



J. Wolf. del. et lith.

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NECTARINIA OSEA



\*.\* We cannot allow this communication to appear without expressing our deep regret (in which, we are sure, all our readers will sympathize) at the heavy misfortune which has lately befallen Mr. Andersson. Some months since, in a hostile engagement between two native tribes, one of which was living under his protection, Mr. Andersson was most severely wounded; and though we are glad to say that, by the last accounts received from him, his life seems to be out of danger, there is too much reason to fear that this intrepid traveller has been crippled for the rest of his days.—ED.

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V.—*On the Ornithology of Palestine*. Part I.

By the Rev. H. B. TRISTRAM, M.A., F.L.S., C.M.Z.S.

(Plate II.)

MOST of the regions comprised in the northern hemisphere have now been so far explored that the naturalist can scarcely anticipate the discovery of many novelties in this portion of the world. Yet the Fauna of Palestine, apart from the peculiar interest of associations, sacred and historical, is of exceptional value from the light it casts on the question of the geographical distribution of species. In the first number of the former series of the 'Ibis,' I had the pleasure of drawing attention to the ornithology of the Holy Land; and I rejoice in being permitted, after the lapse of six years, to occupy a few pages in the first number of the new series with an account of some of the results of a recent expedition to the same country. Ever since my first visit to Palestine in 1858, I had been impressed with the importance of a more complete investigation of its fauna than had yet been undertaken; and not the least of the many obligations which I gladly acknowledge as due to the publication of the 'Ibis' is that it was the means of my being induced to organize and take part in an expedition for the physical exploration of the Holy Land. A period of nearly ten months in the past and present year was occupied in this expedition; and the results, though not very novel, are sufficiently interesting to make us feel well rewarded for our exertions, while we obtained fair collections in all the four classes of the vertebrate kingdom.



Wady el Arish, and is abruptly brought to a point at Ras Mohammed, at the bifurcation of the Dead Sea.

Broken more or less throughout its whole course, this continuation of the Lebanon is the platform on which all the great historical cities of Palestine rest, and divides the watershed of the Mediterranean and the Jordan and Dead Sea valley. The eastern range, that of the Antilibanus, after culminating in Jebel es Sheik (the ancient Hermon) at a height of nearly 10,000 feet, runs southwards with much less irregularity, until it terminates at the Gulf of Akabah in the peak of Jebel el Ashab. In its course it is known as the table-land of Bashan, the mountains of Gilead and Ajalon, the hills of Moab, and the fine range of Wady Mousa or Petra. This range, like the western, forms the separation of a watershed through its whole length, the westward face draining into the Jordan, the Dead Sea, and the Arabah, while the eastern watershed fertilizes the Belka and the Hauran, and is lost in sebkhas or salt-lakes and marshes in the Arabian Desert. None of its drainage reaches the Red Sea or the Euphrates.

In this desert we have, as in the Sahara of North Africa, an illustration of the fact that a desert expanse forms a barrier against the distribution of a fauna, more impassable than an area of water of even equal extent. As it is the Sahara, and not the Mediterranean, which separates the faunas of Europe and Africa, so it would seem to be the Desert of Arabia, and not the Persian or Red Sea Gulfs, which marks the line between the Indian, Ethiopian, and Palæarctic circles of distribution, all of which, however, impinge in this region on one another's boundaries and overlap each other.

Yet, were it not for one unique and unparalleled phenomenon in its physical geography, we should find the avifauna of Palestine similar in character to that of the Barbary States—essentially of the Mediterranean basin, but with some few stragglers from eastern Africa, whose arrival had been facilitated by the lay of the Red Sea, and with a still more scanty number of stragglers across the eastern desert from the Euphrates valley. But the phenomenon of the existence of the Ghor, or deep fissure of the Jordan valley, disturbs these proportions. The little district



of Palestine is rent by this long chasm, 1400 feet below the level of the sea, enclosing tracts, some arid and salt, others fertile and well watered, but all enjoying in the temperate zone the climate of the tropics, and wholly distinct from the country on either side. The enclosing ranges, as I have said, are prolonged into the Red Sea; but whether the Ghor was formerly a branch of that gulf, and separated from it by the rising of the ridge of Arabah (the height of the watershed of which has this year been ascertained by M. Vignes to be 786 feet), or whether the valley has been slowly depressed to the north of that ridge, is immaterial for us to consider with reference to the peculiarities of its avifauna. In either case, the depression is, geologically speaking, ancient, and has existed for such a series of ages as to have permitted the introduction or development of the forms most suitable to its climatic condition. These forms appear most of them to be local and sedentary, and, though frequently closely affined, are, so far as our present knowledge extends, specifically distinct from their nearest congeners in adjacent regions.

Some of the peculiarities of the natural history of the Ghor had not escaped the observation of the ancients, and in some of their guesses there is an underlying vein of geological truth. Josephus observes that some of the fishes of the Lake of Galilee are peculiar, and that others, as the Cat-fish, *κορακῖνος* (*Clarias macranthus*, Gthr.), which he especially names, are identical with the fishes of the Nile. Our specimens captured this year prove the correctness of the assertion of Josephus. From this identity of its fish, the old historian tells us that some have thought the fountain and stream Capharnaum, which flows into the lake, to be a vein (*φλέβα*) of the Nile. Ptolemy, too, mentions a notion that the Jordan was an old affluent of the mighty river of Egypt. We may smile at these conceits, and class them with the old stories of the underground stream from the Euphrates to Tyre, from Lake Phiala round the base of Hermon to the source of the Jordan, and the like; but, after all, there is a connexion, and a strong one, though not exactly as the geographers of old may have dreamed.

Of the fourteen species of fishes collected by us in the Lake



of Galilee, all are of an African character, and most of them identical with the fishes of the Nile. Of the genus *Chromis*, a peculiarly African genus, we find four species, one of them, *Chromis nilotica*, identical with the common Egyptian fish, and three other species not hitherto described. Moreover the Lake of Galilee is the most northerly spot at which any member of this genus has yet been discovered; and here, at the northern limit of the family, we find no less than four species—a most unusual proportion in an outlying region. Further, the genus *Hemichromis* was originally founded upon two species brought from the Gaboon river. Last year Dr. Kirk, of Dr. Livingstone's expedition, brought home no less than seven species from the Lake Nyassa; and now another species of this very restricted genus appears from the Lake of Galilee.

Surely these coincidences point to an ancient connexion between the Jordan and the Red Sea; and that the Lake of Galilee is perhaps only the most northern of that long line of inland seas which Speke, Burton, Livingstone, and other explorers have been so rapidly mapping out on the eastern side of the African continent.

Presuming, from its peculiar ichthyological fauna, the vast antiquity of that depression, we may naturally expect to find strong African affinities in its avifauna likewise. Not that the most locomotive group in nature can ever be found so restricted by geographical boundaries as the inhabitants of inland waters; but if there be any truth in the principles of geographical distribution, they ought to vary *similarly*, and some traces of the former African connexion of the valley should appear even in its ornithology. And this view is borne out by the results of our expedition. The number of species of birds obtained in Palestine was 322. Of these 58 are either peculiar or common to N.E. Africa; 7 species are either Indian, or find their most nearly allied congeners in the Indian and Persian fauna; 31 species of the 58 are peculiarly desert forms, and are either new or have been already included in Rüppell's accounts of the Arabian fauna; 260 of the whole number are included in the lists of the birds of South-eastern Europe or of Asia Minor. It is to be noted that all the species of an African character are obtained principally,



and most of them exclusively, in the Ghor or Jordan valley. There appears to be no difference in the fauna on either side of this isolated strip of the tropics. The same birds, the Wood-Pigeons, Jays, and Woodpeckers of Carmel, equally abound in the forests of Gilead and Bashan; and I never obtained, or observed, on the highlands east of the Jordan a single species which we did not also secure on the western side, with the one exception of the Saker Falcon, a truly desert-loving Raptor.

It is between these two ranges that the ornithological treasures of Palestine are to be sought for; and I trust the Editor will forgive me for a somewhat irregular proceeding, in deferring, for the present, a systematic and annotated catalogue of the birds of Palestine, and plunging at once, after this long and dreary preliminary excursus, worthy of the 'Hierozoïcon' of Bochart himself, into the details of the life and death, the manners and customs, of some of our especial favourites.

First and least of these must be the Sun-bird—*Cinnyris osea* (Plate II.) of Prince Bonaparte, in the 'Comptes Rendus,' but more correctly, I believe, *Nectarinia osea* (Bp.).\* The literary materials for the authentic history of this beautiful gem are scanty indeed. It seems to have escaped the notice of Antinori, and, strangely enough, of Hemprich and Ehrenberg also. The Duc de Vallombrosa brought the only specimen known in European collections before this year, and the type of Bonaparte's description.

But so distinguished a bird, if he has had no history, has at least some legendary traditions attached to his name. Most residents in Palestine will tell you of the "Jericho Humming-bird"—a true Humming-bird, and will not allow you to doubt the fact of its existence, as it has been seen by them, and was shot by the son of their friend or neighbour. They are not, however, so far

\* I have preferred to retain the generic term of Illiger, *Nectarinia*, on the ground of undoubted priority, and being unable to recognize the principle on which Bonaparte has separated *Cinnyris* from *Nectarinia*, unless I were prepared to follow Cabanis and increase indefinitely the number of genera in this group. The characters on which the Prince relies appear too vague, while he has retained among *Nectarinia* such short-tailed species as *N. adalberti*, Gr.



astray as Mr. Gould's Devonshire friend, who held the honour of his county at stake in the maintenance of his assertion that Humming-birds were common there. Then these legends have the highest literary warrant: they are embodied in the journals of Lynch and of M. de Sauley. The gallant Commodore (certainly a most truthful narrator, and most trustworthy, whenever on subjects within the range of his naval training and experience) saw the beautiful-spangled "Humming-bird," between the Dead Sea and Kerak.

M. de Sauley, yet more fortunate, not only saw, in the Ghor es Safieh, at the south end of the Dead Sea, "Humming-birds with ruby and emerald frills," but afterwards obtained one of these wonders of the tropics, which however was never preserved, as an indiscriminating cat carried it off from the dissecting-table, where it had been left.

Our acquaintance with the Sun-bird commenced on the last day of the year at Jericho, when six specimens were obtained, close to our camp at Ain Sultān, the day after our arrival. The oases of the plains of Jericho appear to be its metropolis, and we never met with it excepting in the immediate neighbourhood of water. But wherever a few tamarisks, zizyphus-bushes, or graceful "retem" shade a fountain or straggling pool in some deep glen opening on the Dead Sea, there a few occur. The larger oases, however, of Jericho at the north-west and Safieh at the south-east end of the Dead Sea are the resorts of great numbers, which, though here to be found in almost every tree, are nowhere gregarious, but are noisy and pugnacious, the males chasing each other with loud cries, and as tenacious of their respective freeholds as Robins at home. The note is clear and monotonous, very much like the call of the Willow-Wren, but sharper, and often reminding one of the Blue Tit, yet with a more hissing sound. This is incessantly repeated from sunrise to evening, and the whereabouts of the male bird can at once be detected; but to see him is not so easy, as he ceaselessly hops in the centre of the very thickest and most impenetrable scrub, and darts very quickly and suddenly across the open from tree to tree. The male is extremely restless, and, as it twists and clings to one twig after another in search of insects, reminds one of the Tit-



mouse, much more than of the Creeper, in its actions. It has a curious jerking flap of the wings, opening and closing them like *Tichodroma muraria*. Occasionally I have seen two rivals for the favours of a female singing on the top of a tree, and puffing out the brilliant orange and red axillary tufts, which only at such times are at all conspicuous. The female during the winter continually repeats the same monotonous note, but almost always remains stationary, or creeping slowly about in the very centre of a bush. One female had her quarters in a dense zizyphus-tree fifty yards from our tent, and was used as a decoy-bird by one of our party, who used to go and sit under the tree every morning for a fortnight, and would bring back two or three males, allured to their destruction by this fatal siren, who never left her retreat at the report of the piece. Alas for humanity! on the morning of our departure, her good service to this treacherous collector was rewarded by her own death, to be embalmed alongside of her many deceived admirers.

The female plumage is always brown-grey above, lightish olive-grey beneath, with lightish-yellow vent and under tail-coverts; the tail black, with metallic-green reflexions. The male varies much, and does not appear to attain the nuptial dress till after Christmas, which he loses again in the summer. Not more than one in four of the males we shot in January was in full plumage, the brilliant metallic reflexions of the back, throat, and breast being interrupted by many brown feathers; and I have several times taken birds who had paired, and were breeding, in this incomplete livery. We ascertained that this state of plumage is certainly not the mark of immature birds, as it is always accompanied by the bright axillary tufts, which the young birds do not acquire till after their first moult, prior to which they have the sombre dress of the female, but with a lighter-coloured breast.

In form and size *Nectarinia osea* resembles *N. asiatica*, Lath., but has the upper portion of the axillary tufts rich red, instead of orange, and has the metallic reflexions of the back and throat bright green, instead of dark purple, which colour is only shown on the lower part of the breast and the forehead. It is also not far removed from *N. affinis*, Rüpp., from Abyssinia, but differs



from it likewise by the greater extent of the green instead of purple reflexions.

As we crept along the western shores of the Dead Sea, we met with a few pair up the different Wadys where water remained ; but here, deprived of cover, they are extremely shy and wary. In the Ghor es Safieh, under Kerak (the richest and the hottest portion of the whole Ghor), the Sun-birds were as numerous as at Jericho. On our return we found them plentiful by the wooded banks of the Jordan, but never far removed from its banks. In the month of March, we ascertained their summer range to be more extensive than we had expected ; for one day, while shooting on the south side of Mount Carmel, on the slopes which run down to the Plain of Sharon, Mr. Bartlett declared he had heard their note ; and after a long pursuit, I secured a pair close to the edge of the plain, not far from the sea. The female, when shot, dropped a soft egg. This was the only occasion on which the bird ever occurred to us away from the Jordan valley ; but I have reason to believe it has been obtained in Asia Minor, as a French collector at Smyrna described to me a bird he had once received from the interior, which could only, I think, have been a female Sun-bird. He stated that, unfortunately, it was too badly shot for preservation.

A few days after our visit to Carmel, we again met with the Sun-bird in a deep gorge, the Wady Hamam, opening on to the Plain of Gennesaret. Mr. Cochrane and I pursued it in vain ; but, while searching among the cliffs for Vultures' nests, Mr. Cochrane pulled down from the extremity of the twig of a hyssop-plant what he imagined to be an old nest of *Drymæca gracilis*. It had the external appearance of a loose ball of rubbish, such as might have been floated down by a sudden flood and caught in the branch of a tree. After tossing it about for some time, he threw it towards me ; and on examining it, I was dismayed to find it a fresh nest, very firm and compact inside, with a small hole in the side, and containing two broken fresh eggs, elongated, of a greenish white, with a zone of darker green-grey spots near the larger end. We searched in vain for another, and, mourning our ill-luck, left the neighbourhood the next day. On the 23rd of May I returned to the



same place ; and while climbing up to a cave, the resort of *Hirundo rufula*, I struck with my head a little ball of straw and leaves attached to the extremity of a castor-oil plant, not two yards from the spot where Mr. Cochrane had found his nest. It contained three eggs, quite fresh, and was beautifully shaded both from the sun and from observation. This nest is the one figured in the plate. I was fortunate enough to secure the male bird in full plumage. Close by was another nest, from which the young had been reared ; and we watched the female feeding her young family of three, in the hyssop overhead. I am inclined to believe that they had bred twice ; for we could not make out a third pair.

Meanwhile I had returned, in April, to our old quarters at Ain Sultān, near Jericho, accompanied only by a single muleteer and one guard. On the afternoon of my arrival, on the 13th of April, I discovered by myself no less than seven nests—one with three eggs, one with two hard set, one building, and four with young. All were in precisely similar situations, suspended from the extremity of a small twig hanging down in the centre of a “nubk” tree, whose thorny branches spread in a circle so close to the ground that I had in every instance to creep on all fours till I could get under the trees. The nests in these places were perfectly inaccessible to the attacks of the serpents and lizards which abound there. The nests are at first very neat and compact, long straws and fibres being attached to the extremity of the drooping bough, and on these the bag is woven. When finished, a few loose leaves and straggling straws are loosely fastened all round, to elude observation and remove the appearance of art. I kept three young birds for ten days in a box, and fed them with bunches of the blossom of a jasmine and convolvulus. The hen bird lingered always in the neighbourhood of the tent, attracted doubtless by their cries ; and when we were about to leave, I turned out the two surviving captives, and was glad to see the parent take to them at once, and attend to them in an adjoining tree.

Another characteristic bird of the Jordan valley is the Galilean Swift (*Cypselus galilæensis*, Antinori). Unlike its congeners, this Swift is a permanent resident in the district it inhabits. In



many genera of birds, it may be observed that those species which have the most extended northerly have also the most extended southerly range; and that those which resort to the highest latitudes for nidification also pass further than others to the southward in winter. Thus the migratory Fieldfare and Redwing, visiting regions north of the limits of the Thrush and Blackbird, on their southward migration likewise leave their more sedentary relatives behind. The Brambling, which passes the Chaffinch in Norway, leaves it also in Europe, and crosses the Mediterranean every winter to the Barbary States. The Egyptian and Collared Turtle-Doves remain throughout the year in North Africa and Syria; but the common Turtle (*T. auritus*, Temm.), so abundant in those countries in summer, never leaves a straggler behind in November, and yet in spring advances a thousand miles nearer to the Pole than they do. And thus, while *Cypselus melba* does not return to Palestine until about the 12th February, and the yet more northerly *Cypselus apus* was not observed until the last week in March, *Cypselus galilæensis* is building before the return of the one, and has hatched its young when the other arrives. It may often be seen, during the month of January, high in the air on the plains of the Jordan, and never descending within gunshot until towards evening. The broad white rump gives it at first sight the appearance of the House-Martin, for which indeed it might be mistaken, were it not for its note, which is peculiar and melodious, consisting of two semitones often and rapidly repeated with a tremulous twitter, and most unlike the harsh scream of the Common Swift. Its flight is quite as rapid and darting as that of the other *Cypselidæ*; and in spring we often noticed large flocks of all three species intermingled far aloft, and feeding together on the wing. While, however, the White-bellied bird would frequently sweep nearer the ground, and the Common Swift occasionally follow it, their little congener never during the day descended from its elevation, and often for hours have we waited in vain for the chance of a shot.

Our first specimens were obtained by Messrs. Shepherd and Upcher on the top of the cliff of the Wady Hamam, by the Plain of Gennesaret, on the 8th of March, when the birds were building in



society. Their capture was no easy task, as they never approached the cliffs till toward evening, and then, unless they could be brought down on a little projecting promontory near the edge of the wady, it was in vain to hope to secure the spoils. After two or three shots, they became far too wary to afford another chance.

Unlike the Sun-birds, they mount to the highest portions of the enclosing mountains of the Ghor; and Mr. Bartlett obtained a single specimen, consorting with *Cypselus melba*, near the highest part of Mount Ajalon, east of the Jordan. But it was not until the 1st of April that, in company with Mr. Cochrane, I secured the nest and eggs. Under an overhanging ledge in the fine ravine to the south-west of the Plain of Gennesaret, at the height of 800 feet from the bottom of the wady, we discovered a cluster of nests, about twelve in number, huddled together in one mass on the roof of an open cavern, upwards of twenty feet from its floor. The nests were large, circular, each about half a sphere, and of the capacity of about a quart—a very great size for so small a bird—and composed of straws, large and small feathers, and fine grass, very strongly agglutinated together, and as firmly attached also to the rock. So stout was the consistency of this felting, that it was with some difficulty the nests could be either separated or torn asunder. The saliva of the bird must be the gluten employed; and the construction exhibits a marked approach to the architecture of the genus *Collocalia*, the Edible Swift. The outsides of the nests were decorated with a liberal supply of the loose downy feathers of the Egyptian Vulture, slightly attached by gluten—a covering which I have observed to be omitted in the nests built inside caverns; and there is no warm lining whatever. After laying ineffectual siege for half a day, we were reduced to the very vulgar and unsatisfactory expedient of collecting all the sticks we could obtain, splicing them together, and with a fork at the top, tearing down the nests as best we might, while one of the party attempted to catch the eggs as they fell in an open butterfly-net. Sad was the havoc, and loud and indignant the complaints of the birds as they dashed backwards and forwards overhead. But, besides many fragments, we did



actually succeed in saving two sound eggs, both nearly ready to hatch. Several of the broken eggs were quite fresh.

On my return to Jericho, I found, on April 14th, that all the Swifts which bred in the caves of the Jebel Quarantania had already hatched, and that some of the young were fledged and had left the nest. Yet, on proceeding north the second time, and revisiting the scene of our first bird-nesting exploit by Gennesaret, the birds we had so plundered had repaired their nests and were again sitting. This was on May 7th. Having no desire to exterminate these little confederates, we did not again disturb them, but proceeded to visit a cave in which, on my former visit, I had discovered a pair of *Hirundo rufula* building. As we entered, a pair of the pretty Swallows dashed out, and we soon saw the nest at which I had seen them at work, evidently finished. It was at the further end of a low cavern, and Mr. Cochrane, going towards it, was surprised to see a Galilean Swift fly out. Putting up his hand, he caught the other Swift, a female, in the nest, and afterwards drew out two Swift's eggs, quite fresh. It seems probable that, after we had destroyed their first nest, this pair of Swifts had taken possession of that of the Swallow, close at hand, to save time and labour, and had adapted it to their own purposes by simply adding an agglutinated straw-and-feather doorway to the original construction of clay. The nest of *Hirundo rufula* is very like that of our House-Martin, but larger, and attached to the roof of caves. It has also a long wide passage or neck for entrance, which in this instance the Swifts had contracted. The displaced owners had not, however, quitted the cavern; for they had patiently built another nest for themselves near the entrance, which they were then occupying.

We observed the Galilean Swift as far north as the marshes of Huleh (Waters of Merom), but never either further north or away from the valley; though the Common Swift abounds in myriads on and about Mount Hermon, and there are large colonies of *Cypselus melba* in all parts of the country, up to the highest ranges of the Lebanon.

Far more circumscribed in its range is the *Crateropus chalybeius*, Bp., first brought to the knowledge of European orni-



thologists by the Duc de Vallombrosa. I am not aware of the existence in the Old World of any other very distinct species restricted within so limited an area. It does not even extend up the valley of the Jordan, but is strictly confined to the larger oases round the Dead Sea. It is well known to European residents as the "Hopping Thrush" of Jericho, and is evidently the "Mocking-bird" of Lynch's 'Narrative.' It is abundant in the rich oases of Ain Sultān and Ain Duk, at the north-west of the Dead Sea, in the sultry corner at the north-east, under the hills of Moab—the ancient plain of Shittim, and at the south-east end, in the luxuriant tangles of the Safieh. A few inhabit the shrubs of Engedi; and we found it once or twice at the Wady Zuweirah, at the south-west of the Dead Sea. Nowhere else did it come under our observation; and thus we find a distinct and most characteristic species limited to an area of forty miles by twelve, and not occupying more than ten square miles in the whole of that area, so far as our present knowledge extends. There is a closely affined species, *Crateropus fulvus*, Bp., in the Algerian Sahara, similarly restricted in its habitat to the dayats, or waterless oases, and the thorny shrubs which flourish there. Though a smaller bird, and very different in colour, yet in habits, nidification, and note it exactly resembles the *C. chalybeius*. This latter is one of the most lively and amusing of birds, and in many of its grotesque attitudes and motions reminds one of the Magpie. Clad in a sombre suit of "dittos," he eschews the gaudy plumage of the Smyrna Kingfisher and the Sun-bird above him, but, as he expands and erects his long tail, seems to maintain that it is elegance and grace of form, not brilliancy of colour, which ought to be appreciated. The *Crateropodes* are most sociable and noisy birds, always in small bands, though not in large flocks, hopping along the ground in long line, with jerking tail, and then, one after another, running up a bush, where they maintain a noisy conversation till the stranger's approach, when they drop down in single file and run along the ground, to repeat the same proceedings in the next tree. The nest is a large clumsy structure, placed always in the very centre of a thorn-tree, and requiring some little labour with the hatchet to



clear a way to it. It is composed entirely of strips of bark, loosely woven together, and without any other lining. One in my collection looks much like a very large nest of Savi's Warbler, from this peculiarity of the employment of but a single material. The eggs are four to six in number, dark rich green, smaller than those of the Common Thrush, and a little larger than the eggs of *Crateropus fulvus*. The parent birds continue their attention to the young for some time after they leave the nest; and I have been amused in watching the manner in which the old bird will remain at the top of a bush, scolding and screaming at the intruder till all her brood have dropped down one after the other and are running to the next tree, when she suddenly runs down and follows them in silence, to repeat the same manœuvre so long as she is followed. Their food consists principally, if not entirely, of the berries of the zizyphus or jujube, which are to be found at all seasons of the year.

The Bulbul of Palestine (*Ixus xanthopygius*, Hempr. and Ehrenb.; *Ixus vallombrosæ*, Bp.) is far more widely distributed than the *Crateropus*, though not so numerous in its special localities. It is very like the *Ixus aurigaster*, Vieill., and *Ixus capensis*, Smith; but is easily distinguished from the former by its deep-black head and throat, sharply defined from the paler brown of the back instead of melting into it, by its much lighter breast and abdomen, and by its black tail. From the latter it is distinguished by its black head, and by the lighter colour of the body above and beneath, as well as by the black tail. It is never gregarious, but scattered throughout the year in pairs, and commences its song soon after Christmas. For its music it well merits the name of Bulbul; and I never heard a finer songster, except the Nightingale, which it much resembles in power and variety of note. It is easily approached, and by no means so shy as most of the *Turdidæ*. The nest is very small and neat, placed either in the small fork of a tree or on a side branch, and covered externally to match the bark of the branch on which it rests. In character and structure it much resembles that of the Chaffinch. The eggs are three, seldom four; and while some pairs have hatched their young in March, others do not lay till towards the end of April. The egg partakes of the beautiful character of