CHAPTER XXXI.

Instinct of Birds—The Woodcock carrying her young—Herons—Water-ousel—Nest of Golden-eye Duck; Habits of Birds—Talons of Falcons and Hawks—Stuffed Birds—Plumage, etc., of Owls—The Osprey and Sea Swallow—Manner of Fishing—Carrion-feeding Birds—Manner of finding their Food—The Eagle—Sense of Smell in Birds—In Ducks and Geese—Power of communicating with each other—Notes of alarm—A few words respecting destroying Hawks, etc.—Colour of Birds adapted to concealment—Instinct of Birds finding Food—Red-deer—Tame Roebuck.

MANY people doubt the fact of the woodcock carrying her young from the wood to the swamp in her feet, and certainly the claws of a woodcock appear to be little adapted to grasping and carrying a heavy substance; yet such is most undoubtedly the case. Regularly as the evening comes on, many woodcocks carry their young ones down to the soft feeding-grounds, and bring them back again to the shelter of the woods before daylight, where they remain during the whole day. I myself have never happened to see the woodcocks in the act of returning, but I have often seen them going down to the swamps in the evening, carrying their young with them. Indeed it is quite evident that they

must in most instances transport the newly-hatched birds in this manner, as their nests are generally placed in dry heathery woods, where the young would inevitably perish unless the old ones managed to carry them to some more favourable feeding-ground. Both young woodcocks and snipes are peculiarly helpless birds, as indeed are all the waders, until their bills have hardened, and they have acquired some strength of wing and leg. Unlike the young of partridges and some other birds, who run actively as soon as hatched, and are able to fly well in a very short time, woodcocks, snipes, and waders while young are very helpless, moving about with a most uncertain and tottering gait, and unable to take wing until they are full grown. Their growth is, however, extremely rapid.

Snipes, redshanks, and several other birds of this genus are hatched and brought up on the same kind of ground on which they feed; but woodcocks, in this country at least, are generally hatched far from the marshes, and therefore the old birds must, of necessity, carry their helpless young to these places, or leave them to starve in the dry heather: nor is the food of the woodcock of such a nature that it could be taken to the young from the swamps in any sufficient quantity. Neither

could the old birds bring with it the moisture which is necessary for the subsistence of all birds of this kind. In fact they have no means of feeding their young except by carrying them to their food, for they cannot carry their food to them.

The foot of the heron, as well as its general figure, seems but little adapted for perching on trees, and yet whoever visits a heronry will see numbers of these birds perched in every kind of attitude, on the very topmost branches of the trees. The water-ousel manages to run on the ground at the bottom of the water, in search of its food. All these actions of birds seem not only difficult, but would almost appear to be impossible. Nevertheless the birds perform them with ease, as well as many others equally curious, and apparently equally difficult.

The feet of ducks are peculiarly ill adapted for perching on trees; nevertheless the golden-eye duck generally breeds in hollow trees, not only in broken recesses of the trunk, easy of access, but even in situations where, after having entered at a narrow round aperture, she has to descend for nearly an arm's length, almost perpendicularly, to reach the nest. Through this same entrance also has she to take her young ones when hatched, before they can be launched on their natural element—water.

I could give numberless instances of birds and other animals performing actions and adopting habits which to all appearance must be most difficult and most unsuited to them; all these prove that we are not to judge of nature by any fixed and arbitrary rules, and still less should we attempt to bring all the countless anomalies of animal life into any system of probabilities of our own devising. The more we investigate the capabilities of living animals of every description, the more our powers of belief extend. For my own part indeed, having devoted many happy years to wandering in the woods and fields at all hours and at all seasons, I have seen so many strange and unaccountable things connected with animal life, that now nothing appears to me too wonderful to be believed.

The feet and claws of different kinds of hawks vary very much, being beautifully adapted to the manner in which each bird strikes its prey. If we examine the claws and feet of the peregrine falcon, the merlin, or any of the other long-winged hawks' including the varieties of those noble birds, all of whom I believe were called in the age of falconry "The Ger Falcon," such as the Iceland, the Greenland, and the Norwegian falcon, we find that their power consists rather in their strength of talon and foot than in the sharp needle-like claws of the hen-

harrier, the sparrow-hawk, the goshawk, etc. The rationale of this difference seems to be that the falcons strike their prey by main force to the ground in the midst of their flight; whilst the other hawks usually pounce on the animals on which they feed, and take them unawares on the ground instead of by fair pursuit and swiftness of wing. The sparrow-hawk and hen-harrier seldom chase a bird to any distance on the wing.

I have spoken of the peregrine, the Iceland, the Greenland falcon, and also the falcon of Norway, as being distinct species. This, however, is a point to be decided by naturalists more skilful in the anatomy and osteology of birds than I am myself. *Scribimus indocti!* My remarks are merely the result of my own unscientific observations, aided by the inspection of the numerous and beautifully-prepared specimens of my friend Mr. Hancock, who, I believe, I may safely assert is the best stuffer of birds in the kingdom. The examination of his collection has been a source of great pleasure to me, but it has also had the effect of making me dissatisfied with the performances of all other preservers of birds. A bird, when it is stuffed and "set up," as they term it, ought to be "aut Cæsar aut nihil." A bird stuffed in a second-rate manner is a very valueless and unsatisfactory affair; and it would be

far better, for the furtherance of natural history, if people, instead of having a rare bird badly stuffed and put into a distorted shape and attitude, with projections where no projections should be, and hollows where there should be none, would be content to keep merely the skin just sufficiently filled with cotton or tow to prevent its shrinking.

The owls have all extremely hard and needle-like claws, and in every respect the bird is singularly well adapted for its manner of feeding, which it does almost wholly at night. Its immensely large ears must enable it to hear the slightest movement of the field-mouse, upon which it chiefly feeds; and its sharply-pointed talons contract with a tenacity and closeness unequalled by those of any of the hawk tribe, excepting perhaps the hen-harrier. Again, the soft downy feathers and rounded wings of the owl enable it to flit as noiselessly as a shadow to and fro, as it searches for the quick-eared mouse, whom the least sound would at once startle and drive into its hole, out of reach of its deadly enemy. As it is, the mouse feeds on in heedless security, with eyes and nose busily occupied in searching for grains of corn or seeds, and depending on its quickly sensitive ear to warn it of the approach of any danger. The foot of man, or even the tread of dog or cat, it is sure to hear; but the owl glides

quickly and silently round the corner of the hedge or stack (like Death, tacito clam venit illa pede), and the first intimation which the mouse has of its danger is being clasped in the talons of its devourer.

The owls of this country are far more serviceable to us than we imagine, destroying countless mice and rats. It must be admitted, however, that both the long-eared owl and the common brown owl will, during the time that they have young ones to feed, destroy and carry off pigeons, young game, and other birds, with a determined savageness equal to that evinced by any of the hawk tribe.

The rough and strong feet of the osprey are perfectly adapted to the use which they are put to, that is, catching and holding the slippery and strong sea-trout or grilse. The fact of a bird darting down from a height in the air, and securing a fish in deep water, seems almost incredible, especially when we consider the rapidity with which a fish, and particularly a sea-trout, darts away at the slightest shadow of danger, and also when we consider that the bird who catches it is not even able to swim, but must secure its prey by one single dash made from a height of perhaps fifty feet.

The swiftest little creature in the whole sea is the sand-eel; and yet the terns catch thousands of these fish in the same way as the osprey catches the

trout, excepting that the tern uses its sharp-pointed bill instead of its feet. I have often taken up the sand-eels which the terns have dropped on being alarmed, and have invariably found that the little fish had but one small wound, immediately behind the head. That a bird should catch such a little, slippery, active fish as a sand-eel, in the manner in which a tern catches it, seems almost inconceivable; and yet every dweller on the sea-coast sees it done every hour during the period that these birds frequent our shores. In nature nothing is impossible; and when we are talking of habits and instincts, no such word as impossibility should be used.

I never could quite understand the instinct which leads carrion-feeding birds to their food. We frequently see ravens, buzzards, and other birds of similar habits congregating round the dead body of an animal almost immediately after it has ceased to live; and therefore I cannot agree with those naturalists who assert that it is the sense of smelling which leads these birds to their feast. From my own observation I am convinced that this is not the case, as I have known half-a-dozen buzzards collect round a dead cat on the afternoon of the same day on which it had been killed, and this, too, during the winter season, when the dead animal could have emitted no odour strong enough

to attract its devourers. I am far more inclined to attribute their facility in finding out their food to a quick sense of sight. For the sake of catching these birds and the gray crows also, I was accustomed to have the dead vermin thrown out into a field near the house, where traps were placed round them. When the cats were skinned, and therefore were the more conspicuous, the carrion birds usually found them out the same afternoon. Now buzzards, ravens, and other birds who feed on dead bodies are in the habit of frequently soaring, for hours together, at an immense height in the air, wheeling round and round in wide circles. I have no doubt that at these times they are searching with their keen and far-seeing eye for carcases and other substances fit for food. The eagle, who also feeds on dead bodies, wheels and circles in a similar manner, at such a height in the air that he frequently looks like a mere speck in the sky. There can be no doubt that it is upon his eye only that he depends. When, even at this vast height, his quick eye catches sight of a grouse in the heather, down drops the bird of prey as if shot, till within some thirty yards of the ground, when, suddenly stopping his downward course, he again hovers stationary over the grouse, till a fair opportunity offers itself for a swoop. I have frequently

seen the eagle do this; and he has sometimes discovered the grouse from a height and distance so great as to make it appear impossible that he should have distinguished so small an object.

It is certain, however, that birds have a tolerably acute sense of smelling, although I know that it has been positively denied that ducks are guided by their scenting powers in taking alarm, and that it is by their quick sense of hearing *only* that they are warned of the approach of danger. But this I utterly deny; for I have constantly seen wild-fowl, when I have been sitting perfectly motionless in an ambuscade, swim quietly towards me without the slightest warning of my vicinity, till coming to that point where my place of concealment was directly to windward of them, they immediately caught the scent, took wing, and flew off in as great alarm as if I had stood up in full view. The same thing has occurred very frequently when I have been in pursuit of geese, the birds invariably taking alarm as soon as they came in a line with me and the wind, and just as much so when I was motionless and not making the slightest noise, as when I was creeping towards them. The same sense of smelling doubtless guides birds, in many cases, to their food, but it is certainly not the sole or even the principal guide of the ravens or the eagles.

When one of the carrion-birds has found a booty, others of the same species who may be wheeling about at a greater distance at once see by his manner of flight and other signs that he has made some discovery, and immediately follow in the same direction, in order that they may come in for their share.

In like manner, when one wild-duck has found out a quantity of corn laid down in any particular place, he soon brings others to the spot, and these again give information to others, until at length large flocks collect to feed on what was originally discovered by a single bird. I do not mean to infer that they can communicate to each other by any bird-language the existence and locality of the prize found; but they all go to the spot attracted by the manner of flight of the first discoverers, which doubtless tells their companions most plainly that they are winging their way directly towards a depôt of food, and not going forth on a vague and uncertain search.

The clamour and noise of crows when they find a prize tell the tale at once to all within hearing, and not to those of their own kind only, but to all ravens or rooks in the neighbourhood.

In the same manner birds communicate alarm and warning, not only to those of their own species,

but also to others. Often has the cry of a crow, who has suddenly while passing over my head discovered my hiding-place, caused a flock of geese or other wild-fowl to take wing instantaneously, as if they themselves had seen me; and many a shot have I lost by the cries of peewits and other birds.

I have often been led to think that, when different kinds of wild-fowl were feeding in a quiet place, the mallards and widgeon have taken no heed to their own security as long as there were either curlews or redshanks feeding near them; being apparently quite satisfied that these vigilant and noisy birds were sufficiently watchful sentinels to warn them on the first approach of danger.

A stag takes warning from the alarm-note of the grouse or plover as quickly as if he had himself seen an enemy, and from the manner of the bird's flight he knows pretty accurately where the danger lies.

In getting up to deer it has more than once happened that I have had either to lie motionless for a long time, or to make a considerable circuit, in order to avoid putting up a cock-grouse, who, eyeing my serpentine movements with suspicion, has been ready to rise with his loud cry of alarm had I approached a yard nearer to him. In fact there is a language of signs and observation carried

on between animals of different kinds, which is as perfectly understood by them as if they could communicate by words.

It is difficult to determine how far we are right in endeavouring utterly to destroy one kind of animal or bird in order to increase another species. Nature, if left to herself, keeps up a fair equilibrium and proportion amongst all her productions; and, without doubt, if the world were left to itself without the interference of mankind, there would never be an undue proportion of any one kind of living creature: the birds of prey would keep down the granivorous birds from increasing till they devoured all the fruits of the earth; and the carnivorous birds and beasts would never entirely extirpate any other species, as their own numbers would be lessened by want of food before this could happen; besides which, we see that, unless artificial means are resorted to, the number of living animals always bears proportion to, and is regulated by the supply of food which offers itself; and, as these supplies fail, there is a natural tendency for the consumers to cease increasing, or to betake themselves to other regions. But when man comes in as an active agent, he gradually extirpates all beasts and birds of prey for the purpose of protecting and causing to increase the weaker but more useful

animals and birds. In this country, for instance, we can no more afford to allow hawks and crows, foxes and weasels, to flourish and increase, however picturesque and beautiful they may be, than we could afford to allow poppies or other useless but ornamental wild-flowers to overrun our corn-fields.

A pair of peregrine falcons take possession of a rock—they will issue out as regularly as the morning appears to search for grouse, partridges, or other birds, which form the food of man. It is the same with other hawks; and we well know that crows destroy more game than all the shooters in the kingdom. It is, therefore, absolutely necessary to keep down the numbers of these marauders as much as possible.

I cannot say that I am at all anxious to see our island entirely clear of what all game-preservers call "vermin." There is more beauty and more to interest one in the flight and habits of a pair of falcons than in a whole pack of grouse; and I regret constantly to see how rare these birds, and eagles, and many others, are daily becoming, under the influence of traps, poison, and guns. The edict which has gone forth against them is far too comprehensive and sweeping, and many perfectly innocent birds go to swell the game-

keeper's list of "vermin." But I have gone fully into this subject before.

One advantage certainly results from birds of prey being killed off: blackbirds, thrushes, and numerous other beautiful little birds, increase in proportion as their enemies are destroyed. In several districts where a few years ago these birds were very rare they are now abundant.

The ring-ousel, too, is one of the birds who has benefited by this destruction of its enemies. There are some other birds, such as the wheat-ear and tit-lark, who are seldom killed by a hawk, but whose nests and young are the constant prey of weasels and other ground-vermin. These also have good reason to thank the trapper. Wood-pigeons, whose eggs were formerly taken by the crows and magpies in great numbers, and whose young served to feed many kinds of hawks, now increase daily, and begin to be a subject of great complaint amongst farmers; and yet the wood-pigeon during a great part of the year feeds on the seeds of many weeds and plants which are useless to mankind. The eggs of birds are in general more or less concealed from their enemies, either by the nest being similar in colour to the surrounding substances, or by its situation; but the eggs of the wood-pigeon are particularly exposed to the attacks of crows, magpies,

etc. Their young, too, are constantly stolen out of the nest by hawks and owls. It is a singular circumstance connected with the "*table arrangements*" of these birds of prey, that they never carry off the young wood-pigeons till they are nearly fledged and ready to fly.

The ptarmigan's chance of escape from birds of prey is much better: they are exactly the colour of the stones in summer, and of the snow in winter, and change their colour as that of their abiding-place is altered. The grouse is as nearly the colour of the brown heather as it is possible for a bird to be; his bright eye and red comb are the only discoverable points about him when he is crouched in it. The blackcock's usual haunt is in lower situations, and he delights in the peat-moss, where the ground is nearly as black as his own plumage. The partridge and quail are exactly similar in colour to the dried grass or stubble, and the quickest eye can seldom see them on the ground when crouched, and not erect or moving about to feed. The pheasant's colour very nearly resembles the dead leaves of the wood and coppice, which are his favourite haunts.

The owl sits securely close to the trunk of a forest tree, her mottled-brown plumage being in colour exactly like the bark of the trunk close to

which she is perched. The peregrine-falcon, with her blue-gray feathers, can scarcely be distinguished from the lichen-covered crag, where she sits for hours together as motionless as the rock itself. The eagle sits upright on some cliff of the same colour as himself, huddled up into a shape which only the experienced eye detects to be that of a bird. The attitudes and figures of the whole tribe of hawks are very striking and characteristic, and as unlike as possible to the stuffed caricatures which one usually meets with, and in which the natural character of the bird is entirely lost. From want of time, and still more from not having frequent opportunities of studying living subjects, bird-stuffers in general make less advancement towards excellence in their avocation than almost any other class of artists, nor has the present leaning towards ornithological pursuits produced much improvement amongst them.

In addition to the protection which similarity of colour affords to animals, they have a natural instinct which leads them to choose such places of concealment as, from the nature of the surrounding objects, are the best fitted to conceal them. The hare, for instance, constantly makes her form amongst gray stones much of her own size and colour; and birds which are much persecuted do

the same. The larger size of red-deer obliges them to depend rather on the inaccessibility of their resting-places than on any attempt at concealment; and the roebuck's safety is in the denseness and roughness of the wood in which it lies.

There is some powerful instinct, also, which assists animals in finding their food; and many go direct from great distances to places where they are sure of finding it. Pigeons find out newly-sown peas and other favourite grains almost immediately after they have been put into the ground; and will frequently fly several miles to a field the very first morning after it is sown. Wild-ducks, also, whose researches can only be made by night, are equally quick in finding places where there is plenty of any favourite food. The small gulls, particularly the black-headed gull, discover the ploughman before he has finished his first furrow, and collect in great flocks to pick up every grub or worm which he turns up. The rapid instinct of birds who feed on carrion has been alluded to already. In fact all birds, whatever their food may be, have an instinctive power of discovering it immediately, and that from such great distances as to baffle all attempt at explanation. In the mountainous districts of Sutherlandshire and others of the northern counties, the

red-deer invariably knows the exact time when the shepherd's patch of corn and potatoes is fit for his food, and will sometimes come down in such numbers as to eat up and destroy the entire crop in a single night; or if the cultivated ground be extensive, they will repeat their visit in spite of all attempts to drive them away; and the cleverness they display in taking advantage of every unguarded moment is quite astonishing. In Sutherlandshire little loss accrues to the tenant from this, as a fair allowance for such damage is always readily granted. It is a curious sight to see these animals depending entirely on their own resources and cunning in avoiding danger, and, in spite of their natural timidity, coming fearlessly down to the very door of a cottage to feed on their favourite food, and frequently from very considerable distances; and even after the oats are cut and piled up in sheaves, I have seen red-deer with astonishing boldness manage to appropriate to themselves no inconsiderable share of the ripe corn.

All the deer tribe soon find out when danger ceases. In a domesticated state no animal becomes more fearless and bold than a stag; and in proportion as they become so they are dangerous to strangers, whom they attack with great fierceness.

They have, however, discrimination enough to assault women more frequently than men, being evidently aware that they are the more helpless of the two, and less able to resist. Even a roebuck, when tamed, will do this; and their activity and strength render them no contemptible antagonists.

I remember a roebuck, belonging to a clergyman of the Established Church in Scotland, which one day attacked and hurt a woman who was a zealous supporter of the Free Church. The good lady uttered the most bitter maledictions against the clerical owner of the roe, vowing that he kept his Satanic Majesty "in the shape of a horned beast," for the sole purpose of attacking and destroying Free Church people.

A roe, though so beautiful an animal, is a most unsatisfactory pet; as they invariably either become dangerous as they become tame, or else take to the woods and are killed, their instinctive knowledge of danger having apparently deserted them.