

III. *The Zoology of the Afghan Delimitation Commission.* By J. E. T. AITCHISON, M.D., C.I.E., F.R.S., F.L.S., Naturalist attached to the Mission, and Secretary to the Surgeon-General, Her Majesty's Forces, Bengal.

(Plates VI.–XIV. and two Maps.)

Read 3rd February, 1887.

Introduction . . . . .	By J. E. T. AITCHISON.
Mammals . . . . .	By OLDFIELD THOMAS, F.Z.S.
Birds . . . . .	By R. BOWDLER SHARPE, F.L.S., F.Z.S.
Reptiles . . . . .	By G. A. BOULENGER, F.Z.S.
Fishes . . . . .	By ALBERT GUNTHER, M.D., F.R.S.
Arachnida, Chilopoda, and Crustacea . .	By R. L. POCOCK.
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INTRODUCTION.

IF the zoological collections which I have made do not answer the expectations of all, the difficulties which I have had to encounter in my work must be taken into consideration. On being appointed to the Mission, I was called upon to undertake the general duties of a naturalist, in addition to my more special calling of botanist. Previously to this I had never collected zoological specimens, and, owing to the very short notice of departure given to me, I failed in obtaining collectors, the Afghans, in this respect, being useless. Griffith remarked, fifty years ago, "Afghans will not collect;" and I can vouch for it they are still unchanged. Luckily for the undertaking, Mr. Wood Mason, of the Calcutta Museum, sent me two native taxidermists, who although useless as collectors, were invaluable in the honest way they worked as taxidermists and, in addition, arranged, labelled, packed, and sorted my various impedimenta, so as to allow of my having more time to devote to zoology.

I am greatly indebted to Lieut. Rawlins and Capt. C. E. Yate, both of whom liberally supplied me with birds whenever they had the opportunity, and I must here thank various members of the Mission who assisted me by procuring specimens, and who may not have been personally named elsewhere in this paper.

My collections comprise 290 species belonging to 210 genera, of which 32 species have been described as new.

Of Mammals I collected 16 species belonging to 13 genera, in addition to which 7 other species, belonging to 7 genera, were seen, of which I was unable to obtain specimens. The most interesting, as being the least known of these, as I learn from Mr. Thomas,

is *Ellobius fuscicapillus*, the original specimens of which were obtained many years ago near Quetta. The next point of importance is the extension of the geographical range of *Felis tigris* in Afghanistan as far east and north as Bala-morghab, and that of the Hunting Leopard (*Felis jubata*) to the valley of the Hari-rud; while the Egyptian Fox (*Vulpes famelica*) was obtained as far north and east as Kushk-rud and Kin, in the basin of the Harut river.

Of Birds, I collected 123 species, belonging to 82 genera, besides recognizing about 14 other species, specimens of which I failed to procure. Amongst these there are only three new species, namely, a Woodpecker (*Gecinus gorii*, Hargitt), a Sparrow (*Passer yatii*, Sharpe), and a Pheasant (*Phasianus principalis*, Selater). With few exceptions all the birds observed were migratory, the exceptions being the Pheasant, Raven, Rook, Carrion-Crow, Jackdaw, Sparrow, Starling, the Sky-Lark (*Alda arvensis*), the Large-crested Lark (*Galerida cristata*), the Bokhara Lark (*Melanocorypha bimaculata*), the Wall-creeper (*Tichodroma muraria*), the Bittern (*Botaurus stellaris*), an Owl, several of the *Raptors*, the Black-breasted Sand-Grouse (*Pterocles arenarius*), and a Red-legged Partridge (*Caccabis chukar*).

As spring advances, birds are seen to arrive, following each other very rapidly, such as *Aedon familiaris*, *Sylvia*, *Saxicola*, *Motacilla*, *Lanius*, *Pastor*, *Merops*, *Coracias*, &c., &c. The various Ducks are then leaving, except the Brahminy (*Casarca rutila*), which breeds there and is resident throughout the year. The largest number of species occur in the genera *Saxicola* (8), *Lanius* (6), *Sylvia* (5), *Motacilla* (5), and *Emberiza* (4).

Of Reptiles there are 35 species, comprising Tortoise (*Testudo*), Lizards (*Lacertilia*) 21 species, of which 3 are new, Ophidians 13 species, of which 1 is new. The collections of Lizards Mr. Boulenger considers interesting, as much on account of good and numerous specimens as of the number of genera represented. Amongst the Ophidians there are fine specimens of the little-known *Naia oxiana*, heretofore only recognized from young and undeveloped specimens.

Of Batrachia there are only two species, *Rana esculenta* and *Bufo viridis*. Feeding on the latter was found a Leech (*Aulostomum gulo*).

Of Fishes I only managed to procure 7 species, belonging to 6 genera, 3 of which prove to be new. The most interesting species amongst them, owing to its geographical distribution, is *Schizothorax intermedius*, first found by Griffith in the Cabul river, an affluent of the Indus, and again by the Second Yarkand Mission in the great eastern drainage of Eastern Turkestan at Tang-i-hissar. The specimens obtained by myself were found in the tributaries of the Bala-morghab river, which drain to the north and west towards the Caspian.

The new species of *Schizothorax* described by Dr. Günther was collected in the Hari-rud and its tributaries only.

One hundred species of Insects were collected, of which 20 species have been described as new. The majority of these appear to be Arabian, North-African, Mediterranean, and Canarian types, some Central Asian (Turkestanian), very few Indian; but too few were collected to admit of generalization.

I made no collection of Butterflies (though a few were seen), owing to my not being

able to engage collectors. These only appeared in small numbers of the same species here and there when there was perfect stillness in the air. This stillness occurs so infrequently and at such irregular intervals that it would have required the entire devotion of one's time to collecting these insects alone. When the wind rose they were driven about like so many leaves, and seemed with difficulty to gain shelter. I never, to my knowledge, saw a perfect specimen, all were battered (one may say) to pieces, their wings becoming deeply irregularly fringed from continuous fractures and injuries.

Thanks to the courtesy and assistance of Professor Flower, the Director of the Natural History Museum, and to the kindness of Dr. Günther, I was enabled to exhibit the collections at the Natural History Museum, South Kensington.

I am indebted to the several officers of that Museum who have identified and described for me the species of which each has made a special study, namely:—

The Mammals, Mr. Thomas; the Birds, Mr. Sharpe; the Reptiles, Mr. Boulenger; the Fishes, Dr. Günther; the Insects, Mr. Kirby and Mr. Waterhouse; and the Spiders and Crustacea, Mr. Pocock. To Mr. G. B. Buckton, F.R.S., I am obliged for his description of a gall-insect.

I alone am responsible for the localities with the references and remarks enclosed within brackets and initialed J. E. T. A.

## MAMMALS.

By OLDFIELD THOMAS, F.Z.S.,  
Assistant in the Zoological Department, British Museum.

[Since the following notes on the Mammals of Afghanistan, brought home by Dr. Aitchison, were written, I have received a paper by Dr. J. Scully "On the Mammals and Birds collected by Captain C. E. Yate, C.S.I., of the Afghan Boundary Commission" (J. A. S. B. lvi. pt. ii. p. 68, 1887), and therefore practically a paper on an almost precisely similar set of Mammals to those here described. Thirteen species are there referred to, two being new; of these, one (*Spermophilus bactrianus*) is not represented in Dr. Aitchison's collection, while the other (*Ellobius intermedius*) is evidently the same as my No. 11.—O. T.]

### 1. FELIS TIGRIS, L.

a. Skin and skull. Karaol-khana.

This Tiger has the rich coloration of Bengal specimens, and shows no approximation to the greyer and longer-haired type found further north.

[Blanford, Eastern Persia, ii. p. 31.

Afghans call the Tiger *Báber*; Turkomans *Yúlbars*.

During the march of the Afghan Delimitation Commission from India to Khusan, the question whether we were ever likely to meet with a Tiger was often discussed,

## 13. ANTHOPHORA ATROALBA (?).

*Anthophora atroalba*, St.-Farg. Hym. ii. p. 73 (1841).

In the British Museum, from the Canaries; it is likewise recorded from S. Europe and Algeria.

*Hab.* Hari-rud and Badghis.

[This species (and, I think, *Eucera clypeata*) was found in the sheathing leaf-stalks of the *Assafœtida* plant, in a semiunconscious state.—J. E. T. A.]

## 14. ANTHOPHORA LITURATA (?).

*Anthophora liturata*, St.-Farg. Hym. ii. p. 74 (1841).

Four specimens, apparently belonging to this species, but hardly determinable, having been soaked in spirit. *A. liturata* was originally described from Oran (Algeria), but has likewise been taken in Turkestan by Fedchenko. Not previously in the collection of the British Museum.

*Hab.* Hari-rud valley and Badghis.

## 15. XYLOCOPA HELLENICA.

*Xylocopa hellenica*, Spin. Ann. Soc. Ent. France (2), i. p. 114 (1843).

Previously recorded from the Balkan Peninsula, Kirghis Steppes, Caucasus, Asia Minor, Bagdad, and Turkestan.

*Hab.* Hari-rud valley.

In addition to the above there are several other specimens of Bees in bad condition in the collection, which I cannot at present determine.

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**ORTHOPTERA.**

By W. F. KIRBY,

Assistant in the Zoological Department, British Museum.

As in the case of the *Hymenoptera*, the species of *Orthoptera* represented in this collection belong principally to distinctly Mediterranean types, and many of them were already recorded to possess a very wide range. Few or none exhibit well-marked affinities with the Indian fauna. The materials at my disposal have not been sufficient to enable me to identify all the species with positive certainty.

## BLATTIDÆ.

## 1. POLYPHAGA (?), sp.

Four species of a very broad apterous form, possibly belonging to a new genus, but which it would be unadvisable to describe at present.

*Hab.* Collected in the Badghis and Hari-rud valley.

[These were seen usually on sandy soil where camels had been resting for the night, moving about amongst the dung.—J. E. T. A.]

## MANTIDÆ.

## EREMIAPHILINÆ.

## 2. EREMIAPHILA ARABICA.

*Eremiaphila arabica*, Sauss. Mém. Genève, xxi. p. 254, pl. vii. fig. 56 (1871).

This desert genus is represented by a specimen of one of the most widely-ranging species, which extends to the frontiers of India.

*Hab.* Collected between Quetta and Khusan, along the route of march.

## MANTINÆ.

## 3. POLYSPILOTA STRIATA.

*Mantis striata*, Stoll, Spectres, pl. xi. fig. 41 (1813).

A single damaged specimen belonging to this or to a closely allied species. *M. striata* occurs throughout Tropical Africa and its islands, and is also said to have been taken in Borneo.

*Hab.* Collected in the Hari-rud valley.

## 4. HIERODULA ROBUSTA (?).

*Hierodula robusta*, Sauss. Mém. Genève, xxi. p. 73, pl. vi. fig. 53 (1871).

A single bleached specimen, agreeing with Saussure's figure in the shape of the prothorax. Saussure obtained his type from the East Indies, without specifying any exact locality.

## 5. MANTIS RELIGIOSUS.

*Gryllus (Mantis) religiosus*, Linn. Syst. Nat. i. p. 426. n. 6 (1758).

Two specimens. Common throughout S. Europe, N. Africa, and W. Asia.

## EMPUSINÆ.

## 6. (BLEPHARIS) MENDICA.

*Mantis mendica*, Fabr. Syst. Ent. p. 275. n. 7 (1775).

An immature specimen of this widely distributed species, already known to extend from the Canaries to Syria. The generic name is preoccupied in Pisces (Cuv. 1817), and should be replaced by some other.

## GRYLLIDÆ.

7. *ACHETA AFRICANA*.

*Gryllotalpa africana*, Beauv. Ins. Afr. Amér. p. 229, pl. ii. C. fig. 6 (1805).

Two specimens. The species is common throughout Tropical Africa and Asia, and even extends to Australia and New Zealand.

*Hab.* Hari-rud valley and Khorasan.

8. *GRYLLUS CAPENSIS*.

*Acheta capensis*, Fabr. Syst. Ent. p. 281. n. 6 (1775).

One immature specimen. A still more widely-ranging species than the last, as it has been taken in all quarters of the globe.

*Hab.* Between Quetta and Khusan.

## LOCUSTIDÆ.

## PHYMATINÆ.

9. *CIROTOGONUS HOMALODEMUS* (?).

*Ommexycha homalodemum*, Blanch. Ann. Soc. Ent. France, v. p. 615, pl. xxii. fig. 4 (1836).

Agrees fairly with the insect described and figured by Blanchard from Sennaar; but its identity cannot be positively affirmed without comparing specimens from that locality.

*Hab.* Between Quetta and Khusan.

10. *PYRGOMORPHA BISPINOSA*.

*Pyrgomorpha bispinosa*, Walk. Cat. Derm. Salt. Brit. Mus. iii. p. 199. n. 8 (1870).

Four specimens. Walker's type was from S. India.

*Hab.* Badghis.

## PAMPHAGINÆ.

11. *EUNAPIUS GRANOSUS*.

*Pamphagus (Eunapius) granosus*, Stål, Bihang Svensk. Akad. Handl. iv. (5) p. 31 (1876).

Four specimens in different stages of growth. Stål's type was received from Algeria.

*Hab.* Hari-rud valley and Badghis.

## ACRIDINÆ.

12. (*ACRIDIDIUM*) *ÆGYPTIUM*.

*Gryllus (Locusta) ægyptius*, Linn. Mus. Ulr. p. 138 (1764).

Common throughout the Mediterranean district.

As *Tetrix*, Latr. (*Tettix*, Fisch.), is co-typical, and therefore synonymous with *Acrydium*, Geoffr. & Fabr., *Acridium*, auctorum, will require to be renamed.

*Hab.* Hari-rud valley and Badghis.

## 13. EUPREPOCNEMIS LITTORALIS.

*Gryllus littoralis*, Ramb. Faune Ent. de l'Andalusie, ii. p. 78, pl. vii. figs. 1, 2 (1839?).

Three specimens, apparently belonging to this species. It has previously been recorded from South Spain, Egypt, Kordofan, Rhodes, and Beyrout.

*Hab.* Between Quetta and Khusan.

## 14. ACRIDA GRANDIS (?).

*Tryxalis grandis*, Klug, Symb. Phys. ii. pl. xv. fig. 1 (1830).

A bleached specimen, agreeing fairly with Klug's figure, but exhibiting no trace of blue or red colour at the base of the hind wings. It is very doubtful how far the numerous named species of this genus are really distinct. Klug described the species from Egypt.

*Hab.* Between Quetta and Khusan.

## 15. STAURONOTUS MAROCCANUS.

*Gryllus maroccanus*, Thunb. Mém. Acad. Pétersb. v. p. 244 (1815).

A common species round the Mediterranean, and one of the most abundant and destructive locusts in Cyprus.

*Hab.* Badghis.

## LOCUSTINÆ.

## 16. LOCUSTA DANICA.

*Gryllus (Locusta) danicus*, Linn. Syst. Nat. i. (2) p. 702. n. 77 (1767).

Three specimens of another widely-ranging locust, which is met with in most parts of the Old World.

*Hab.* Between Quetta and Khusan.

## 17. SPHINGONOTUS KITTARYI (?).

*Sphingonotus kittaryi*, Sauss. Mém. Soc. Phys. Genève, xxviii. (2) no. 9, p. 207 (1884).

A single discoloured specimen, probably belonging to this species. Saussure's types were received from Turkestan and the shores of the Caspian.

*Hab.* Hari-rud valley and Khorasan.

## 18. THRINCHUS CAMPANULATUS (?).

*Thrinchus campanulatus*, Fisch. Bull. Mosc. vi. p. 378 (1833); Orth. Ross. p. 257, pl. xi. fig. 1 (1846).

Two specimens, differing from the figure chiefly in the narrower band on the hind wings. Described by Fischer de Waldheim from Georgia.

*Hab.* Hari-rud valley and Khorasan, Persia.

In addition to the previously-mentioned Orthoptera, there is a species of *Caloptenus* (?) new to the British Museum (one mature and two immature specimens), and one or two other immature specimens, which I am not at present disposed to notice further.