get enough to eat if they tried looking for food themselves.

Some birds have very strange ways of looking after their young ; and these can be studied among our own wild birds in some cases. Moorhens have more than one brood in the year, and when the first young ones are feathered, but long before they can fly, they find another lot of little brothers and sisters have been hatched off, and the older young birds help their parents to feed these new ones. This is a very unusual way of doing things, but no doubt the helpful ways of the

older family are of great use in bringing up the next lot, and this may be one reason why the moorhen is the commonest of our water-birds.

The little dabchick and its handsome big relative the crested grebe, have a quite original way of managing the nursery ; the little ones can swim from the first, but they do not do so very much for the first week or two, because one of the old ones carries them on its back, under the wings, while the other hunts for food and brings it to them. With the Indian dabchick I have noticed that the old ones sometimes take turns in carrying the young, and that at bed-time the old bird goes back to the nest, and that the young ones sleep on its back there, not under the parent's breast, as most young birds do. The old ones put fresh material on the nest every day, and I once even saw one of the little ones helping in this. Another bird which carries its young ones is the woodcock ; this bird lives on worms, which it finds in mud with its long bill. But the young ones are hatched in woods away from the feeding-ground, so the old birds fly there with them every night,

instead of bringing the food to them, as most old birds do when the young cannot find food near their homes. It was long a puzzle how the woodcock does this, for its feet are not at all suited for carrying anything, nor is its bill; but by watching it has been found out that the little bird is carried between the old one's legs as it flies, so that there is not much strain on the feet. Only one can be taken at a time, so it is lucky for the old woodcocks that they have only four young ones in the brood.

With birds that keep their helpless young ones in nests and feed them all the time, you can see that there are two different ways of doing this, even among our tame birds. When pigeons feed their young ones the little bird puts its beak inside the old one's, but when canaries do this, the little birds gape widely, showing the red inside of their mouths, and the old birds put their beaks in the little ones' mouths. This is the usual plan with birds which have helpless young ones to feed, as you will find if you watch the young of most of our common wild birds being fed. But some birds besides the pigeon family take

the young bird's bill into their own, and even go further. Young cormorants, for instance, not only put their bills in their parent's mouth, but their heads as well ; in fact, they get as far down the old bird's throat as they can, a way of feeding which looks very uncomfortable for the feeder.

Generally, when young birds are brought up in a nest both the old ones help in the feeding, as our common pigeons do, but some of them can bring up the brood alone if necessary ; many hen canaries will do this, and a few cock pigeons—a hen pigeon does not seem so devoted to her eggs and young as a fowl or canary is, and always wants her mate's help. Young birds which live in nests always get their feathers gradually and all over their body at once, as is the case with pigeons and canaries ; but there are differences in the way of feathering in active young birds. With fowls, and all birds of that family, the wing-feathers are the first to come ; every one must have noticed how little chickens have quite fair-sized wings when they are only a fortnight old, and try to fly a little. With ducklings it is quite the other way ; their

bodies go on growing, and getting bigger and bigger, while their little featherless wings look as if they were never going to make a start, and they do not begin to grow large and have quills until the rest of the duck's body is fledged. Then, young sea-gulls grow their feathers all gradually together, like young pigeons, so birds which are hatched downy and active may fledge in three different ways, according to the family they belong to.

There are some birds which are helpless nestlings and born naked, which get beautiful coats of down later on ; this is so with young owls, for instance, which have such thick coats of down that they look like powder-puffs. Unlike most peculiarities in young birds, there are differences in this point in the same family ; for instance, all young parrots are blind at first, and helpless, like young owls ; but some kinds of them are always naked until the feathers come, and some have plenty of down. Many of you must have noticed, too, that young sparrows are quite naked, although young canaries, which, like sparrows, are finches, have a certain amount of fluff. So it seems that if a young bird passes its





KINGFISHER.

babyhood in a sheltered hole or nest, it does not much matter if it has down or not.

Some of the funniest young birds among the helpless kinds are young kingfishers; these are hatched naked, and never get any down, but when the feathers begin to come and are sheathed in a sort of skin, as new feathers are, this sheath is of a silver colour, not bluish-grey as usual, so that a baby kingfisher looks rather like a live pincushion at this age. Also, although it cannot do much for itself, it has some idea of moving, but it runs backwards instead of forwards! This seems very strange, but then baby kingfishers live in a hole; and if after crowding to the entrance to watch for one of the old ones coming back with fish, they wanted suddenly to get back inside when they happened to see some enemy instead, they would be very likely to stick fast if they all tried to turn round at once. But by "reversing engines" it is easy enough for them to retreat down the tunnel in a hurry without getting in each other's way in doing it.

Another British bird which has a very

curious way of moving when it is a baby is the young dabchick ; as we have seen, the old one carries it about on her back just as a human baby is carried about in the mother's arms, and it is also like a human baby in another way, that is, in crawling on all fours before it can walk. Young dabchicks do not have much walking to do, it is true, as they only come on to the nest when out of the water or off the old one's back ; but when they move about the nest for about the first week of their lives they crawl on all fours, using their little downy wings as front legs, and looking, with their striped coats and pink bills, very like some big queerly coloured beetle.

A very different bird is also a quadruped when it is young, and in an even more remarkable way. This is the young of the hoatzin, a South American bird which looks something like a crested pheasant ; but its habits are different from a pheasant's, for it hardly ever comes to the ground, and makes a stick nest on the boughs, like a wood-pigeon's. The young hoatzin is also not at all like a young pheasant ; it is nearly naked,

like a young pigeon, but it can see and crawl about, and it uses its wings as well as its legs to hold on to the twigs. The wings have two claws on them, which come in very usefully



HOATZIN.

when the bird is climbing like this, but after the feathers come they disappear. You can see specimens of this queer bird and its nest and young ones in the Bird Gallery at the South Kensington Museum.

There is one family of birds whose young

ones are never in the nursery at all, so to speak, but look after themselves as soon as they come out of the egg. These are the mound-birds, which look rather like partridges or, sometimes, small turkeys, and have much the same habits as these birds when they are grown up, except when they are nesting. Then they do not sit on their eggs, but bury these in the ground, or in a mound of sand or earth and leaves or twigs, which they scratch up with their big strong feet.

When the young ones are hatched, they scratch their way up to the open air, and run off to begin life on their own account. They can not only run at once, but fly, for their wings are feathered at the time of hatching, and so they are well fitted to make a start in the world at once. These strange birds are found in the islands of the South Seas and in Australia, and one Australian kind, which is called the brush-turkey, is always kept in the Zoo, and sometimes makes its mound and hatches out its queer chickens there.

The young of these mound-birds are wild and timid from the first, which is well for

them, as they are not looked after and educated by their parents, and young birds, as we shall see presently, generally have to go through a certain amount of what we may fairly call schooling.

## CHAPTER VIII

### BIRDS AT SCHOOL

MANY people have an idea that birds and other creatures are able to get on in the world entirely by "instinct"; that is to say, that they are born with a natural knowledge of what to do and where to live, what to eat and what enemies to avoid. This is true to some extent, but not altogether, and, as a matter of fact, young birds have to learn many things by experience or teaching, just as we have, and this is the "schooling" that I spoke about in the last chapter.

There is not much, of course, that little helpless birds in a nest can learn; only to lie quiet when their parents give the alarm-call. They are certainly not taught manners, as far as I have seen, for they do not wait their turn to be fed, but the greediest keeps on taking all the food it can get till it has had

enough. I was able to see this very well with a brood of starlings which were reared in a hole in a roof below a window in some lodgings I occupied many years ago at Oxford; when the young ones were getting well feathered, one generally had his head out of the hole when an old bird arrived. No doubt he stood on his brothers; at any rate he got nearly all the food until he had had enough, some being at times snapped up by another head which appeared a little lower down. In breeding pigeons, too, you can generally notice that the young one which is hatched from the first of their two eggs gets more food than its brother or sister which comes out of the second egg, simply because it is stronger and more pushing. So it is with canaries; if you want all the brood to have a fair chance, it is best to take away all the first eggs as fast as the hen lays them, and put them back when the last is laid, so that all the young ones can be hatched at once and have a fair start.

This practice of feeding the young according to the principle of "those who don't ask won't have" must be useful to birds which build dark covered nests with only a little

entrance hole, like the wren. It has often been a puzzle how little "Jenny" manages to feed all her large family in the dark when she herself is blocking up the doorway of her round nest by standing in it, but if she keeps on feeding as long as any little one cries and gropes with its mouth towards her she cannot very well miss any young one as long as it is strong enough to gape and cry; weak young birds in a state of nature simply die.

With dabchicks, which, as I have said, feed the young ones at first, though these are not helpless as far as moving goes, I did notice that they observed fairness, and did not feed the same young one twice in succession; indeed, I have seen a little one get a peck instead of a mouthful when it cried for more food out of its turn, so that dabchicks, at any rate, have some notion of discipline. But then they are, I think, more intelligent than most other birds.

Active little birds which feed themselves, like ducklings and chicks, are of course learning all the time; they know naturally, or by instinct, that moving creatures like insects are good for food, but they do not know that all kinds are not equally nice, and so they will

peck at first at some nasty insects which, after experience of their bad taste, they do not care to try again. They also learn not only to lie still when the old bird gives the alarm-call, but to avoid enemies on their own account when they have been warned a few times. So their education goes on by degrees, and by the time they are grown up they have learnt most of what they will ever need to know. But as their schooling has to be gone through while they are still very small and cannot fly, it is not often that the whole brood lives to grow up in the wilds; some of the little things are certain to be snapped up by some enemy or other, or they may meet with accidents, such as falling into holes or cracks, or wander so far away from the old ones that they never find them again, and die of cold.

Some birds are better than others at looking after active young ones; the common hen is much better than the pheasant, and will save more of her brood, for the hen pheasant is careless, and if she has had to fly away and leave her chickens to hide, is quite contented if she can collect two or three of them when she comes back, and goes off leaving the rest

to their fate. This is one reason why people so often use hens for rearing young pheasants ; but then it is best to keep the little pheasants close to the coop, by means of a wire run, for a few days, till they have learnt the meaning of the old hen's call, for they do not understand her clucking at first. This shows that they have to learn a strange language much as we do. Many people have been amused at the trouble that an old hen has with a brood of ducklings when she has had duck's eggs given her to hatch ; it is not only that they *will* go into the water, but they are very disobedient little things, and do not pay much attention to her in any case. Ducklings are very much inclined to straggle about all over the place, and so very often their own mothers cannot keep them together, and thus they lose many of a brood by various enemies ; the Muscovy duck does best with hers, for she is not only a very brave and careful mother, but her ducklings are more reasonable, and keep closer together and nearer her, when they are small.

As to birds which are brought up in nests, they have to begin most of their education when they come out into the world ; and it

is then that their real troubles begin. When they are in the nest, their parents at least know they are all together, and, if no enemy finds the nest, or if they can defend it from any foe that does find it, they can generally manage to rear all or most of the brood till they can fly. But then the young ones still have to be fed for some time, and they are still nearly as ignorant of the ways of fierce animals as the active little ones are when they first come out of the shell. You can see this very well with young sparrows, which will sit about in places where anything can see them, and let you walk up quite close to them; in fact, I once touched a young sparrow's tail before it flew away—I really could have “put salt on its tail” as people say! But you will generally find, if you get near a young sparrow like this, that some old one will come along and make a harsh chattering noise to warn it; if you are not too near, it may even rush at the young bird and absolutely drive it away. It seems to be most often the cock sparrow who does this, and, generally speaking, the fathers of young birds of the passive sort of young birds are attentive

to them as well as the mothers, though not all as much as the cock sparrow, who is one of the best of fathers in the bird world.

With birds that have active young ones, the father often does not bother himself about them, but leaves all the care of them to the mother; this you can see with the ordinary cock and drake. Male birds who, like these two, have very much finer plumage than their wives, generally behave in this unfeeling way. But perhaps it is not so unfeeling as it looks, for it is important for young birds and their mothers not to be seen, and one bright-coloured bird going about with them might put the enemy on their track by being too conspicuous. However this may be, it is certain that male birds whose plumage is not much, or any, brighter than their mates' are generally attentive fathers, as in the case with the gander and the cock partridge; the cock partridge even broods or warms his young ones as well as the mother, besides helping her to defend them against enemies.

The warning against enemies which is given to the young sparrows, as I said just now, soon makes them wilder; besides, no doubt

with these and with other young birds of any sort, the sight of any of their brothers or sisters who are slow to learn being seized and devoured by an enemy soon makes the rest of the family nervous. And it must always be remembered that they have to learn about enemies; a young bird may be nervously afraid of any bigger bird or of a four-footed animal coming near him, but he does not know, till he learns by observation, that a hawk will behave differently from a pigeon, or that a cat is not so harmless as a rabbit!

That some birds will learn more quickly than others one can guess by rearing a family of young birds; you will often find among them one very clever and one very stupid one, and the others ordinary, as you may say; indeed their characters are quite different, just as those of a family of children are. But the most nervous ones, even if they are not clever, often have a better chance to live, for it is better that they should be frightened of every big creature they see, till they learn the different kinds, than that they should be too unsuspecting of strangers. Where cleverness will come in is when they begin to learn what

animals are dangerous, and how far they must keep away from each foe they may meet.

For instance, a young skylark must learn to get well away as soon as he even sees the swift merlin, which will try to fairly chase him down, but he need not keep so far off from the sparrow-hawk, which can only catch him if it comes upon him suddenly and can clutch him in its short fierce rush.

Because of this need for learning the look of enemies and what they can do, it turns out that a bird may be wilder when it is young than when it is grown-up, the opposite of what one might expect. In Calcutta the house-crows are all about the streets, and you can notice that the newly-fledged young birds, which can be told from their parents by not having such glossy plumage, are more timid than the old ones are. If you point a stick or an umbrella at them they will jump, or dodge in their flight; but an old crow will not care, for he knows that these things are not guns. But if you simply show a gun to an old crow, he will be off in no time, for it is not necessary to point it at him—he knows what it is well enough.

In the same way, no doubt, birds learn to know the different kinds of birds of prey from each other ; they see which are slow and cowardly, like the kite and buzzard, and which are quick and fierce, like the falcon and hawk.

The birds of prey themselves have their lessons to learn, and they have more schooling than most birds. Old birds do not have to teach their young ones to fly, as one often hears ; they can fly by instinct, just as they can walk or hop, but they are clumsy at first, and fly better with practice. Now a bird of prey has not only to learn to fly cleverly and settle neatly, like all birds that fly, but it must also learn how to seize its prey, and this is often taught it by the parents.

Eagles have been seen teaching their young to catch things in the air ; one old bird soars high, carrying in its claws some creature which it has killed ; underneath the young bird flies, and tries to catch the prey which its parent drops for it, while the other old one keeps handy to seize the food if the young one misses it, which it is very likely to do at first.

Then the young hunter has to learn what

prey he can attack with a good chance of success, so as not to waste his time over creatures which are too swift or strong for him. It is not of much use for a sparrow-hawk to chase swallows, and an eagle must be careful how it seizes a wild cat or a fox. No doubt many of the strongest and fiercest birds come to an untimely end by seizing a prey which is too strong for them, while they are young and inexperienced; for there must be some reason why these powerful birds, which also live a long time, are not more common, and sometimes such birds have been seen to be killed by creatures they have seized.

The little singing-birds, also, have their music-lessons, for it is not all of them that can sing their proper song without hearing it sung by old birds of their own kind. They may do so, if the song is of a very short and simple kind, just as the young cock will crow if he has been hatched in an incubator and brought up in a "foster-mother"; but a really good song must be learnt. A young nightingale brought up in a cage may have a good voice, but he will not sing his real and beautiful song unless he has heard an old bird sing it many



EAGLE.



times. I had a good opportunity of noticing this when I was a boy ; a schoolfellow of mine took a young linnet from its nest and reared it, and in due time the little bird began to sing. But it was kept in a town, where it never heard a wild linnet sing, and so all it could do was to imitate the chattering of the sparrows and the whistling of the starlings, which were all the masters it had.

People who rear the German high-class singing canaries always take care to keep some very fine old birds to teach the young ones when they begin to sing, and these are actually called "schoolmasters," and always cost much more than an ordinary singing canary.

Then, when the young birds are quite grown up and have got mates of their own, they have to learn, more or less, how to build a nest ; I say more or less, because they always have some idea of it, this being really one of the things they know by instinct. A young martin, for instance, will naturally make its nest of mud, and a young sparrow of straw or hay ; but the first nests are often not nearly so well done as those the birds

afterwards make when they have had more practice and experience. Of course they are very often helped in this by having a mate who is older than themselves, and knows better what is to be done; for so many young birds are killed before their first year is over, because they do not learn all they should about enemies and so forth, that it is quite a chance if they find another one of their own age for a mate. When a bird has lived a couple of years it has learnt about as much as it can, and then, if it has luck, it stands a good chance of living for many years if it is a big bird with few enemies, for its school-days ought to be finished by that time.

## CHAPTER IX

### BIRDS THAT KEEP ORDER

BESIDES the particularly unscrupulous birds that go about imposing on others, taking away their well-earned food, and impudently giving them their greedy, ill-mannered children to bring up, there are here and there others of a much better nature than the ordinary kinds, who make it their business to keep order among the rest of the feathered world. You can notice this even in the poultry-yard; if a fight arises among the hens or the young cockerels, the master cock of the yard comes up and puts a stop to the disturbance, letting them see very plainly that if there is going to be any fighting done where he is, it is he that is going to do it. But since the cock has generally a large family to rule over, it is natural after all that he should take an interest in keeping them in order, and, no doubt, such a high-spirited bird as he is

feels some jealousy when he sees any others of his own kind fighting. What is really very strange is the habit some birds have of appointing themselves to the position of



CARIAMA.

magistrate or monitor when they get into the company of other species quite different from their own, some of which they would never meet in a state of nature.

This is the case, for instance, with that

curious South American bird the cariamas, a creature which looks and behaves like nothing else that wears feathers. It has a strong crow-like beak, and, like a crow, feeds mostly on insects and small animals, and anything too big to be swallowed whole, it holds down with its foot and tears in a very crow-like fashion; yet in other ways it is not at all crow-like. It has the long legs, bare above the hock, of a wading-bird, but it does not wade, or even wash. Its hind-toe is so short that it is no use in holding on to a perch, yet the bird roosts on one at night, though it spends most of its time on the ground; and it also nests in trees and bushes. Its short wings are like those of a pheasant or partridge, but its real relationships are rather with the large-winged cranes. It is the only bird which will lie sprawling on its back, or nearly so, in the sun, and is altogether a puzzle, with no near relations but one, for there are only two kinds of cariamas known.

One of this queer bird's eccentricities is the idea of making other birds behave, as I have said; it is easily tamed, and when kept among other birds has the reputation of doing

its best to preserve order among them ; and I once saw a most remarkable case of this myself. At one time the pair of cariamias at the Zoo were kept in the great wire aviary where the gulls live. Among these were, as usual, some of the large, fierce, greater black-backed kind, which in the spring often fought and hurt each other. On one occasion I saw one of these gulls, with bleeding head, running away from another, who had evidently wounded him and meant to finish him off if he could get him into a corner.

The poor victim ran past one of the cariamias, which also joined in the pursuit ; but it evidently soon saw how the case really stood, for it quickly turned about, faced the pursuing gull, and sprang at it, striking it with its feet like a cock, and made it give up the chase.

Then on another occasion I saw a pair of wild wood-pigeons having a fight in one of the cranes' paddocks at the Gardens ; but the fight did not last long, for one of the cranes—the common grey European kind—ran up and stopped the disturbance by driving off the quarrelsome pigeons in different directions. This kind of crane seems especially to ap-

preciate doing police duty, for in Brehm's book on bird-life there is a very interesting account of one which had been reared from a chick and allowed to go loose on a nobleman's estate and the village belonging to it, in Germany, and occupied most of his time in looking after the other creatures' affairs. He was particularly great on keeping order among the poultry, and was more severe with geese and turkeys than he was with the fowls and ducks ; and with good reason, for the turkeys sometimes joined forces against him and defeated him by numbers. However, he was fair even to them, for once he was seen to interfere between a turkey and a cock which were fighting, and to have a tough fight with the big bird before it gave in ; but he did not forget that the cock was also an offender against the rules he had laid down, for when he had finished with the turkey he looked out for him and punished him too ! This remarkable bird did not content himself with being policeman and magistrate all in one among the feathered world, but he looked after the affairs of the horses and cattle as well, and stopped any quarrels or disturbances which arose

among them, using his beak with much more force on their hides than he did on his fellow-birds, as was necessary, no doubt, in dealing with creatures so much bigger and stronger than himself.

It is certainly strange that he should have taken upon himself to settle their disputes at all; for one bird policeman I knew myself did not even think that all birds' quarrels needed his interference, but only troubled himself about rows between birds more or less of his own sort. This was an Australian magpie or piping crow, who used to live in the mixed collection of birds which were once housed in the big aviary at the Zoo on the Canal Bank, now only inhabited by various parrots. There were parrots in it then, but he did not bother himself at all whenever there was an uproar among them; the character he specially kept his eye on was a common English magpie which was a sad bully, and very much given to ill-treating any other bird of the crow tribe, such as a jay or jackdaw, if it was for any reason not very well able to look after itself. But before he had been long at this game the Australian bird would

be down on him, drive him off his victim, and hunt him all over the aviary ; indeed, he was so severe with this bird that in the end he put an end to his iniquities by killing him outright.

It must not be thought that it is only tame or captive birds which have these ideas about keeping order and discipline among their neighbours, for something of the sort may often be seen among birds in their wild life. I once saw our crows in Calcutta behave in a way that certainly looked as though they sympathised with a weak creature in trouble, though in the ordinary way there is nothing a crow likes better than to find anything weak at his mercy, when he will very soon give it trouble enough.

I had taken a dabchick which I had bought alive in the bazaar—where all sorts of water-fowl, caught in nets, are sold for food in winter—down to our pond in the museum grounds, and thrown it up in the air, thinking it would fly down to the water as a duck would do. But such a sudden start did not suit the poor little diver, and it fell fluttering to the ground a yard or two from the bank.

Before I could save it, a kite swooped down from above and carried it off to a ledge on a building close by, where it began to pluck the poor little bird, alive and screaming. I felt bad enough, thinking I had been partly to blame, but the crows seemed quite furious; they cawed fiercely round the kite, and even sprang on it and pecked it, but could not save its victim. Perhaps they would have treated the dabchick in the same way themselves, but they did not behave as if they wanted the prey, but rather as if they were angry with the kite. They often rob kites of their food, but then they go about it in a quiet and well-planned way, two birds acting together; one gets in front of the kite and caws in its face, while another waits behind to pull its tail. Then, of course, the kite turns round in a fury, and the crow in front snatches the food it has been trying to save from them and flies off with it.

At any rate, whatever the reason for the behaviour of the crows was on this occasion, there is no doubt that both crows and kites in India are themselves kept in check and tyrannized over by a bird much smaller than

themselves, and no doubt his attacks often keep them from snapping up some young and more or less helpless bird of another kind. The bird that does this is called, from this habit, the king-crow; it is a kind of shrike, about as big as our starling, and black all over from bill to tail. This tail is a very striking part of the bird, for it is long and very much forked; and as the king-crow's favourite perch is a telegraph-wire, it is a bird that every one who notices live things at all knows by sight. One curious thing about the bird's forked tail is that one of the forks is generally more or less worn away, which looks as if the bird always turned round in one direction when he left his wiry perch, and so rubbed that side of the tail away; but I never found out if this really was the reason. The king-crow feeds on insects, but when he is not hunting these he finds time to chase and bully the kites and crows, especially when his mate is sitting on her nest high up in a tree. It is funny to see the big clumsy birds flying away in fear of this active black fly-catcher, but they cannot very well do anything else. It is as impossible for a big slow-flying bird to

catch a small active dodging one on the wing, as it is for a stout policeman to catch a lively small boy in a lot of winding streets, so that the large birds cannot turn on the king-crow to punish him ; while, whenever he catches them up he can punish *them* to some purpose, as I found when I handled a live king-crow which had been caught. His bill and claws are remarkably sharp for so small a bird, and can make themselves felt even on tough human skin ; so that it is not wonderful that other birds are afraid of him. It is not only birds that the king-crow attends to, for my friend Mr. Dewar has seen a monkey driven away by them ; monkeys are very properly looked on as suspicious characters by birds, for they are the greatest of birds'-nesters whenever they get the chance.

The king-crow is found all across the warm parts of the old world from West Africa to China ; indeed, I think the two queer birds on the well-known " willow-pattern " plates are meant for king-crows. This struck me very forcibly in India when I saw two of these fighting in the air. He has relations, too, with very similar habits and ideas, so that

practically all over the East the loafing criminal birds are looked after by these black-coated policemen.

In South Africa, however, we find a very beautiful bird which distinguishes himself in this way. This is one of the rollers, a family of insect-eating birds of rather large size, being about as big as jays; and as they have more or less of blue in their plumage, like jays, they are generally known as "blue-jays" where they are found. There is one very common kind in India, which shares the telegraph-wires with the king-crow, and a lovely bird it looks when flying, with its blue and purple wings. I never saw it chase other birds, but its African relative, which has two long tail-feathers like streamers, but is very like it otherwise, is a great warrior, and gives hawks and crows a very lively time if they venture anywhere near its chosen perch.

English people at the Cape call this roller "Moselikatze's bird," for that grim old Matabele chief, the father of Lobengula, thought a great deal of it, and would let no one wear its feathers but himself; no doubt he looked on it as a great war-chief in the

bird world, as he himself was among the natives.

But the best known among all these police-



KING-BIRD.

officer birds is the king-bird of North America, because this country has so long been settled by Europeans, and so much has been observed and written about its birds that they are as well known as European ones. So for a long

time people who are fond of reading about birds, even if they have never been to America, have known of this brave little bird by name.

He has, indeed, given a name to all his relations, for he was originally called the tyrant-bird in scientific books, and all the family to which he belongs are called tyrants, though some of them are little insignificant creatures enough.

The king-bird himself is much like our fly-catcher in shape and habits, but twice as large, and is much more handsomely coloured, being nearly black above and white underneath, with a splash of orange-red for a crown to mark his royal dignity. He is not really a tyrant, for he does not bully harmless birds, which, I am sorry to say, the black king-crow sometimes does, now and then stealing from them insects they have caught, or even catching a very little bird itself and eating it. The king-bird only "goes for" the birds of prey, and he does not respect any of them, even the great white-headed eagle, which is the national emblem of America, as most of my readers will know.

Indeed, Benjamin Franklin gave this as

another reason why he thought the grand eagle an unsuitable emblem for a free people, since it was not only a bully and a thief, robbing the hard-working osprey or fish-hawk of his prey, but a coward, letting this little bird drive it out of a district. So the king-bird is always a favourite with farmers, who know it will act as a protector of their chickens against all feathered robbers.

The missel-thrush among our British birds is another enemy to birds of carnivorous habits, and never misses a chance of attacking them, from the stealthy magpie to the fierce sparrow-hawk ; but it behaves rather like those robbers who used to keep others of their trade away and levy "black-mail" from people themselves, for when food is scarce in winter it will drive other kinds of thrushes away from the berry-trees, so that it can have all the fruit to itself, and in spring it will sometimes steal the broods of other birds, even of its own near relation the song-thrush ; but even then it can fairly claim some consideration from them for keeping away far worse enemies.

Sometimes many birds will join together against an enemy who is too strong for them

singly ; in America, where the ospreys are often quite common and numerous, instead of being scarce solitary birds as they are in Europe, they will combine against the robber eagle and drive him altogether out of the neighbourhood. And the pirate skua gull does not always have it all his own way with the other gulls ; though he will rob the big herring-gull, which is so much larger than himself, the common gull, which is a much smaller bird than the herring-gull, though bigger than the skua, will get his friends to come to his aid, and turn the tables on the pirate for a change.

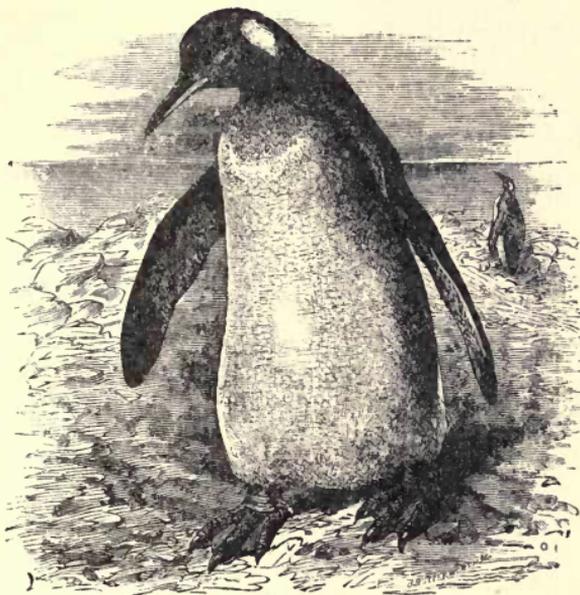
And when the birds of daylight find out an owl, whom they all hate as a midnight murderer, they will all join forces against him, no matter how unfriendly they may be to each other at other times. Even in the bird world might is not always right ; and the brave and active birds, or those which have the sense and the pluck to combine against every one's enemy, can exercise some control over almost any of the tyrants of the air.

## CHAPTER X

### BIRDS UNDER WATER

IT is, when one comes to think of it, such a strange thing that the birds of the air should invade the domains of the fishes, and even chase and catch them in their own element, that it is natural that people should be specially interested in diving birds. You can see this in the London parks, where the little diving tufted ducks are quite the favourites among the water-fowl, and in the Zoo, where the penguins are some of the few birds which are as popular as the beasts. Penguins are the most perfect of the diving birds, and can do what none of the others can in the way of feats in diving and swimming. One of the first things you will notice about them is that they swim with their wings, not their feet; in fact, the penguin has changed his wings for paddles, for they are real "water-wings,"

of no use at all in the air, but the very thing for driving him quickly through the water. They do not fold like other birds' wings, but hang down straight and stiff, so that the bird



KING-PENGUIN.

seems as if he had an overcoat on with the sleeves too tight; and they have no quills, but are covered all over with little short narrow feathers which look at first sight more like scales. These queer "flippers" are very

strong ; penguins not only swim very fast, at any rate under water, as you can see in the diving birds' tank at the Zoo, but they can—some kinds at any rate—jump right out of the water as fish do, and penguins of this sort often come up to breathe in this way, just like porpoises. Penguins also box with their flippers, and can strike very hard blows ; one of the small black-and-white Cape penguins which one usually sees in Zoological gardens can give a blow hard enough to numb one's hand, and a great emperor penguin, more than a yard high, which was captured by one of the Antarctic expeditions, knocked four men over before he was overcome. One advantage that penguins have over most other diving-birds is that they can swallow their food under water, which gives them a chance of taking several fish one after another without wasting time in coming up, and also saves them from the risk of having their prey stolen by any gulls that may be about. Gulls are, as I said in another chapter, great at stealing other birds' food, and since they have been so common in the London parks in winter, the diving ducks have learnt to go under when-

ever they get a bit of bread, and the surface-feeding ducks to put their heads under water with it, though both of them have to swallow it above water in the end.

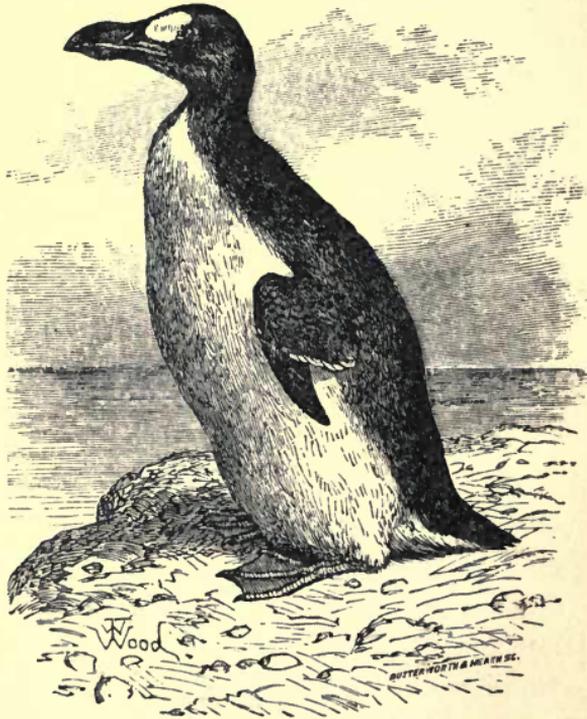
To return to the penguins, another use they put their queer wings to is to work them as front legs when they are in a hurry ; in the ordinary way a penguin toddles along solemnly in an upright position, but when it wants to go fast it drops on all fours, the wings acting as forepaws. Although they look so awkward on land, penguins really do a great deal of walking about, for their breeding-places are often many yards from the sea, and so they really spend a good deal more time on their feet than other divers do, and walk about more than a great many land-birds, especially as their young ones do not go into the water till they are fledged, so that all the food they get has to be carried to them. And when an old penguin is moulting it gives up going to sea altogether, and stays on shore for weeks at a time without anything to eat, until the new suit of feathers has come through. For all this, penguins sometimes stay out at sea for a very long time together, for one was once

caught off the New Zealand coast which had barnacles growing on its toes, which were quite sore and had lost some of the claws in consequence; and for shell-fish to have settled and grown up on its feet like this the bird must have been at sea for weeks, if not months. It is no effort for a bird to keep swimming for a long time, for they are all lighter than water, so that they float naturally; and this is why so many of the divers come ashore so little.

There are no penguins north of the equator, and nearly all of them live quite down in the south seas; but in the north we get another family of diving birds which look and behave rather like them, except that they can fly, and are not such perfect divers. These are the auks, of which three kinds are very common round most of our coasts, the guillemot, razorbill, and puffin. They swim with their feet, like ducks, when they are on the top of the water, but as soon as they dive they take to their wings, and fly under water; but in doing this they do not spread their wings so widely as they do when they fly in the air, but keep them half closed. You can

see, if you watch one of these birds diving in a tank, that its wings are not so good for diving as the penguin's, for the long quills are rather in the way; but, as these birds need their wings for getting up to the rocks where they lay their eggs, and for travelling to their fishing-grounds, they have to put up with what one may call a "general-purpose" wing, long enough to keep them up in the air, and short and stiff enough to be a fairly good paddle under water. But they are not very clever performers in the air; they cannot start up suddenly or turn quickly, as they do under water, but they get up with a long slant from the waves, and turn in a long curve. No doubt they would be glad to give up flying altogether, as the great auk, which was much the biggest of the clan, did; this bird had only small wings, of no use at all to raise its heavy body, and used to go ashore to lay its egg on low beaches, as penguins do now. Indeed, the great auk was the bird which was first called "penguin," and the birds we call penguins nowadays were named after it. But wherever a shore is suitable for a bird which cannot fly to land on, it is also

easy for men, and so wherever the poor great auks had a home, men found them out and



GREAT AUK OR GARE FOWL.

killed them for food and feathers, and too often in cruel sport, so that in time there were only a few left, and these were all snapped up for museums about half a century ago.





RED THROATED DIVER.

That was the end of the great auk, and it is a warning not to "put all one's eggs in one basket"; if the bird had kept up the use of its wings ages ago it would have still had the air as well as the water to trust to, and would still have been living, as its small relatives are to-day. The true penguins, which must have been flying birds ages ago, for their wing is still formed on the same plan as other birds' wings, as is shown by the skeleton, have made the same mistake, but they live more out of the way of men, in the south seas, and so have not come into contact with sailors so much. But still, if they are not preserved, as the penguins at the Cape are now, there is great danger that many of the kinds will be killed off, as they collect in such numbers in particular spots, just as the great auks did.

The other wing-divers, if I may use the expression, are very different birds from the heavy penguins and auks of the sea-coasts. These are the dippers or water-ouzels, which are found living by mountain streams almost all over the world; one is quite a common bird everywhere where there are swift clear rocky streams in our country. Many of my

readers must have noticed, in such places, a bird much like a blackbird, but with a short tail and white breast, perched alone on a rock ; and the strange thing is that the dipper really is, like the blackbird, a singing-bird of the thrush kind, and no one, looking at it, would have the least idea that it was anything of a water-bird, much less a diver. Its feet are just like a thrush's, and yet it swims like a duck ; but it is not often seen swimming, for it generally goes straight under water and flies there, sometimes helping itself along the bottom with its feet ; its food consists of the different sorts of water-insects and shell-fish that are to be found in streams. Young dippers are reared in a nest like other young thrushes ; but if they are put into the water before they are fledged they know how to dive, and use their half-folded wings as paddles at once. So here we have a bird of a land family which is quite at home in the water, and in such water as the real water-birds do not care about, for you find hardly any of these in the mountain streams the dippers love. Winter and summer the brave little water-ouzel sticks to his stream, diving

off the ice-crust of the edge, and singing every now and then, for he is one of our few winter-singers; as long as the stream runs he can always pick up some sort of a living and keep cheerful.

The rest of the diving birds generally rely on their legs rather than their wings for travelling under water as well as on the surface, and they are rather different in shape, having longer necks than the birds which use their wings as paddles, and bigger feet, as one would expect, while their wings are generally so arranged as to pack into a very small space, and not leave the points of the quills sticking out to be in the way. Among these we find the most thorough water-birds of any, the grebes and divers. Penguins and auks do come ashore a good deal, and the auks have a considerable amount of flying to do, as they breed high up on cliffs, but grebes and divers are hardly ever out of water; they have to fly now and then, but as to going ashore, they avoid that so much that some people have said they cannot even walk or stand. This is not right, but the bigger kinds are very clumsy, especially the divers, which often

find it saves trouble to flop along on their stomachs, rising a little and throwing themselves forward with their feet. The divers often have to go a yard or two in this way, for they make their nests on shore, though quite close to the water's edge; the nest is only a few scraps of stalks, etc., that may be found handy. Grebes make a good-sized nest, but theirs is very often not on shore at all, but on water-plants, or low-hanging boughs, or even floating in the water itself; and the nest is always wet, for the birds build it of sodden weeds and rubbish which they fish up from the bottom, and cover the eggs over with some of this wet bedding whenever they leave them. For this reason, though grebes' eggs ought to be white, you do not often find them so after they have been sat upon for a little, as they get stained to various shades of buff by the juices of the weed. As I have said before, grebes carry their young ones about on their backs, although the little birds can swim from the first; but as far as I ever saw, young dabchicks, at any rate, cannot dive for a few days, and young divers do not seem to be so active as young ducks. Grebes and

divers are very much alike in general shape, with long necks and broad, short bodies, and feet right at the very hind end, so that it is a strain for them to stand up, and they look, when they do walk, about as comfortable as a dog on its hind legs, and fall down very easily. Divers have ordinary webbed feet, but grebes have each toe webbed separately, which gives a very queer look to the foot.

Both of them are fresh-water birds in the nesting-season, though they go to sea more or less in the winter, and the common "little grebe" or dabchick, is the diver which most people have the best chance of studying; it may be found on any fair-sized piece of water, and nests in the London parks. It was in St. James' Park last year that I had a particularly good chance of seeing a dabchick travelling under water, as it was feeding close to the bank; it dashed along, as the birds which dive with their feet always seem to do, with strong strokes of both feet at once, not paddling with one at a time, as birds do when they swim on the top; and the little fish it was after seemed to have no idea of what was coming till they were snapped up, which

rather surprised me. One thing one always notices with this little bird—that, if the water is not clear enough to follow its course far, as generally happens, it never by any chance comes up where you might expect it, which is a wise policy. I noticed this even with my little friends in Calcutta, which knew me so well; and though they might come up nearer me than they went down, the place of their appearance was always an unexpected one.

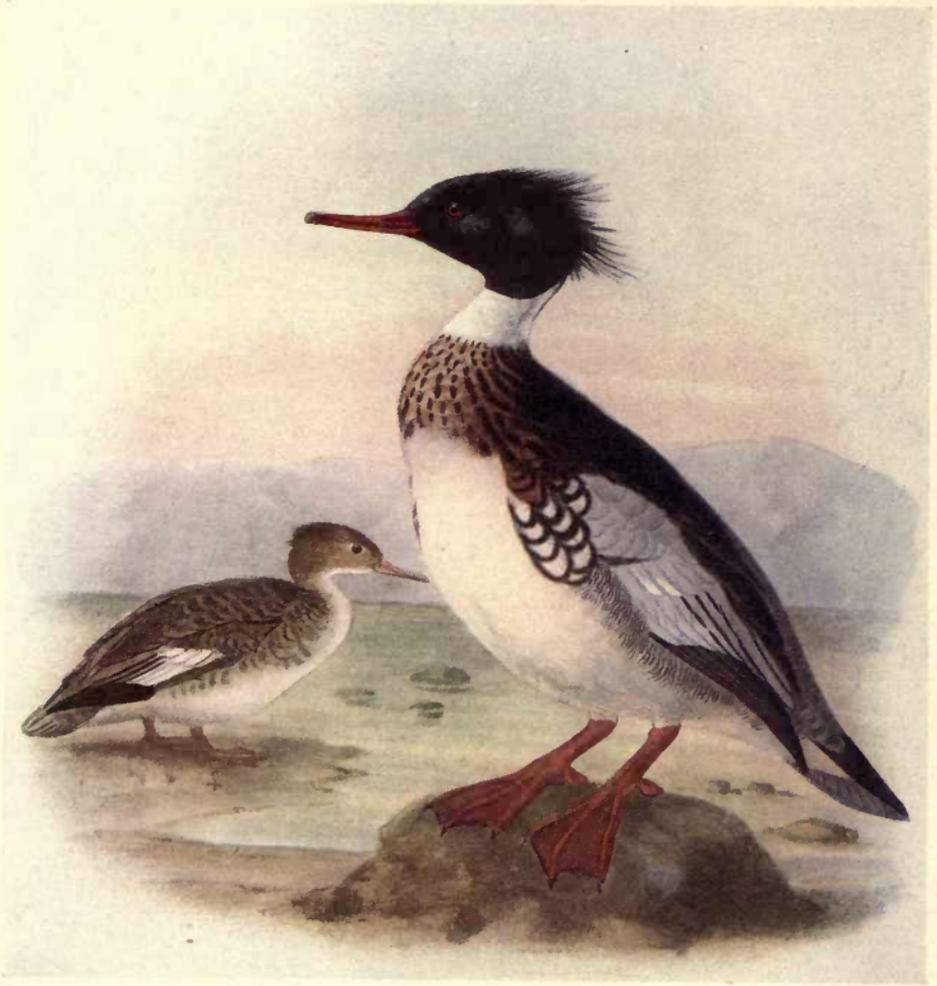
The big grebes and the divers are wonderfully strong and fast swimmers; on the great Swiss lakes it is the custom to hunt the great crested grebe in a boat with several rowers, and shoot at it when it comes up, and even then the bird gives a very long chase, and often gets away. It is interesting, showing how differently birds of the same sort may behave, that one naturalist says that when you are getting up to a flock of grebes, many of them will fly away and the others make up their minds to dive; he reckoned that any one which dived three times would not fly.

Flying is not a very safe performance with grebes; they cannot start except with a long

run, and do not rise quickly, and they travel very straight, so that they must run a good deal of risk from birds of prey, and it is not surprising that they fly no more than they can help, and generally at night. A couple of years ago a great crested grebe was discovered one day in one of the fountain basins at the west end of the Serpentine lake in Hyde Park, and there it stayed for about three days before it could screw up courage to get away, though the wild ducks often flew in and out. I saw it go at last; after following the ducks about as if it wanted them to show it how they got away so neatly, it made a slanting rush and just managed to clear the edge of the basin and whizz off down the lake; but it could easily have been knocked over if any one had been near enough and cruel enough to do such a thing, as it could hardly have dodged.

Crested grebes are now being well protected in England, which is a good thing, as the poor birds used to be sadly persecuted, and even now one sees far too many of their beautiful satiny breast-skins used as ladies' furs. Though grebes are found nearly all

over the world, unlike divers, which are only seen north of the tropics, they are not really so common or so widespread as another great family of diving birds, the cormorants, which one can really call the leading family of diving birds; there are so many of them, and they live and nest in such different places, but always in colonies. There is something crow-like about cormorants, as their plumage is generally dark, and they have a longer tail than most water-birds, more like a land-bird's; and indeed their very name is from the Latin *corvus marinus*—sea-crow, and names like this are given to them in several languages. Besides, like crows, they are perching birds and build great nests of sticks, often on trees as well as rocks, and have helpless young ones, though these are only naked at first, and soon get a thick coat of down. But, of course, they are not really related to crows. The reason why they are so much more at home in trees than other water-birds is because their foot is suited for grasping as well as swimming, with a large hind-toe webbed to the front ones; thus it is good for gripping, and at the same time makes a very



RED BREASTED MERGANSER. *Page 136.*



big paddle. Generally they only drive themselves along, both above and under water, with their broad feet, but it seems that if hard pressed to escape an enemy they will use their wings as well, though not in chasing prey.

A cormorant afloat looks the very perfection of a diver, as he swims low with his tail in the water and his head in the air, driving himself along like a steamer, and sliding ever so neatly under the water; but he does not care about staying in it nearly so much as most of the divers, and when he has finished fishing he comes out to roost on a tree or rock, and seems never to sleep afloat as other divers do. We mostly think of our common cormorant as a sea-bird, and our smaller kind, the shag, very seldom leaves the rocks and the salt water; but the common cormorant, in olden days when the beasts and birds had it more their own way in Britain, must have been much more of a fresh-water bird than he is now; we do not encourage cormorants to come into the fresh water nowadays, as they are so destructive to valuable fish like trout and salmon.

In India the commonest cormorant is a small kind, not so big as a rook, and it is quite a tree-bird, making big colonies in tree-tops like rookeries. There are a great many of these dwarf cormorants in India; indeed, they are the commonest diving birds there, and along with them one often finds their relative, one of the queerest of diving birds, the darter or snake-bird. There are only a few kinds of darters, only found in hot climates, and they look like exaggerated cormorants. That is to say, a cormorant has a long tail for a water-bird, and a darter's is longer; a cormorant has a long neck, and a darter's is very long indeed; a cormorant swims low in the water, and a darter sinks so deep in it that you only see his long snaky neck sticking out, and can understand at once how he got his second name.

These queer birds are often on view at the Zoo, and interest people very much when they are let out to fish in the diving birds' tank. They harpoon the fish with their bill, which is pointed, not hooked at the tip like a cormorant's, and then come up to the top, jerk off the fish, and catch and swallow it. As a

general rule, cormorants also seem to come up to swallow their fish, but a shag and a small African cormorant they had at the Zoo used to swallow under water like penguins, and one common cormorant did so too, so perhaps this is a trick that some clever birds learn, and the others do not.

So far all the divers I have been speaking about belong to families of birds all of which dive, except the dipper, which belongs to a land-bird family; and in some water-bird families we find that some are regular divers and others only surface-swimmers. This is so with ducks; every one has seen how ordinary ducks, though they dive for fun, only turn "end up" when it is a case of feeding under water, and so cannot reach the bottom through more than a foot or so of water; but there are regular diving ducks, like the tufted duck and red-headed pochard, which always go down for their food. Tufted ducks are very easy to watch in St. James's Park, where you can see them travel about over the bottom, looking for the shell-fish on which they feed so much, and can notice several interesting things about their move-

ments ; one is that the feet strike very much outwards as well as backwards, and another is that the effort of the bird is all to keep itself down, for when it wants to come up it has only to stop paddling back and up it comes like a cork. You can see, too, how, like other ducklings, the young of these diving ducks are active at once and start on their career as divers, and very funny it looks to see a brood of these little downy things all diving "on their own"; if the brood is a large one it is quite hard to count them, for there are always some down and some up. There are a good many kinds of ducks which make a speciality of diving, the most celebrated being the eider-duck which furnishes the valuable down for quilts ; this is a sea-duck, and one of the deepest divers of all sea-birds.

There are some diving ducks which have even gone into the fishing divers' line of business, and chase and catch fish under water ; these are called mergansers or saw-bills, and one of them, the red-breasted merganser, is quite common on the Scottish and Irish lakes. These fishing ducks are nearly as greedy as cormorants, and their

beaks are narrow like a cormorant's beak, not broad like a duck's, with peculiar saw-like edges formed by rows of horny teeth, which do not give a fish much chance of escape.

Sometimes some of the ordinary surface-feeding ducks will dive for food, but few people seem to have seen this done ; I have noticed it with several kinds myself, but then I have watched ducks a great deal, as they are favourite birds of mine. It is a wise duck that learns this accomplishment, for ducks may easily find themselves on water which is too deep for them to reach the bottom by turning "end up," especially in winter when the sides of rivers and streams are frozen up, and then only those which will dive for food will get anything to eat. But the surface-feeding ducks are always at a disadvantage when they practise diving, because their feet are not so big as those of the diving kinds, which makes it much more of an effort for them to keep under, unless they use their wings as well, which most ducks will do if they are very hard pressed in diving, for instance when a wounded one is chased under water.

When the ducks are ashore, however, the diving bird's big feet and short straddling legs are in his way, and he waddles much worse than an ordinary duck ; and he also starts on the wing much more awkwardly as a rule. So that even in creatures so much alike as ducks, one can see that getting one advantage generally means giving up another more or less.

A bird that is not very much known as a diver is the moorhen's near relation, the coot ; but it does dive for food a good deal, and very fairly well too. It looks very funny when doing so, because it takes such a jump to go under that it fairly lifts itself out of the water ; but it is interesting that it should dive at all, for it belongs to a family which is not even web-footed, though its feet are rather better for water work than the moorhen's, as the toes are fringed with a scalloped skin which does duty for a web to some extent.

It will be seen that, except the penguins, all the different types of diving birds I have been talking of are represented in this country, and the north is very well off for birds of this

kind, while there are very few sorts of divers in hot countries. All through the warm seas there are hardly any diving birds; perhaps the sharks, which are so common there, have something to do with this, for a bird that goes down deep for its food would certainly run a great risk from these ravenous fish. And then so many of the fish population which are of a nice size for birds to eat are flying fish, in the tropics; and how are the birds to get on when, after they have invaded the fishes' home to chase them there, the fish turn the tables on them by rising up and flying off into the air like the birds themselves?

## CHAPTER XI

### BIRDS ABOUT TOWNS

WHEN I was a boy I used to wonder a great deal as to what were the commonest birds to be seen in different countries—what corresponded, in fact, to the sparrows at home ; and I found it was very hard to get at this from books, which told one a great deal about the strange and wonderful birds of the various countries, but did not give one much idea of the everyday kinds. It is easier to get this sort of information nowadays, but even yet the common street birds of the world are often very much neglected, for naturalists do not think them worth notice, and forget that there must be something very interesting about birds which have the wits to pick up a living and look after themselves amongst our houses and streets.

Of course the common house-sparrow is the

chief town bird over a very large part of the world, and indeed you do not often find him far away from houses of some sort. But how he got this position is not so easy to understand. We know how he got to North America and Australia and New Zealand, because he was taken there less than half a century ago ; and now they wish they had not got him ! But where did the sparrow start on his travels ? He is not a bird of passage, and does not care about colonizing a country until we have made it comfortable for him by cultivating it and building houses, and so we find that he does not explore much for himself, but follows our roads. In this way he is spreading across Siberia as the Russians colonize that country ; and as our European civilization came from the east, he is most likely an Eastern bird which has travelled west with us. At any rate, there he is in India, as lively as here and even tamer and more cheeky, for he simply will not be kept out of the rooms. He finds it safer to have his nest indoors, for everywhere outside prowls the house-crow, another bird who loves town life as much as the sparrow, and likes nothing

better than to snap up an unwary young sparrow who is out on his first trip into the wide world. But this crow does not spread away from India, and even there he keeps mostly to the hot plains, so that you very rarely see him in the mountains ; I only did so once, at Darjeeling. At Darjeeling I found there was a different sort of sparrow about the houses, the bird we call the tree-sparrow here, and see very little of, as with us it is a shy and not very common bird, and does not often come near buildings.

When you do see one, you can tell it from the cock house-sparrow by its having a chocolate instead of grey cap, and by the black spot on each of its cheeks ; it is also a smaller and neater-looking bird, and the hen is not so plain as the hen house-sparrow, being just like her mate. Perhaps this was the original sparrow in Europe and the house-sparrow when it came in, if it did, from the East, drove it out to the fields and woods. At any rate, I found it very much at home under the eaves and in the streets in Darjeeling, and so you may find it in many Eastern towns where the house-sparrow is not in possession ; for in-

stance, it is the ordinary sparrow in Japan, and if you look at the sparrows in any Japanese drawing, you will see that they differ from the sparrows you usually see in just the points that I have mentioned.

Then there is a bird which is called a sparrow, but not very closely related to the real sparrows, although, like them, it is a finch — the pretty lavender-coloured, pink-billed Java sparrow. This, I found, was the common sparrow of the town of Zanzibar when I was there nearly twenty years ago, and very pretty these birds looked flying about the houses; I never saw them come down into the streets for food, as our sparrows do, so I suppose they flew out into the country for it. The Java sparrow looks a heavy, clumsy bird in a cage, but he flies very fast and straight, and is a much better traveller than one would think. Of course in Zanzibar he is not a native bird, his real home being in Java, according to his name, but he has been introduced into many other countries in the East. In India I once heard of a case which shows very well how this might happen almost accidentally; in an aviary in Bombay,

I was told, the Java sparrows reared so many young ones that presently it was "all Javas"; then the owners would catch up a lot of them and turn them loose. Then after a time the Javas would be "over-represented" again, and out would go another batch, and so on. But in India the Java sparrow has not had much chance of getting a settlement in the towns, as every hole and crevice is likely to be "booked" already by the house-sparrow, as it is here.

Although in the northern part of the United States they had no common little town bird, which is why they brought our sparrow over, this was not so in California and Mexico, where there is a bird which lives about houses and is called the house-finch or linnet. It is, indeed, nearly related to our linnet, and is a streaky-brown bird of about a sparrow's size; the cock is a prettier bird than a sparrow, as he has a bright crimson forehead and throat, and he is also a singer. Americans have taken this bird to the Sandwich Islands, so, like the house-sparrow and the Java sparrow, he has got a lift in the world from his human friends.

So has the house-mynah, which is an Indian bird of the starling kind, with the same habits as our starling. This is not the glossy-black mynah with yellow flaps of skin on its head, which is such an attraction to visitors at the Zoo because of its talking powers. The house-mynah is a more slender bird, and mostly brown in colour, with yellow legs and a little yellow bare skin about its eyes. It is even tamer than our starling, because it not only builds in holes in buildings as the starling does, but also runs about in the streets as well as in the gardens. It is a bold, plucky bird, and stands no nonsense from the crows, but "goes for" them if it thinks itself aggrieved; and it is, I think, about the most popular bird in India with Europeans and natives. So it is not surprising that it has been taken into various other countries, and is now found in Australia and some other places in the Pacific, and also as far away as Mauritius and St. Helena.

The swallow tribe, as every one knows from our birds here, are great lovers of houses, and nearly everywhere you will find some kind of swallow about towns; but in India the

place of swallows is taken very much by the house-swift, which is very common there and often drives the swallows out, as our swift, which is one of our best-known town birds, does at times with house-martins here. The house-swift is very common in Calcutta, much more so than any swallow-like bird I have seen anywhere; it is smaller than our swift, and much blacker, but it has a big white patch on its back like the house-martin, which makes it a prettier bird than ours. As this swift is found in Africa as well as Asia, it is one of man's lodgers over a very large part of the world.

Although swifts belong to a different family from swallows, they are so much like them that they are often called by the same name, and so it is not surprising that the house-swift of America is called the chimney-swallow because it builds in chimneys as our common swallow sometimes does.

This bird also is smaller than our swift, and of a blackish colour all over; its tail is short and not forked, but the quills of it end in sharp horny spikes, which help the bird to support itself against the wall to which it clings with

its sharp claws. It builds a curious nest of little bits of twigs, which it snaps off from the trees as it flies past, and these are stuck together and to the wall with the sticky saliva which all swifts have. You find the same stuff gumming together the feathers and straws with which our swift and the Indian swift make their nests in holes and crannies. Sometimes, in a very wet season, this natural glue will melt, and down the chimney falls the nest, but if the young birds are at all well grown they will save themselves by clinging to the wall and crawl up to the top into safety. In some of the West Indian Islands we find several sorts of what are there called black-birds—they are really troupials, birds which have more of the starling about them—living about the towns like sparrows; and in Demerara the place of sparrows is taken by the kiskadee, or sulphury tyrant, a relative of the king-bird I was speaking about in a previous chapter. The kiskadee is a bird about as big as a thrush, with a brown back, yellow breast, and black and white head; it has a strong crow-like beak, and has no objection to making a meal of

young birds, mice, or fruit, as well as on its ordinary diet of insects; but it seems not to be a scavenger and hunter after scraps, like so many of the birds that live in towns, and it does not build its nest on houses.

What seems the strangest, however, to any one used to this country, is to find large birds living in towns, as nearly all big wild birds are now scarce and shy in Britain, especially birds of prey. Yet kites were once so common in London that foreigners took particular notice of them, and they are still as familiar as sparrows in Indian towns. The Indian kite is smaller and duller in colour than the European red kite which used to be so common here, but their habits are much the same.

Kites are most wonderful and beautiful fliers, and you cannot look up in India without seeing one or more wheeling and sailing overhead, "waiting for things to die," as Mr. Kipling says in the *Jungle Book*. But in case there are not any creatures obliging enough to die for his benefit, the kite has no objection to killing them himself, if they are small and weak and slow enough, for he is





KITE.

not a swift or fierce hawk. But at a sudden sweep and pick-up he is unrivalled, and his feats in this way are something astonishing. He is always on the look-out for scraps, and has learnt to eat bread and cooked food of any sort as well as meat, so that nothing eatable is safe if kites are in a position to make a swoop. The position they need is room to pass at a rush without drawing in their yard-wide wings; then, if the person who has the eatables happens to look another way, the rush is pretty certain to come, and very startling it is. As the kite only needs to guess at the chance of food, he will strike at anything wrapped up in paper, and I have even once had a cup of tea knocked away from my very lips as I was drinking it on the verandah, and never even saw the kite that did it, only felt a light switch from his wings on my nose. The reason why kites manage this kind of robbery so securely is that, like other hawks, they seize and carry off anything with their claws, and do not have to check an instant to seize with their beak, as a gull has to do; and so, after one has watched kites, gulls, graceful and clever as they are,

seem absolute "butter-fingers" by comparison with them.

In fact, I so much admired the skill of these bold robbers that in Calcutta I often used to feed them with scraps after breakfast, and never remember seeing them miss anything I threw up for them. As I said in speaking about crows, kites often lose their booty to these cunning rivals, and "battles of kites and crows" must have been well known to our ancestors, as they are mentioned as the types of little petty wars. In Egypt the yellow-billed kite has for a rival scavenger in the towns our well-known hooded crow, which is quite a familiar bird there, though a bird of the wilds with us. What particular crow used to haunt English towns does not seem to be mentioned—the carrion crow, I suppose; certainly the raven was a town scavenger in some places, and where he was common the kites had no chance for any pickings.

The bird called "carrion crow" in many towns in warm parts of America, and protected by law as a street scavenger, is not really a crow at all, but a small kind of vulture, about as big as a fowl; as it is all black, and

has a flight more like a crow's than like the stately gliding of most vultures, the mistake in its name is easily understood. A small white vulture is also a common town bird in the drier parts of India and in Egypt; but people often mistake kites for vultures, and kites are certainly the commonest scavengers in all parts of India I have been in. The strangest of these prowlers after pickings, however, was the great adjutant stork, a huge bald-headed bird about four feet high and eight across the wings, which used to be quite a common street bird in Calcutta during the rainy season, which corresponds to our summer months; indeed, it used to be said that the rains never "broke" till a dozen of these great birds were to be seen on the top of Government House. As some one humorously put it, "Jupiter Pluvius would not sit till they formed a quorum." But that was a score of years ago, in the days when all sorts of carrion and refuse were thrown into the streets, resulting in what was known as the Calcutta smell, which never left one's nose all the while one stayed there. In my time things had been so much improved that only

one adjutant still found it worth his while to call ; he was a well-known character both to men and to the crows, and might have been there still if some one fresh out from home had not shot him, not knowing that adjutants were protected by law, as is the case with scavenging birds in several countries.

The last town bird I shall mention is also a stork—*the* stork, in fact, for it is the well-known white, red-legged bird we all make the acquaintance of so early from tales and pictures. In fact, if you notice, most people call any long-legged bird a stork, though the stork was never a common British bird as the heron is and the crane was. But it is the best-known of all big birds in many parts of the Continent, especially in Holland, Germany, and Turkey, because it comes into towns to build on the roofs, and is a welcome visitor in spring, and one that cannot be overlooked.

So it comes that it is as familiar as a tame bird, and has got into all the legends and fairy-tales ; in fact, it may claim to be the most popular as well as the most handsome of all birds which come to live with us. Let us hope that some day some enterprising storks may

seriously make up their mind to colonize on this side of the North Sea, but not too soon; they must give time for people to get over the silly craze for shooting all unusual birds on sight.

## CHAPTER XII

### SOME STRANGE NESTS

NOTHING that birds do has ever been more attractive than the making of the cradles for their eggs and young, and some of these are so extraordinary that one could hardly believe them to be the work of creatures with only bills and claws unless one really knew this was the case. In this country we have not any nest-builders which can compare for skill with the birds I shall be speaking of presently, but there are one or two here which can challenge the world for energy in getting work done, which, after all, is what one ought to expect from a British bird. The wren, for instance, has been known to put its big domed nest together in a day, which means very quick and hard work indeed; and then there is the sand-martin, which is the most wonderful of all burrowing creatures.

No one, to look at this little delicate bird, smaller than a sparrow, with such a tiny bill and feet so small also, could imagine that it could drive a tunnel a couple of yards deep into a sand-bank, or that it would take all this trouble simply to make a simple little bed of a nest in the chamber at the end. It seems such a lot of work compared to what the swallow and house-martin undertake with their mud masonry; and yet perhaps the sand-martin is the wisest of the three, for there is another wonderful point about it—it is the most widely-spread of all our small birds. It is as well known in America, where it is called the bank-swallow, as it is in Europe and Asia, and goes as far south as Brazil in winter.

But the feats of the wren and sand-martin are more a matter of perseverance than remarkable skill; the hanging nests of the gold-crest and the golden oriole are cleverer performances, and these are nothing compared to the wonderful nests which are made by the weaver-birds which are so common in Africa and India. Fortunately, weaver-birds, being finches, are easy to keep, and are always to be seen at the Zoo and in many private

aviaries, so that it is possible to watch them at the task of making their wonderful woven nests without going to their native countries. These nests are generally on much the same plan ; they are begun from the top, and built downwards, sometimes being suspended by a long stalk. Then a strong loop is made across the bottom, on one side of which the cup is made which holds the eggs, while the hole at the other is either left as it is, or has its edges built down so as to form a long spout, up which the bird shoots when it goes into the nest. As the top is entirely covered in, this opening underneath is the only way of getting into the inside ; and as such nests are built at the ends of slender twigs and palm-leaves, there are very few enemies that can manage to invade the weaver's little home. Besides, a number of the birds build together, and although they are quarrelsome and very much inclined to steal each other's materials, no doubt they find that union is strength when an enemy attacks the colony. At any rate, the nests are always easy to see, although in the tropics most small birds hide their homes very carefully ; the nests of the common



STORK. Page 172.

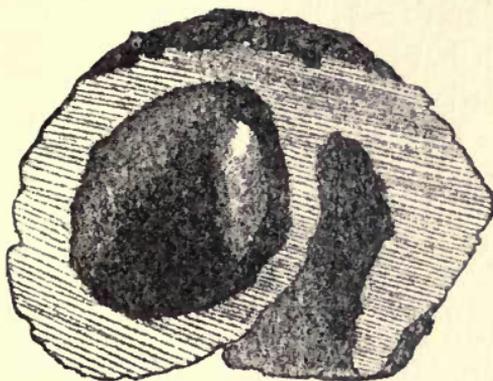


Indian weaver are common objects to be noticed even on a railway journey. So common are they, and so well woven, that the natives sometimes collect them, after the birds have done with them, to use for stuffing mattresses, for they are so springy and tough that they can be squashed flat without damage.

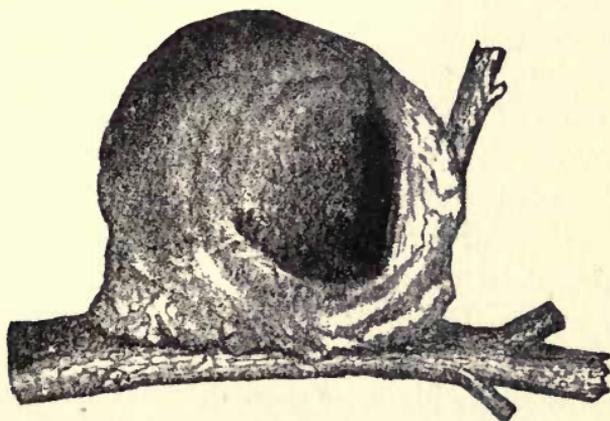
One African weaver-bird even goes in for what one may call a "tenement nest," and has long been well known as the "republican" because of this. The colony all unite to make a great roof of thatch among the boughs of a tree, and then the pairs each build their separate nests under the shelter. This interesting bird has never been brought here so far as I know, which is a pity, as an aviary of them would be a most interesting sight, although they are not pretty-coloured birds, unlike most of the weavers, of which the cocks in the nesting-season are generally gaily decked out in yellow or red, though the hens are plain and look much like sparrows. It is a curious thing that the only other bird which builds a tenement nest is a parrot, because as a rule parrots do not build nests at all, but just gnaw and scratch out a hole in a

rotten tree or a bank, if they do not find one ready made. This republican parrot is the quaker parrakeet of South America, which is often to be seen caged over here. It is about as big as a tame dove, green with a grey breast, and is an amusing pet if it can be made tame. Its nests are made of sticks in trees, and a whole flock make their abodes one against another, so that they form a sort of block of twiggy buildings divided up into separate rooms. Each room has a porch over the entrance, so that it is hard for an enemy to get in ; but if one room is taken up it does not matter to the birds, as there is no communication, and an opossum—one of the worst enemies to bird-life in America—has been found living in one of the rooms of these mansions of the quakers, without making them desert the rest. A more harmless guest is a kind of teal, which, like so many ducks in the warmer climates, likes to nest in trees.

Another South American bird which builds a clever nest and is likely to have it stolen, or at any rate taken as soon as it is "to let," is the oven-bird, a creature something like a thrush, but with no spots on the breast and



CUT SECTION.



NEST OF OVEN-BIRD.

a shorter tail. Also it does not hop like a thrush, but struts like a bantam-cock, and has a harsh hawk-like scream instead of a song. It is a common garden bird, and often builds its nest on posts or on beams of houses, and from what Mr. Hudson tells us in his book on South American birds, seems to be a general favourite, just as the robin is here. The nest is made of mud and fibre, and is as big as a man's head, domed over, with two compartments, the entrance being shut off from the egg-room by a partition which goes half across the inside. This, of course, makes it very safe, and it is not surprising that it is looked upon with envious eyes by other birds, especially as it is durable as well. The most pushing of the would-be tenants are some large swallows; in other countries the swallow tribe are too often robbed of their mud nests by other birds, but here we have a swallow which itself would rather be a robber than a mason, and a sad time, Mr. Hudson tells us, the poor oven-birds have in kicking these unscrupulous birds off their doorstep. Sometimes they do not succeed, and have to give up their little mud hut to the invaders alto-

gether. Another bird which also makes a bold bid for this nest is a yellow finch, but it is not so impudent as the swallows, and has the decency to wait till the oven-builders have done with it.

Among the Australian birds there are two kinds which may be seen at the Zoo which also build very remarkable mud nests; these are round mud cups, standing up on a branch on which they are plastered. They are made so truly that they look more like the work of human hands than any other bird's nest, and are very like the earthenware nest-pans which fanciers so often use for their pigeons. The builders of these nests, so very much alike in style, are quite different birds; one of them, the grey struthidea, called "apostle bird" in Australia, is something between a jackdaw and a thrush in appearance, and has a grey plumage with glossy black tail. The name "apostle bird," which is given because the birds go about in flocks of about a dozen or so, is inappropriate as well as irreverent, for they are most rowdy, quarrelsome creatures. This bird is generally on view, but the other feathered potter is much rarer in captivity,

as well as much prettier. It is known in books as the pied grallina, and by Australians as the magpie-lark or mudlark, and is about as big as a missel-thrush, handsomely pied with coal-black and snow-white. As it likes to run about on lawns and in shallow water, it is very like a giant edition of our common pied wagtail.

All who take an interest in our home birds know of the nuthatch's skill in mud-work, which it uses in plastering up the entrance of the tree-hole in which it makes its nest, so as only just to have room to slip in and out; and one of the foreign nuthatches, which nests in holes in rocks, improves on this idea and makes a cone of plaster surrounding the entrance and sticking out from the rock. The same exaggeration of a British bird's idea is seen in the nests of some Indian and Australian swallows, which are not content with plastering a mud nest on to a wall or rock like our house-martin, but build a sort of mud bottle with a neck, fastened against the support by the bottom. These birds often build in colonies, and a collection of their home-made mud jars is a very curious sight.

The so-called edible-nest swallows—which are really swifts—have long been celebrated for building perhaps the strangest nests of all, nests that are at any rate the only ones used for human food ! Every one has heard of the “ bird’s nest soup ” which is so well known as a Chinese delicacy ; and a great delicacy it is, for first-quality nests sell in China for about their weight in silver. It is thus a special treat, like turtle soup in England, and the average poor Chinaman, no doubt, knows no more about its taste than an Englishman does. The taste is not much, if it comes to that, for the nests, which are shaped like half-saucers, and stuck to the rock by the flat side, are of a substance much like isinglass and just as tasteless, so that the chief point of the soup is the flavouring that is added and the expense !

How the birds got the stuff to make these queer nests with was long a great puzzle ; they build in caves by the seashore in the East Indies, and it used to be thought that they got the material from the sea, in the shape of floating fish-spawn or sea-weed, which they prepared somehow. It is now known that

they secrete the gummy nest-material themselves ; in fact, it is only their saliva. All swifts have very gummy mouths, and glue the materials of their nests together, and this particular kind simply makes the nest entirely of this mouth-gum. It is a little bird, of dark dull colour, and not so big as our sand-martin ; but as the product it gives is so esteemed, the places where it breeds are reckoned good property, and the nests are carefully collected. Care is taken not to work the birds too hard, and exhaust them, for, of course, to get a clean first-quality nest, the first one they make must be taken, so that the birds have to make another in which to rear their brood. Fortunately they are very common where they do nest, inhabiting caves in many thousands. A nearly related kind has taken to building in European houses in the Andaman Islands, and I have seen them there gumming their nests on the wall ; but unfortunately this sort mixes the saliva with moss, so that the nest is of no use for soup-making !

Some other East Indian swifts, the tree-swifts, also build a very curious nest. The

birds themselves are different in their habits from ordinary swifts in often perching, like swallows, on trees ; other swifts, as can be noticed with our kind, never perch, but only cling to things or creep into holes. Tree-swifts build their nests on the branch of a tree, and the nest is about the smallest any bird does build, in proportion to the size of the builder ; it is only about the size of the bowl of a tea-spoon, and is stuck to the bough in such a way that the bird sits on the branch and can cover the egg with its breast at the same time. There is only room for the single egg, and the nest is quite too small to be sat in. It is made of saliva like that of the edible-nest swift.

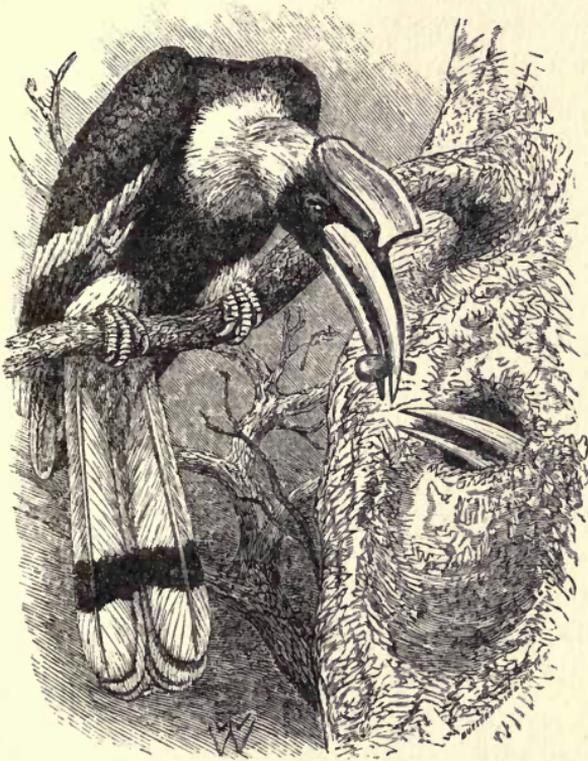
The last strange style of nest I shall mention here is not so much a nest as a prison-cell ; there is no "building" about it, as it is simply a hole in a tree with the entrance walled up, and the hen bird is shut up inside it. This strange performance is the queerest habit of the hornbills, those strange top-heavy looking birds with short legs which seem out of all proportion to their huge beaks and heads. They always have them at the Zoo, and

every one notices their strange appearance and their tameness, which reminds one of the friendly ways of a dog rather than of a bird.

The hen bird, when she has settled in the hole she means to lay in, plasters herself in with the dirt that accumulates in her cell, only leaving a slit like that of a letter-box, where she can put out her bill to receive the food which her mate brings her. She is in no danger of starving while he is alive, for he works hard to feed her and the young, and she is quite safe from the attacks of monkeys and other nest-robbing animals, having such a small opening to defend; any monkey putting his hand in the nest of the larger kinds of hornbills would get such a gripe and wrench from the great bill that he would most likely be crippled for life, even if he did not find the enraged cock hornbill helping to attend to him outside. Of course the hen gets rather cramped in such a small space, but as she moults very hard at the time, she would not be in a condition to fly if she were out.

In the case of the smaller sorts of hornbills, which are not so able to fight off enemies as

the big ones, the advantage must be still greater ; you can see the nest of one of these,



HORNBILL. (After Tickell.)

with the bird in it, in the South Kensington Museum. When it is time for the hen to come out into the world again, the plaster

is broken away and the family go off together. Hornbills are found both in Africa and in India, and have the same habit in both countries; yet there are many different kinds in each. No doubt the first of the hornbills thought of the idea and they handed it down to their descendants, who kept it up through all their history and travels. Very clever birds they must have been, for there are no other birds which have invented such a plan for keeping the wife and family safe, though the tropical bird world is full of ingenious dodges which our birds have never needed to use, because there the great trouble is for birds to escape enemies, while here it is mostly the question of getting food in the winter. Tropical birds have had to develop their wits, while those of our climates have to trust to their strong wings to enable them to find food at all times of the year; this is why long journeys are the strong point of most of our birds, and cleverly-made nests are chiefly to be found in the warm parts of the world.

## CHAPTER XIII

### BIRDS AT NIGHT

WE generally think of birds as creatures of the day, and so they are for the most part; night is the time of the beasts, which use their noses more than the birds—indeed, most birds behave as if they could not smell at all, and so they would have a difficulty in finding their way where a beast could scent it out without any trouble. So it comes about that night-time is bed-time with most birds, and it is very interesting to see how they go about putting themselves to bed. Generally they “tuck their heads under their wings” as we say, but this does not mean that they lift up their wing and put their head under it; what happens is that they tuck their head in between the first joint of the wing, close to the body, and the body itself, using the wing

as a pillow, while the long shoulder-feathers cover the head like a counterpane.

Some birds, as you all know, sleep on the ground, sitting flat down, but many roost on a perch, and many must have wondered how the perching bird holds on in its sleep, especially when the wind is blowing through the trees. You know if you fall asleep in a chair with something in your hand, you are soon waked by the thing dropping out of the hand, which has relaxed itself as soon as you lost consciousness; and it seems as if the bird, when he drops off to sleep, ought to drop off his perch as well. The reason why he does not is quite simple—the muscles and sinews in his legs are so arranged that when the leg is bent up towards the body the toes are pulled together, and so they hold on to the perch without any effort or thought at all. You can easily test this with a dead chicken, if it is not stiff, and you can watch it in a live one walking—as the leg is bent the toes close. It needs very little bending of the leg to close the toes, and so a great many birds sleep standing on their perches, with the leg only slightly bent, and generally these tuck up one

foot into their feathers to keep it warm ; no doubt during the night they "change legs" every now and then, so as to keep the toes warm on both feet.

People often talk as if birds used their nests as bed-rooms, and it certainly seems a reasonable thing to do, but really very few of them do sleep in their nests ; no doubt the idea has got about because most of those that do so are house-birds, like our tame pigeons, which roost in the cote, and house-martins and swifts, which roost in their nests and holes ; sparrows also, in winter at any rate, and wrens, too, will roost in nests.

Water-birds very often sleep on the water, especially the diving sorts, and those that live very far out at sea can hardly do anything else ; but, generally speaking, they like to come ashore to sleep if they can do so conveniently, for then they know where they are, while if they go to sleep on the water, except on the wide ocean, they may easily be drifted ashore in their sleep by the wind or current, and fall a prey to their enemies. Long ago it was said that water-fowl could not roost on trees because of their clumsy

webbed feet, but this is quite a mistake, and many kinds do roost in trees, especially in hot climates, where sharks in the sea and crocodiles in the fresh water make a waterside bed a very unsafe one.

There is a great deal of difference among birds as to their powers of looking after themselves at night, even among nearly-related kinds. Fowls, as many of you most likely know, are very stupid and helpless in the dark ; no matter how hard to catch one may be in the daytime, you are pretty sure of it if you go to take it on the roost. Pheasants are not much better ; but peafowl seem to be able to look after themselves very well in the night-time. They go to roost quite late, after all the other day-birds are gone to bed, and on one occasion not long ago a peahen got away from a dealer's in Covent Garden, and was living in freedom there for months, for she used to roost on the roofs, and was always wide-awake enough to fly across the street if there was any attempt made at a night surprise—and she was only caught at last quite by accident. Until I knew of this case I could not imagine how a big bird like the peacock

managed to live in the Indian forests among all sorts of enemies, but evidently he is not easily caught napping.

The little quail, although a bird of the fowl kind, is quite lively at night; in fact, I think it is more of a night than a day bird, for one I once kept loose in a room was always more lively at night, and would come then inside the fender and enjoy itself by rolling in the hot ashes under the grate, though a hot cinder falling on its back would now and then make it shoot out in a great hurry. It is known, besides, that quails, when on their passage in spring and autumn, generally fly at night, and so do most of the small helpless birds, such as the various warblers, which visit us in the summer-time; the small birds which are seen migrating by day are mostly those which have been delayed or have miscalculated their time, and so have to finish the journey in the light.

It was for a long time a great puzzle to naturalists why the little travellers should be on their journey at the time when they would be snugly at roost if they were at home, and it is only of late years that the reason

has been found out. The reason simply is—gulls; these greedy birds are prowling about along the coasts in numbers everywhere, and though they are not swift fliers and cannot in the ordinary way catch an active little bird as a hawk can, they are quite able to snap one up if it is tired by a long flight or a struggle against the wind, and they do get many victims in this way when daylight surprises the travelling birds. But most of the pilgrims, by getting across the water at night, escape these ravenous pirates, which are then asleep on the cliffs or shore.

Some birds seem to make little difference between day and night, like wild ducks, which fly about at any time, and feed either in the daylight or dark; indeed, where they are likely to be persecuted they are often very much of night-birds, and keep very quiet during the day. But there is no reason to suppose that ducks see particularly well at night; they do not need much light for grubbing for food in the mud with their peculiar bills, which are so well suited for sifting out of it any food it may contain.

Woodcocks and snipes are also night-

feeders, but they grope in mud for worms with their long soft tender bills, and do not use their eyes to find their food. The most thorough night-birds of all feed in this way,



KIWI.

the curious kiwis or apteryxes of New Zealand ; these have their nostrils placed at the end of their long beaks, just as a beast's are placed at the end of its snout, and so we find that they behave more like beasts than like birds, nosing and sniffing their way about, and it has been proved that they have a keen scent.

They also have long hair-like feathers on their faces, like the whiskers of cats, so that they most likely feel their way as well. On the other hand, they see worse than any other birds; it is not so surprising, perhaps, that they do not seem able to see much by day, but even at night their little eyes do not appear of very much use to them. I have found that you can wave a handkerchief before a captive one and that it will take no notice, but will start if you make a noise; and even a wild one will walk close up to a man even at night. Kiwis are not able to fly; indeed, they have the smallest wings of any birds, but it is funny to see that when they are asleep in the daytime, they tuck their long bill away behind their tiny wing, just as if it were big enough to cover their heads. I have never seen the other birds which do not fly, such as emus and rheas, tuck their heads away at all, but I cannot say if they never do it. I think the kiwis are the most thorough night-birds of any because they are the sleepest in the daytime; you can pick one up without making it wake and turn its head round. After the kiwis, owls seem quite bright and lively

creatures, even in the daytime, though people have an idea that they are particularly drowsy, and that they cannot bear the light. That is quite a mistake, as you will soon find out if you ever keep a tame owl, and tame owls



WHITE OWL. (After Wolf.)

make very nice pets, especially the brown or tawny owl, which is one of the commonest in our country. If your owl is of this kind, you will find not only that it can see quite well in the day, but that it really likes the sun ; and so do most owls. The only kind of owl which really does seem to like to hide in

the dark and sleep all day is the barn-owl or white owl, which certainly does look terribly sleepy in the daytime; but even this bird can see quite well in the light. While this book was being written I met a gentleman who told me he had reared a barn-owl which would follow him about in the daytime; and he used to take it away from home and let it go and it would fly home like a pigeon, so that it had no difficulty in finding its way about.

The fact is, that owls stay at home, in holes or thickly-foliaged trees, in the daytime, for reasons of their own; no doubt they are tired after they have been sitting up all night to hunt and feed, for they really can see well at night and live their lives then as a matter of course; and then, if they are found out by the other birds in the daytime, they get so much bothered by the abuse and chattering which is dinned into their ears that it is no wonder that they hide as much as they can. All other birds have a great dislike to owls; they do not see them very often, and evidently think they are awful guys to look at, and they know just enough about them to understand that owls are suspicious characters, and likely

to snap up any one who is not careful to roost in a safe place. Very likely they have seen some friend made away with like this; for owls, though they feed mostly on mice and other small beasts, since they find these running about at night, are always ready to seize on any bird that comes in their way. The brown owl, which is a wood bird, catches more birds than the barn-owl, which hunts over the open country and does not catch many birds except the sparrows, which roost in big noisy companies in trees and ivy where the owl can easily find them, without having to search in the woods.

Many owls even hunt in the daytime; one of these is the little owl, which is now the commonest owl in many places in England, although it is not naturally an English bird, but has been brought over from the Continent and let out by naturalists who like this quaint little fellow. For the little owl is a very comical-looking little bird, only about a black-bird's size, with pale yellow eyes which give it a very fierce look. This is the owl which was sacred to the goddess of learning, Minerva, or Athena as the Greeks called her, and it is

still very common in her favourite city of Athens ; and this must also have been so in ancient times, because the Greeks used to have a proverb about "taking owls to Athens," just as we say "sending coals to Newcastle." Little owls come out in the afternoon, so that it is quite easy to see them and watch their habits. In India there is a small owl almost exactly like this kind, and from watching its ways I learned how it was that owls have to stay at home in the day. In India the crows hang mostly about the big towns, and are not so common in the country, and so one finds that in Calcutta, for instance, the owls do not come out till the crows have gone to bed ; indeed, I have seen a crow on his way home to roost make a swoop at an owl which had come out a little too soon, no doubt being in a hurry for supper. But in country places the same small owls might be seen at tea-time, as they had matters there more their own way.

When you get a chance of watching an owl in the dusk, you will notice that he blinks and screws his head about and bobs it up and down just as much as he does in the daytime ;

it is simply a way he has got, and does not mean that he cannot see properly in the daylight. It is true he does not fly away very readily in the day, but that simply means he is afraid of the mobbing he will get from the other birds if he does fly, and when he is on the wing he can steer himself quite easily. Some owls have "horns" or "ears" of feathers sticking up from their heads, and this helps them to look like a broken stump when they are perched upright on a bough with their feathers drawn close and their great eyes nearly shut; and very likely in this way they often escape even the sharp eyes of their enemies the day-birds. It is a real danger for an owl to be driven out in the day, for the hawks hate him as much as the other birds do, though very likely the owl turns the tables on the hawk at night, for the owls are quite as fierce as the hawks are, at the proper time.

Owls seem to be wiser than hawks in one way at least; they have a great idea of providing for a rainy day. When hunting is good they will catch as many birds and mice as they can and store them up in their homes,

for owls really have homes, and generally live in the same place in which they lay their eggs and rear their young. Once in America an owl was found in possession of sixteen fresh fish, in mid-winter, when all the water in the neighbourhood was frozen, and it turned out that half a mile from the owl's home some boys had broken the ice on a pond, and the practical bird had found this out and been working hard to get in his supplies while he had the chance. After this it is rather hard on owls that they should be abused for being stupid !

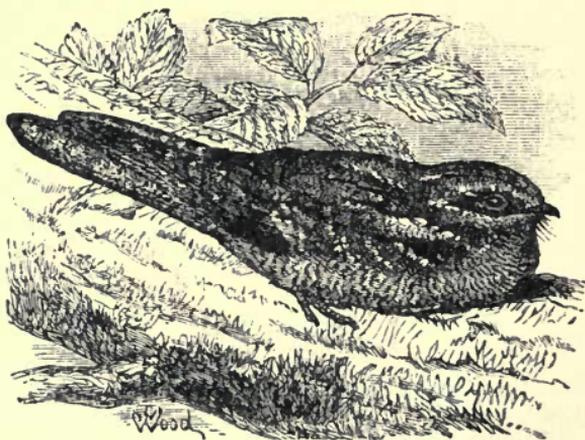
After the kiwis, the stupidest-looking and the sleepest night-birds are the moreporks, queer Australian birds which you can generally see at the Zoo. They are about as big as rooks, with mottled grey plumage, very small feet, and big flat heads with enormous mouths, like frogs. They snap up their food with their bills, and do not catch it in their claws like owls, and they can swallow a sparrow whole.

They are some of the laziest birds in existence, and in the daytime are so sleepy that they can sometimes be touched, even in the

wild state ; but they have splendid digestions. When an owl eats a mouse or a bird, it afterwards throws up the bones and the fur or feathers in a quid or pellet, but the morepork digests everything together. Yet it can go for a long time without food, for one at the Zoo once ate only one mouse and one sparrow in ten days ; then I suggested that the bird wanted a change, and that they might try it with fish. The morepork liked them, and started taking his meals again. I do not suppose they often get hold of a fish in the wild state, but it struck me that fish might be a good substitute for some of the geckolizards, which are night reptiles, or for frogs ; but the usual food of moreporks in the wild state seems to be large insects. However, birds which eat these are ready to eat any sort of small animals ; I have even seen our common thrush once catch and eat a small fish from a stream.

Moreporks are close relatives of nightjars, which are found all over the world, one of them being quite a common summer visitor to our own country. This bird, although one does not see it very often, is well known in the

country by the noise it makes, which is a loud purring, and sounds something like some sort of machinery at work. Nightjars make all sorts of queer noises, and the commonest kind in India has a note which sounds exactly like the noise a stone makes when you throw



NIGHTJAR.

it on ice and it skips and bounces along ; and the bird in America which says “ whip-poor-will ” is a nightjar. Nightjars live on insects, which they catch on the wing like swallows, and they must have very tough insides to digest the big hard beetles with which they stuff their stomachs, for though

their mouths are wide, their beaks are very tiny and weak, not at all like the strong beaks of the moreporks, and quite unfitted for crunching a beetle's hard shell.

The nightjar was the bird which the Romans and Greeks called the goatsucker, because they had an idea that it sucked the milk from their goats at night, and you will find the name goatsucker used for it in the older English books on birds. Of course, though, it does nothing of the kind; when it is seen near animals it is after the insects which are attracted by them.

Speaking of the curious cries of the nightjars reminds one of the bird which has made such a great reputation by singing at night—the nightingale. There are really three kinds of nightingales, all very much alike: the one we know, the nightingale of Eastern Europe, which bird-fanciers in Germany call the sprosser, and the Persian nightingale, which is the bird which Eastern poets call the bulbul. It is often mentioned by them, because there is a pretty legend that the bulbul is in love with the rose, and that the queen of flowers does not open until she

hears the bird sing. But all nightingales do not sing only at night, and it is quite common to hear them in the daytime, where there are many of them. And there are plenty of other birds which sing in the night, such as the chattering little sedge-warbler in our country, and the mocking-bird in America. But both of these mix up their songs with the notes of other birds, while the nightingale is original and like nothing else. Shakespeare is not at all fair to it when he says :

The nightingale, if she should sing by day,  
When every goose is cackling, would be thought  
No better a musician than the wren ;

for whatever other bird may sing near the nightingale, its notes seem very thin and harsh beside those of the celebrated singer. Our western nightingale has the sweetest voice of the three, but the two eastern ones sing more loudly and strongly. You can judge that the nightingale's song must be far better than any other birds by the fact that the Greeks and Romans noticed it and wrote about it in their poetry, even as far back as Homer's time, when they thought thrushes

and blackbirds were very nice to eat, but did not think their songs were worth mentioning ; so it is quite plain that the nightingale does not need the stage all to itself to be the chief performer in Nature's orchestra.

## CHAPTER XIV

### BIRD ADVENTURERS

PEOPLE are rather inclined to get hold of the idea that certain birds are proper for certain countries, and that any strange new kind which comes in from oversea will never be able to settle down in a new home, and this is a very unfortunate notion, for it is often made an excuse for the shooting of rare visitors which is still constantly going on, although more and more people nowadays object to it. It is a wrong notion, too, for it is impossible to suppose that all the various kinds of birds have always lived in the countries one finds them in now ; many must have sent out colonies and occupied fresh countries, and in a few cases we have had a chance of seeing this happen.

For instance, the magpie is such a striking fellow, with his pied plumage and long tail, to say nothing of his noisy chattering, that he is



MAGPIE.



a bird that can never have been overlooked anywhere; and yet up to the time of the Stuarts people who went to Ireland were astonished at finding no magpies there, though now they are commoner in Ireland than they are in Great Britain.

It was about 1676 when the first colonists arrived, and they were supposed to have been blown over from Wales. There were only a few pairs, and it was lucky for them that there were no people about at the time who collected any bird which was new to a place, or all the emigrants would have fallen victims. As it was they increased and multiplied, and have shown plainly how a bird nation, like a human one, can spread and colonize when it has the chance.

The magpie is a strong cunning bird, and can look after himself well, but a much bigger deed in colonizing has been done at the opposite end of the world by a weak and tiny creature, the silver-eye or blight-bird of New Zealand. This is a delicate little greenish bird much like our willow-wren, but distinguished by white rings round its eyes; it had long been known as an Australian bird, but in 1856 it began to appear in New Zealand,

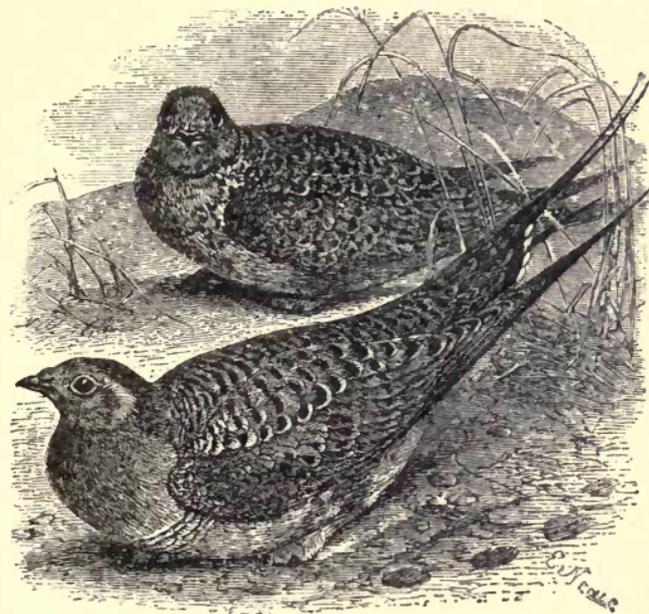
to the great surprise of every one. Even the native Maoris, who were good naturalists, and had a name for every native bird, called this one simply "the stranger," and thought it came from some other country.

It was most noticed in the North Island of New Zealand, but disappeared from there for a couple of years; then for four years the little birds travelled between the north and south islands, nesting in the southern island, and going to the northern one, which, of course, according to the rule in the southern half of the world, has a warmer climate, for the winter. It then occurred to some of them that they might as well stay in the north island altogether, and since then they have spread all over both islands, and are now the commonest of birds in New Zealand, except our old friend the sparrow, which, however, only got there by our assistance.

There seems to be good reason for thinking that the little silver-eyes did not come all the hundreds of miles from Australia, but that they had been living in parts of the South Island in small numbers all along; but even if this is so, they have been wonderful

colonists to have spread over so large a country in only about thirty years, as they have done.

In our own country, during the last fifty



SAND-GROUSE. (From Yarrell's *British Birds*.)

years, we have seen the sand-grouse bravely attempting to colonize, but in this case unfortunately without success. These strange birds belong to a family of their own, and are

not really grouse at all, but more nearly related to plovers and pigeons. As the picture shows, they have very long wings and very small feet; in fact, they look as if they ought to feed on insects in the air, like swallows, instead of on seeds on the ground, as they really do. The only use they make of their long wings is in travelling, and in escaping from hawks, which they generally do successfully, as they are so swift that only the very fastest falcons can catch them.

In size sand-grouse are about as big as turtle-doves, and their plumage is of a sandy-colour speckled with black; they fly in flocks, calling out *cluck*, *cluck-cluck*, as they go. The real home of these birds is in the dry plains of eastern Asia, but for many years they have been trying to push westwards and invade Europe. The first colonists that arrived here came in 1859, and other expeditions went out in 1863, 1872, 1876 and 1888. Often there were hundreds and even thousands of birds in these invading armies, and they spread all over Europe. That they meant to settle down and colonize is plain, because both in this country and in Denmark they bred.

With us eggs were found in Yorkshire and young birds in Morayshire, on open barren ground, and if you live near such country you may any year have the luck to come across a young sand-grouse. If you do, you will know it from a young partridge by the feet, which have only three toes, and those so short and wide, and so covered with down, that the foot looks more like the paw of some little beast than the foot of a bird. But for all their persevering attempts to settle in unknown countries, the sand-grouse have not succeeded in living anywhere in Europe further west than Russia. In our part of the world no doubt the wet climate was what they could not stand; even in summer we get so much wet, that short-legged birds like these, always living and looking for food on the ground, cannot help getting dragged and chilled. Perhaps, later on, they may succeed better, and get used to the climate by degrees, for in all kinds of creatures you will find some which will bear heat or cold or damp better than others; and any sand-grouse which are found to be able to live on a damp soil will soon increase and multiply, for fortunately a law

has been passed to stop the shooting of these interesting birds and give them a chance to settle down among us if they can ever bear our climate.

It seems strange that all the sand-grouse expeditions went west ; but, after all, what else could they have done ? East of them was the Pacific Ocean, and there was no one to tell them that across the waste of water there were the thousands of miles of beautiful dry open prairies in America, with no sand-grouse or any other birds at all like them living there. If they tried to spread south in Asia they would find the country in the possession of other nations of sand-grouse wherever it was fit for such birds to live in, so that there was nothing left for them but to go west, and west they went accordingly.

When I was living in India I got some view of a bird invasion myself. Thousands of water-fowl of all sorts are netted by the natives to supply the Calcutta market, and in one winter, 1896, I found some ducks were being brought in which I did not know. In looks they were between the common wild duck and the little diving tufted duck ; they

had the squatty shape of the diver, but they were not so small, and they had dark green heads and chocolate breasts, though the green was not nearly so bright as in the wild drake, and there was no white collar. I soon found out from books that they were of a species known as Baer's white-eyed duck, and that very little was known about them except that they lived in the very far east of Asia; and they certainly were not known to come to India. That winter I only saw eleven of them, but next winter there must have been an invasion in force, for I saw at least fifty of the unfortunate captives in the market; in fact, for a few days they were quite one of the commonest kinds of ducks there, and, of course, where so many were caught, there must have been many more that no one noticed. In the following winter these unfortunate ducks still came in, though they were not quite so common in the market as they had been the year before, but even yet no sportsman had shot any, though later on they had more luck. But after this the birds got scarcer, and when I left India in 1902 they had ceased their visits as far as one could see.

But meanwhile they had strayed farther west still, for one turned up in England ; it was not an escaped bird, for the few that had reached England alive had all been through my hands, and were safe in the London Zoo. One of these has only lately died ; he lived in the pond close by the Fellows' Refreshment Room for more than ten years, and I looked on him as quite an old friend.

I found that most of these emigrants were young birds, and I suppose that they had simply lost their way ; but perhaps they have founded a new colony in Siberia further west than where they used to live. They could not very well settle down in India altogether, because India swarms with tree-ducks—queer birds which roost and make their nests in trees, and whistle instead of quacking. These tree-ducks are very quarrelsome and jealous of strangers, and any new duck which wanted to settle in Indian waters would have a bad time of it in the summer, when the heat of the fierce Indian sun has dried up so much of the water, and these quarrelsome whistlers want all the ponds that are left for themselves. So it is difficult to say whether this invasion was





WAXWING. Page 219. ADULT (left). YOUNG (right).

a failure or not ; it certainly was if the stranger ducks wanted to find new winter quarters.

India is the winter home of one of the greatest of bird adventurers, the beautiful starling which is called in our bird books the rosy pastor, and sometimes comes to Britain and gets shot and stuffed as usual. Many of you may have seen it in a museum or collection of British birds ; it is like no other bird either here or anywhere else—about the size of our starling, but with a long silky crest, and plumage pied like a magpie's, only the light parts, instead of being white, are a lovely salmon pink. Sometimes the bird is brought over alive and kept in aviaries ; but in confinement the lovely rosy tint of the feathers changes to a dirty cream-colour, although the bird remains healthy and jolly. He is really one of the jolliest birds in the world ; always on the move, fighting and squabbling with his companions and singing his song, which is a most unmusical chattering. Rosy pastors, although they are always quarrelling, are sociable all the same, and always go about in flocks ; and if one gets separated from his companions he chums up with a flock of

common starlings, though he finds even these lively birds dull and slow compared with his own kind. In the winter months these pink starlings have a very merry time ; they eat all sorts of food—insects, fruit, and even corn, and often do a great deal of harm to the farmers. But they do a great deal of good as well, for if there is one thing they like more than another it is locusts, and they devour any number of these great destructive grasshoppers. In the spring they go off, still in flocks, to settle their nesting affairs ; and their nesting colonies may be found almost anywhere in Western Asia and south-eastern Europe. Generally they fix on a place where there is a plague of locusts, and so they have been known for centuries as useful birds and man's allies against some of his worst enemies. The furthest west one of their nesting colonies has reached was in Verona in Italy ; a few came to reconnoitre the ruins of an old castle there, and a few days later the main army arrived in their thousands. All the birds that had lodgings in that castle then had notice to quit ; the rosy pastors wanted all the room there was, and even then some of them had

to make their nests on the ground. They did not stay long, for the eggs were soon hatched, and the young fledged very quickly ; and then these useful and beautiful visitors all went off, and have never nested there since, for it is a peculiarity of these birds that they are always changing their nesting-places, although they keep to India as their winter home. In this, of course, they are different from most birds, who cling to their nesting-place before everything ; but perhaps such hordes of greedy birds, all needing insect food for their young, would not find enough in the same district two years running.

But the greatest gipsy of the bird world is that lovely creature known as the waxwing ; this is also one of the rare visitors to our country, but when it does come it is seen in far greater numbers than the rosy pastor, which only comes to us in ones and twos. Although it has not such a very striking plumage as that bird, it is very different in shape and plumage from any other bird we have, and if you come across any and see them at rest you cannot very well mistake them for any other bird here. On the wing, however,

if the colours are not to be seen, you could easily mistake waxwings for starlings; but their habits are very different, for they hardly ever come to the ground, preferring to keep to the trees, where they feed on any berries they can get, and they are not at all noisy birds, though they often utter their soft gentle note. They have got their name of waxwings from the curious red spot on the wing, which is formed by little horny tips to the feathers in that part, just like tiny drops of red sealing-wax; some extra fine birds may even have waxy tips to their tails as well. No one knows where these pretty birds will turn up; their summer home is in the Arctic forests all round the world, but they cannot be absolutely depended on to nest in the same district, and in winter they stray far and wide. Sometimes not one is seen here for years, then flocks of hundreds may be found; in Russia they are commoner than in most places, and many are caught for food, while others are sent away as cage-birds, for they are very much admired by bird-fanciers, and soon settle down to life in a cage. Indeed, they are rather too contented, for they are very much inclined

to sit and stuff until they get so fat that they die in fits. However, there is not so much danger of this when they are in an aviary as there is when they are kept in cages, and some fanciers who have aviaries have even got these beautiful birds to lay and hatch their eggs during the last few years, though no young ones have been reared so far. But even getting eggs from waxwings would have been a great triumph half a century ago, for then no one knew what they were like, as no waxwings had ever been found nesting. However, the great egg-collector Mr. Wolley went to the trouble of spending a whole winter in Lapland, in the hope of taking these eggs in the spring, and he was not disappointed. It turned out that the eggs and nest were nothing so very remarkable, as one might have expected from the old birds being so different from other birds in Europe; the nest is simply an ordinary cup-shaped one made in a tree, with a foundation of twigs and a lining of lichen, and the eggs are not unlike an ordinary thrush's eggs, but not so pretty, for the ground-colour is only bluish-grey instead of bright blue. Still, it was considered a great

feat of Mr. Wolley's to have got them at all, and there is something appropriate in a naturalist having taken more trouble than has ever been taken before or since over bird's eggs, when the eggs to be got were those of a bird which, as I have said, is the greatest of bird adventurers itself.

## CHAPTER XV

### SOME BIRD NOTABILITIES

SOME of the nobility of the bird world are well-known to every one ; the eagle has for ages been considered the king of birds, and he deserves the title for his strength and majesty ; the peacock and the swan can claim the rank of princes for their beauty ; the nightingale is the prince of singers, and the parrot tribe are the jesters. The raven also has always claimed a high rank for his wisdom. Our Saxon ancestors believed that Odin, their chief god, had two ravens, Thought and Memory, who flew about the world all day and came back at evening, to sit one on each of his shoulders, and tell him all that they had seen going on.

But there are other notable birds which are not so well known to most people as these, but have nevertheless got such reputations

that stories are told about them, or they hold important positions in their own countries. It is not necessary for a bird to be big to be a notability; one of the most celebrated of European birds is the little wren, and very likely he has won his celebrity because he is so small and at the same time so self-assertive, with his loud song and cocked-up tail. So we find all sorts of fairy stories told about this tiny bird, and queer names given to him; in Yarkand they call him "the mouthful" and in Iceland "the mouse's brother"; the Highlanders say that he said "it's the less for that" when he took a drink out of the sea, showing that he is supposed to think a lot of himself although he is so small; and there is a very well-known tale of how he tried to cheat the eagle out of his position as king of the birds. The birds, so the story goes, were, naturally enough, determined to take as their king the bird who flew highest, and when the competition took place it was soon seen that the eagle was going to win. But when he had soared so high that even he could get not a stroke higher, and hung on his wings, considering, no doubt, which of his loyal subjects he



WREN. *Lower figure, ST. KILDA VARIETY.*

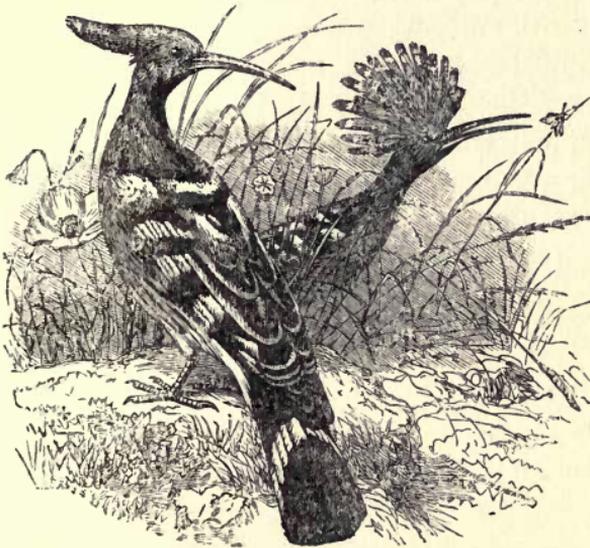


would select to dine upon when he came down, he was startled to hear a piping squeak a few yards above him ; this came from the wren, who had been sitting on his majesty's back all the time, and was now taking his unfair advantage and trying to break the record. Of course, says the tale, neither the eagle nor the other birds would admit the claim of this impudent little rascal, but the wren has gone about proclaiming himself as king of the birds ever since, and several European languages give him the title of king at the present day.

But of all the European birds the one which seems most suitable to have fairy-tales told about it is the lovely hoopoe, which looks as if it were some magic bird, with its beautiful cinnamon crest, and the black and white wings, which make it look like a butterfly as it flies. It is a bird that no one can help noticing, and I find that at the Zoo people are more interested in it even than in the gorgeous birds of paradise, even though few of them know that the hoopoe is really an English bird, coming to us every year, and even sometimes rearing a brood here, when a stray

pair have the luck to settle down in a place where they are protected from the stupid people who shoot at everything rare and beautiful. The hoopoe is particularly a bird of dry countries, and is very common in North Africa and India; and Mohammedans, who have a great respect for Solomon, who, they think, was a great magician as well as a great king, and knew the language of all birds and beasts, believe that the hoopoe was a special favourite of his. When it goes about prodding in the ground for grubs with its long bill they think that this is searching for hidden treasure, or finding out where there is water for a well; and there is a pretty story of how the hoopoe came to have its fan-like crest. Once, it is said, Solomon was travelling and suffered from the heat of the sun, and a flock of hoopoes came and flew over his head and shaded him with their wings. He was so grateful that he promised them whatever they should ask, and the silly birds asked to have golden crowns on their heads. It is not surprising that before long they were sorry that they had chosen such a dangerous ornament, for of course all the bird-catchers

were after them for their valuable head-dresses, and soon there were only a few left to come back to the wise king and beg him to take back his gift. Solomon said that it would not be the part of a king to do that; crowns they



HOOPOE.

asked for and crowns they must always wear, but he changed the crown of gold for a crown of orange feathers, and the hoopoes have carried this ever since. A very absurd tale, perhaps you will say; but, after all, it is not

so bad to believe in fairy-tales about beautiful birds, as the ignorant Indian natives do, as to shoot them for museums, as we do in Europe.

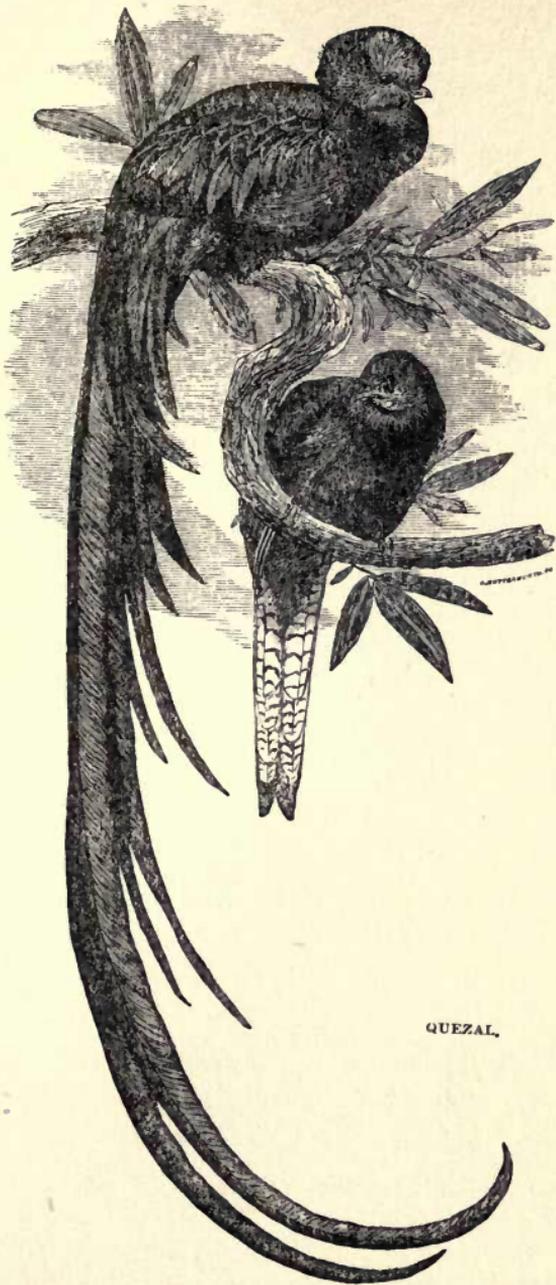
The kingfisher is another of our birds which every one has noticed—when they have had the luck to get a look at a bird which is so swift and shy—and so we find it is one of the birds of legend, in Europe at all events ; I never heard of any tales of it in India, where it is common and tame, and only one among many brilliant birds. It used to puzzle the ancient Greeks very much ; at least, so one would think from the story they told about its nest. They thought that it was specially favoured by the gods, who kept the sea calm for the birds for a fortnight in winter, because their nests floated on the water ; and as the Greek name for the kingfisher is halcyon, we even now speak of very beautiful weather, or an unusually peaceful time, as “ halcyon days.” Centuries later, even up to the time of Shakespeare, people still had the idea that kingfishers had so much to do with the weather that even a preserved specimen hung up in a room, would show the way the wind was blowing by turning its beak in that direction ;

in fact, that a dead kingfisher indoors was just as good as a weathercock outside. Another story told how the kingfisher was supposed to have got its beautiful colours, so much more brilliant than those of any other bird in our climate. This tale said that when the dove which Noah sent out from the ark returned without finding land, Noah sent out the kingfisher, which was then an ordinary-looking grey bird, no doubt thinking that being so used to water it would find its way about better. But the kingfisher, which was very tired of the ark, did not trouble itself with looking for land, but flew up high, so high that its back was dyed deep with the blue of heaven, and its breast scorched to a chestnut colour by the glare of the sun. Then it began to think of coming back ; but it had been away so long that the dove had been sent out and returned again, the flood had gone down, Noah had sent out all the beasts and birds, and had left the ark and broken it up. So the kingfisher could not find its home again, and to this day it follows the brooks and rivers and shore, trying to find Noah's ark !

So much for the way a beautiful bird is

supposed to have got its plumage; the Ceylonese tell another tale of how another lost it. This is the pitta, a very pretty bird, much like a thrush in size and shape and habits, but very beautifully coloured, green and blue, red and buff, black and white, all showing on its plumage. But when you look at it you cannot help thinking that it wants one thing to make it really smart, and that is a proper tail; it has only a ridiculous little stump, and you would not notice that if the bird were not always moving it up and down. But, says the old tale, the pitta did have a fine train once, but the peacock, which then had none, borrowed it for a wedding costume, and never gave it back again to the owner.

To turn from birds celebrated in ancient fairy-tales and fiction, we come to two strange ones which have been honoured by being put on postage-stamps and crests. Of course all of you who collect have seen eagles and swans on such designs, but it is not every one who knows what is the bird on the Guatemala stamps; it has a long tail, and is sometimes called a parrot in stamp-catalogues. But it is a far more splendid bird than any parrot



QUEZAL.

—the quezal or resplendent trogon. This lovely bird is only found in Central America, and in ancient times the native kings used to allow no one else to wear its plumage but themselves. And this plumage is more splendid than that of any other bird, being of the most brilliant golden green, with scarlet on the breast, and as the quezal is as big as a pigeon it is large enough to be very striking, and is certainly finer than any of the birds of paradise. It is only the male quezal that has the long streaming feathers, but the hen is just as brilliant in colour. Quezals are not very energetic birds; they sit on the boughs and fly out to pluck berries now and then; in the forests they live in food is abundant enough to be got in this very lazy way.

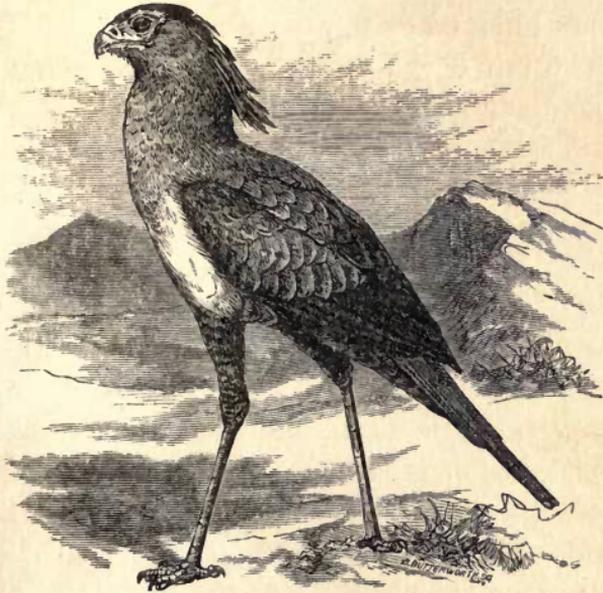
Although there are many other sorts of trogons, none are nearly so splendid as the quezal; but the bird I am mentioning as figuring in a coat of arms is even more extraordinary in its way. This is the secretary-bird of Africa, which figures in the coat of arms of Cape Colony, and is protected by law for its services in killing snakes there. It looks, as the picture shows, more like an eagle





STARLING. Page 234. ADULT (right). YOUNG (left).

on stilts than anything else, and it really is a sort of running eagle; it is very active on its legs, but although it has large wings like an ordinary eagle's, it has but little power of



SECRETARY-BIRD.

flight, and cannot go far at a time on the wing. No doubt it has let its wing-muscles get weak for want of practice, as it finds it can do all its business on foot. They generally have the secretary-bird on view at the Zoo, and the

keepers teach it to show how it kills the snakes by throwing it a dead rat tied to a string ; it is astonishing to see how quickly it strikes with its foot on the prey, but anything that lives on poisonous snakes has to be quick, or it will not live to have many fights with them.

The last bird I shall say anything about is one which has never figured as one of the world's famous birds ; it is nothing more or less than our common starling, about which there are no legends or stories so far as I know, though it has been known at least since the time of Homer, who speaks of starlings flying in a cloud. No doubt it is because starlings go so much in flocks that they have not become notable birds, for birds with reputations do not go in crowds ; but still the starling is one of the most wonderful birds in the world. He lives anywhere, on the wild cliffs among the sea-birds, or in the middle of our big towns ; he can do almost anything—fly well, run fast, and hop about quickly in trees ; he can eat anything, though he likes insects best, and he can imitate almost any bird's note, and does so, not only when he is tamed, but in his wild state, just for the fun of the

thing. In this he is very different from the parrot tribe, which never, so far as I have seen or heard, exercise their mocking powers when they are wild ; they have to be put in prison to make them use their abilities. Then the starling, with our help, has been a most successful colonist ; he is really a bird of Europe and the temperate parts of Asia, but he has been taken to Australia, New Zealand, and North America, and got on well everywhere.

It is fortunate that he is generally a useful bird, perhaps the most useful wild bird in the world ; but at any rate, with our help or without it, he can make his way, and is already, most likely, the commonest bird in Britain, and very likely to be the commonest bird in the world. There is always something new to be found out about his notes and habits, and so we have in him a bird notability who is always with us, and not the least worthy of study of all the many birds of which I have tried to say something in these few chapters.



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