

XIX.—*Two Days at Madeira*.

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To a naturalist, beyond any other traveller, I think, the aspect of a country he is visiting for the first time, in whatsoever part of the world it may lie, is a matter of great and never-ending interest. This interest is, of course, greatest in the case of a country whose natural productions are entirely unknown; but it would not be inconsiderable even in one, if such there be, whose fauna and flora have been already thoroughly worked out. It accordingly follows that localities of the intermediate and most numerous class, where the animals and plants are already more or less catalogued, must possess an interest inversely proportionate to the amount of facts which are on record concerning them. Such an instance of the middle class is offered by the cluster of islands known as the Madeiras, the field wherein one of the most reflective and diligent zoologists of our time has so long laboured. Even of those among us who take no special heed of entomology, there can scarcely be one who has not been charmed with the writings of Mr. Wollaston, whether from the ardent love of nature and the keen powers of observation they betray, or the masterly handling of results and the sound inductive philosophy they evince. Ornithologists may well wish that a naturalist so gifted had paid as much attention to the birds of the Madeiras as to its beetles, and this without in any way depreciating the useful information respecting the former, furnished at various times by Mr. Edward Vernon Harcourt\*. It is rather in the hope of encouraging some one who may have the opportunity of further studying Madeiran ornithology that I venture to offer the following remarks; for I myself, during my late short visit, collected no specimens, and made no personal observations, possessing any novelty.

The European character of the Madeiran fauna is well known.

\* "Notice of the Birds of Madeira," P.Z.S., 1851, pp. 141–146, reprinted in *Ann. and Mag. Nat. Hist.* 2nd ser. vol. xii. pp. 58–63; 'A Sketch of Madeira,' London, 1851, pp. 115–123; "Description of a New Species of *Regulus* from Madeira," P. Z. S., 1854, p. 153; and "Notes on the Ornithology of Madeira," *Ann. and Mag. Nat. Hist.*, 2nd ser. vol. xv. pp. 430–438.

Of the ninety-nine birds included in Mr. Vernon Harcourt's latest and most complete list ('Ann. & Mag. Nat. Hist.' June 1855, 2nd ser. vol. xv. pp. 430-438), only *one*, *Procellaria pacifica*, Aud. (if that be a good species, and rightly identified, which I think open to doubt), appears to be a straggler from the New World; but *three* are to be considered African—*Musophaga africana*, *Porphyrio alleni*, and *Procellaria mollis*\*; while *four* are given which are common and peculiar to the neighbouring Atlantic islands—*Fringilla butyracea*, *F. tintillon*, *Cypselus unicolor*, and *Columba trocaz*. To these latter may probably be added *Anthus berthelotii*, first distinguished by Dr. Bolle ('Ibis,' 1862, pp. 343-348, and 'Journ. f. Orn.' 1862, pp. 357-360) as distinct from *A. pratensis*, under which name he supposes that it figures in Mr. Vernon Harcourt's list, and making therefore *five* species which are not inhabitants of other parts of the world. There is besides *one* species which, as far as is known, is confined to Madeira only—*Regulus maderensis*†. The remaining *eighty-nine* have never been accounted otherwise than identical with European species.

It is a very true remark of that prince of observers in natural history, Gilbert White, that "that district produces the greatest variety which is the most examined." Hence I cannot but infer that the species of birds to be found in the Madeiras are much more numerous than even Mr. Vernon Harcourt's catalogue shows. I have the greater confidence in this belief from information given me by a gentleman resident in those islands. He told me he had himself, though paying no particular attention to the subject, met with several species, of which he did not know the names, not included in that list. Islands situated at a distance from other lands seem to be much resorted to by

\* This species, although figured by Mr. Gould in his 'Birds of Australia' (vol. vii. pl. 50), probably only occurs in Australian waters as a straggler. It is stated by him to be "very abundant from the 20th to the 40th degrees of S. lat." ('Ann. & Mag. Nat. Hist.' vol. xiii. p. 364). Its only known breeding-place, as far as I am aware, is on the Dezertas, whence my friend Dr. R. T. Frere has had many specimens.

† Mr. Darwin appears to have overlooked this decidedly distinct species, when he states ('Origin of Species,' p. 391) that "Madeira does not possess one peculiar bird."

birds that, in the course of their periodical migrations, have gone astray; and it only requires the constant presence of a good watchman to secure these stragglers and record their occurrence. This I believe to be the chief reason for the otherwise unaccountable richness of the ornithology of an isolated rock, like Heligoland. Now, unfortunately, the Madeiras do not possess a Herr Gätke: as far as I am able to learn, they have not a single ornithologist permanently resident and always on the look-out for a novelty. Ornithologists, and some of them good ones, have visited the island, nay, have passed perhaps many seasons there; but their powers of observation have often been limited by other causes. They have either been invalids themselves, like Dr. Heineken\*, or have been the companions of invalids. Consequently, of the character of the casual additions to the Madeiran avifauna we are quite ignorant. On the other hand, I do not suppose that the number of species really inhabiting the islands is likely to be materially increased by any future observations.

Still there is much in the Ornis of the Madeiras that merits or requires further elucidation. The facts that *Scolopax rusticula* is stationary all the year, and constantly, though in small numbers, breeds in latitude 33° S., and that *Petronia stulta*, departing from its customary habits of seclusion on the continent of Europe, is met with on trees in the centre of the town of Funchal, are such as, if they did not come to us on undoubted authority, would scarcely be credited. It is almost impossible that these should be the sole exceptional peculiarities of their kind in Madeiran ornithology.

To British oologists the Madeiras have for some years been known as the locality whence they have obtained a plentiful supply of the eggs of various Procellariidæ. These were, I believe, first imported into this country by my friend Dr. R. T. Frere; and it is very much to be regretted that we have so little information respecting the breeding-habits of the birds which produce them. Some of us who are afflicted with the mania for egg-collecting, and who are sceptical on every point pertaining

\* I have not seen the paper said to have been published by this naturalist in the 'Edinburgh Journal of Science,' 2nd ser. vol. i. p. 229, and am only acquainted with that in the 'Zoological Journal,' vol. v. pp. 70-79.

to our favourite study, have expressed doubts as to the genuineness of the specimens called by the name of *Puffinus obscurus*. These entirely want the strong musky smell which is so characteristic, as far as we know, of eggs of the whole family; and, I believe, insinuations have been occasionally uttered respecting the Bantam-hens which might be kept to lay these valuable objects. I confess to having been at one time among the disbelievers; and therefore I feel bound to record the fact, of which I was not formerly aware, that the Dezertas are uninhabited islands, and consequently that there is no domestic poultry there. At the same time I wish I could hear of some ornithologist visiting these barren rocks at the breeding-season, and putting the matter for ever at rest.

The geological relations of the existing fauna and flora of the Atlantic isles and the European continent have, as far as known, been treated by much abler hands than mine; and I can scarcely hope to add any reflections on the subject which are worth the printing. Yet hitherto the birds of these interesting groups (the only relics of an Atlantis which ever had a real existence) have been entirely neglected from this point of view. I cannot persuade myself that an examination of their ornithology would be void of result; and I would here beg to offer one remark on the peculiar distribution of the species of the genus *Fringilla*, as now restricted by most ornithologists. It contains six very well-marked forms; and the following list exhibits their breeding-range, as well as I can ascertain:—

1. *F. montifringilla*; Northern Europe and Asia.
2. *F. cælebs*; Europe and Asia, from lat. 68° N.
3. *F. spodiogena*; Algeria.
4. *F. moreleti*; Azores.
5. *F. tintillon*\*; Madeiras, Canaries, Cape de Verde Islands?
6. *F. teydea*; Canaries.

Thus showing that one-half of the known species are confined

\* One of my fellow-passengers informed me that some difference was observable between the specimens of this bird killed in the northern and southern parts of Madeira. I hope to obtain confirmation of this.



to the Atlantic Islands—a fact suggestive enough to those who are acquainted with the deductions inferred from similar cases by Professor Edward Forbes, Mr. Wollaston, and, chief of all, Mr. Darwin.

In connexion also with this topic, I would remind my readers of Mr. Wollaston's admirable remarks on the effects of isolation and exposure to a stormy atmosphere upon the insect-world \*. I fully believe that similar effects are to be traced among birds; and, if I am not mistaken, the first and most apparent effect of the latter cause is an obscuring or darkening of the plumage. We have examples of it in our own country. Few of our native birds attain the brilliant hues observable in their Continental brethren. When do we ever see an English Yellow Bunting or a Bullfinch as brightly coloured as a French or, still more, a German one? The dark back of our Pied Wagtail has led it to be described as a species distinct from the Continental *Motacilla alba*. Our Long-tailed Titmouse is equally deserving of a like recognition. I will say nothing here of the *quæstio vexata* of the difference between *Lagopus scoticus* and *L. albus*; for in that case probably other causes have come into play. If we go to the other extremity of the Palæarctic region, we find the same thing occurring. *Orites trivirgata* differs from the Continental *O. caudata*, just as our own Long-tailed Titmouse does. *Accentor rubidus* bears the same relation to the Continental specimens of *A. modularis* as our own Hedge-Sparrow. In a word, several, perhaps many, British forms are repeated (I do not say exactly, but to some degree) in Japan. If I am right, how can the fact be reconciled with the doctrine of the continuity of specific areas? Simply, I imagine, by similar conditions obtaining in localities so far apart; and the most obvious of these similar conditions I take to be the prevalence in both localities of an insular, as opposed to a continental, climate. Mr. Vernon Harcourt has already remarked that "all the birds of Madeira are darker than their European brethren;" and I can, of my own knowledge, confirm his statement in several instances. The variation here observable is very much greater generally than in the case of

\* "Variation of Species," p. 70 *et seq.*

British as distinguished from Continental forms; and Mr. Wollaston has pointed out the probability of variation being dependent on the length of the period through which isolation has lasted. It is, accordingly, well to examine the evidence afforded by geology. Professor Edward Forbes supposed that the Madeiras and other Atlantic islands were the summits of a Miocene continent\*; and Sir Charles Lyell has quite lately declared his belief that, "waiving all such claims to antiquity, it is at least certain that, since the close of the newer Pliocene period, Madeira and Porto Santo have constituted two separate islands"†; while he further asserts that the naturalist is "entitled to assume the former union, within the post-pliocene period, of all the British isles with each other and with the continent"‡. It, therefore, appears to me that the differences of variation observable between the birds of the British islands and Madeira respectively and those of the Continent of Europe are exactly in accordance with these statements.

The foregoing remarks I have made only in the hope of showing how much more remains to be done by the ornithologist in the Madeiras. I must now recount my own impressions, formed during my short stay of two days. On October 20th, 1862, I left Southampton, a passenger on board the Royal Mail steam-ship 'Tamar.' We had a rough night of it going down channel, and the following morning found ourselves at anchor in Torbay, where our captain determined to wait till the spell of bad weather was over. How it rained, and how it blew, and how those on board managed to kill time, I need not here say. The scenery of that beautiful bay, to me so familiar, was generally obscured; but every now and then one obtained a glimpse of some well-known feature, bringing back lively and pleasurable reminiscences of more than ten years since. One agreeable circumstance of our three days' detention was the recognition of a party of old friends, whose acquaintance it had been my good fortune to make several years before in far distant latitudes. A company of about thirty Pomatorhine Skuas (*Lestris*

\* Geol. Survey of the United Kingdom, vol. i. pp. 348-350, and p. 400.

† The Antiquity of Man, p. 444.

‡ Ibid. p. 277.

*pomatorhinus* \*) were in close attendance on our ship, and about as many more round each of two other craft, weather-bound, like ourselves. They were very tame, coming close alongside the quarter-deck in quest of food; and dire was the strife, and loud the contention, as one lucky bird after another seized on some choice morsel and conveyed it far astern to devour it at leisure. Late in the evening of the 23rd the wind shifted, the glass rose; and shortly before midnight we had our steam up, our anchor weighed, and we were rounding, first, Berry Head, then the Start, and then were fairly on our course for Funchal. The next few days were passed as days are commonly passed at sea. We had favourable weather, and the passengers came gradually creeping up on deck, as flies show themselves in the first sunny days of spring. Two or three Gulls—apparently Kittiwakes (*Rissa tridactyla*)—occasionally convoyed us; and the various persons on board slowly fraternized. I was gratified to find several representatives of zoological science among my companions,—Mr. William Hinton, to whom Mr. E. Vernon Harcourt was indebted for many ornithological facts, as recorded in his earliest paper; Mr. J. Y. Johnson, who has lately pursued the subject of Madeiran ichthyology with as much zeal as success; and Mr. Robert Swift, the well-known conchologist of St. Thomas, West Indies. On the 28th, about noon, we were boarded by a pretty Saxicoline bird, no doubt a South-European species, and, I should suppose, either *Saxicola stapazina* or *S. aurita*; but as it was to all appearance a young bird in the first plumage, and I am not acquainted with either form in its immature dress, I could not be certain. It was tame enough, but declined to take any notice of a few crumbs of bread (all I had to offer by way of hospitality); and it did not stay with us very long. About 5 o'clock in the evening, land was announced on the starboard bow, which our captain recognized as Porto Santo. By the time I got on deck it was shrouded in a heavy rain-cloud, and required some amount of faith to believe in its existence. Later it became much plainer, and we ran by it, then

\* I fully accept Herr Preyer's derivation of the name of this bird, commonly written "*pomarinus*," and Dr. Selater's emendation of the same ('Ibis,' 1862, p. 297).

sighted Madeira proper and the Dezertas, and finally dropped our anchor in Funchal Roads about midnight.

Next morning, looking out of the port-hole, the first thing that attracted one's attention was the intensely blue water—so blue as to appear almost opaque. The sky was clouded, and the hills above the town draped in mist. Our steamer was surrounded by gay-looking boats, stocked with live turtle, bananas, and neat wicker cages crowded with canary-birds. The moment an unwary passenger showed himself in the waist, a general chorus of tawny boatmen in indifferent English invited him to go ashore. By the kindness of one of our fellow-voyagers, horses had been ordered for my brother, my nephew, and myself. When we got on to the beach, and had satisfactorily concluded the wrangle, inevitable in such cases, as to boat-hire, the rain began. We paddled about the town for a couple of hours or more, as the idea of starting on a ride was absurd. We looked into the fruit-market; were offered a string of semiputrid Quails by a man in the street (said Quails being decidedly darker in colour than our *Coturnix dactylisonans*); visited the Convent of Santa Clara, whose inmates have an ornithological turn, since they make very pretty artificial flowers out of feathers; and finally inspected the Fort, which is defended by certain soldiers of His Most Faithful Majesty and a glacis covered with prickly pear. From the ramparts a good view of the town is obtained; but what I looked at more was some three or four couple of small dark Swifts (*Cypselus unicolor*), which were wheeling to and fro under its walls. Beautiful little birds they were, and a very good living they seemed to be making, judging from the constant rapid jerks in their flight, and the abundance of small insects that, in spite of the rain, filled the air. At length the sun shone out, and in desperation we determined no longer to defer our ride. Accordingly the horses were brought out, and off we started at a gallop, each of us being accompanied by a man (a *burriqueiro*) whose business it is to hang on by the tail. The first mile was over the stones, and up a hill so steep that, having some regard to my reputation for veracity with the readers of 'The Ibis,' I shall refrain from mentioning what I believe to be its angle of inclination. I can only say I do not think I ever rode (much less gallopped)



up a more tremendous ascent. Each side of the road was bounded by high walls, festooned and overhung with brilliant flowering plants; but every here and there one obtained a look-out. The rain came on again, more heavily than before, accompanied by a storm of wind; and we several times had to take shelter from it. At length we arrived at the Church of Nossa Senhora do Monte, upwards of 1900 feet above the sea, which forms so conspicuous an object from the bay. Here we turned sharply to the right, the weather improved, and after emerging on a comparatively open country, arrived at a spot which the fragments of broken glass showed to be a favourite picnic-ground. A beautiful prospect was before us. At our feet lay Funchal, with its heights all dwarfed; to the eastward the craggy Dezertas, the home of a thousand Petrels, looking unspeakably desolate, notwithstanding the golden glare with which their peaks were lit up; and extending far away to the south and west nothing but the calm sea, overshadowed here and there by a passing cloud. After enjoying this view for some little time, we turned our horses' heads, presently stopping at a small cottage—a *venda*—where our attendants begged a draught of wine. Horrible stuff it was, manufactured, if our tastes could be trusted, chiefly of rum and raisins. Fine Spanish chestnuts and thriving pinasters were dotted about; and passing down a rocky gully, a Buzzard (*Buteo vulgaris*) flapped slowly from the top of a half-dead tree. At length we reached the object of our ride—the Curral dos Romeiros, a secluded valley, placed among a multitude of wild ravines. A small stream ran at the bottom, and made its exit, sparkling in the light, through a narrow gap. Crossing this, we ascended the opposite side, disturbing two or three more Buzzards; and, finally, striking the Caminho do Palheiro, were soon in the town, where we re-embarked on board the steamer.

Next morning we were on shore again betimes. A kind friend, who had invited us to breakfast, met us on the Praza, and accompanied us to his own house. I took a seat in an ox-sledge, which is the form of vehicle that in Funchal represents the Hansom cab of the British metropolis. The streets are paved with small flat pebbles, set edgeways, over the well-worn surface of which these sledges glide easily, their progress being assisted,

like those at Amsterdam, by the occasional application of a greasy rag to the runners. Notwithstanding this precaution, however, so heavy is the draught up the steep hills, that the poor beasts were constantly down on their knees. At length we arrived at our friend's house, a pleasant *quinta*; and having done justice to his hospitality, and admired the view from his garden, we started on our expedition to the Curral dos Freiras. The day was beautiful. As we rode on, the strangeness of the scene struck us with increasing force at each succeeding step. On each side were fields of corn or sugar-cane, cabbages or yams, or sometimes a vineyard that had survived the ravages of the *Oidium*, studded with orange- or apple-trees, and intersected by hedge-rows of fuchsias or blackberries; while overhead were fig-trees and pines, poplars and dates, enough to confuse for ever one's notions of geographical botany\*, and rivalling the odd jumble of the classic "Groves of Blarney." We passed over a comparatively low range of hills to the north-west of the town, when a wonderfully bold headland, Cabo do Girão, upwards of two thousand feet in height, appeared on our left; then a deep ravine, the channel of the Ribeiro dos Socorridos, spanned by a viaduct of almost Roman proportions. About the streams of water, whether natural or artificial, were numerous Grey Wag-tails (*Motacilla sulphurea*), a species I had long known, on Mr. Hewitson's authority, to be found in the island. Flocks of Linnets (*Linota cannabina*), the cock birds with their breasts still crimsoned, rose twittering cheerfully from the furze-bushes and cactus-thickets by the road-side. In the air were poised dark-plumaged Kestrels (*Tinnunculus alaudarius*, var. *rufescens*, Sw.), occasionally dropping down, I presume in quest of the lively little Lizards (*Lacerta dugesi*), of which plenty showed themselves on the dry stone walls. As we gradually reached a higher level, we were favoured by a repetition of yesterday's rain. At length, passing by the Jardim da Serra, and through a wood of Spanish chestnuts, which no doubt would have been picturesque had we been able to see it, we emerged at the foot of a steep slope overgrown with coarse grass. Here we got off

\* It will, of course, be understood that nearly all the prevailing plants are introduced species.

