

CRITICAL REMARKS ON THE SYSTEMATICS OF THE WHITE-BROWED SHORT-WING, *HETEROXENICUS CRURALIS CRURALIS*, (BLYTH) [AVES : TURDIDAE¹]

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(Plates I and II)

INTRODUCTION.

Stuart Baker (1924) has partly confused the two allied species of Himalayan Short-wings, viz., the White-browed Short-wing, *Heteroxenicus cruralis* (Bly.) and the Nepal Short-wing, *H. nipalensis* (Horsf. & Moore). His key on p. 16 is wrong and does not agree with the subsequent descriptions. Thus, he says in the key that in *H. nipalensis* the chin and throat are indigo blue in males and dull white in females, whereas actually, as shown below, they are dull white in both the sexes. Again, he gives the chin and throat as white in *H. cruralis* males and ashy brown in females, whereas actually these regions are dark indigo-blue in males and ashy brown in females only. His description of the plumage of *H. cruralis* is very inadequate and, in some respects, incorrect.

In the present note the points mentioned above have been clarified from the specimens of *H. cruralis* and *H. nipalensis* present in the collection of the Zoological Survey of India. In addition, the question of the type-specimen(s) of *H. cruralis*, which Sharpe (1883) claimed to be in the British Museum, London, but which is actually in the Zoological Survey of India (Indian Museum), is clarified. The question of the correct type-locality, which has been wrongly given in many recent publications, is settled. Finally the plumages of adult males and females are described, and notes added on breeding, distribution, etc.

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SYSTEMATICS.

Order PASSERIFORMES.

Family TURDIDAE.

Subfamily *Brachypteryginae*.

Genus **Heteroxenicus** Sharpe.

¹1868. *Drymochares*, Gould, *Proc. zool. Soc. London*, p. 218. Preoccupied.

1902. *Heteroxenicus*, Sharpe, *Bull. Brit. Orn. Cl.* XII, p. 55. New name for *Drymochares* Gould.

¹ Some authors place it in the family Timaliidae.

Heteroxenicus cruralis cruralis (Blyth).

(The White-browed Short-wing.)

1843. *Calliope(?) cruralis*, Blyth, *J. Asiat. Soc. Bengal* XII, p. 933. Type-locality: "Darjeeling", N. Bengal (formerly Sikkim). Type (♂) in Zoological Survey of India (Indian Museum), Calcutta.
1844. *Larvivora homochroa*, Hodgson, *Gray's Zool. Misc.*, p. 83. *Nomen nudum*. (Not seen.)
1844. *Raticilla cruralis*, Gray, *Genera Birds* I, p. 180.
- 1846¹. *Brachypteryx cruralis*, Hodgson, *Catal. Birds Nepal, presented by B. H. Hodgson to Brit. Mus.*, pl. 73, no. 589. (Not seen.)
1847. *Brachypteryx cruralis* Blyth, *J. Asiat. Soc. Bengal* XVI, p. 136.
1849. *Brachypteryx cruralis*, Blyth, *Catal. Birds Mus. Asiat. Soc. [Bengal]*, p. 178, no. 1056 A (not B).
1850. *Larvivora cruralis*, Bonaparte, *Conspect. Genera Avium*, p. 301.
1854. *Brachypteryx cruralis*, Horsfield and Moore, *Catal. Birds Mus. E. India Coy. London* I, p. 397, no. 646.
1861. *Brachypteryx rufifrons*, Blyth (ex. Jerdon and Blyth MS.), *Proc. zool. Soc. London*, p. 201. Type-locality: Sikkim. ♀
1862. *Brachypteryx cruralis*, Jerdon, *Birds of India* I, p. 495.
1862. *Brachypteryx aurifrons*, Jerdon, (ex. Jerdon and Blyth MS.), *Birds of India* I, p. 495. *Nomen nudum*. ♀. (Probably a misprint for *rufifrons* Blyth 1861.)
1863. *Brachypteryx cruralis*, Hodgson, *Catal. Mamm., Birds, Reptiles & Fishes of Nepal & Tibet presented by B. H. Hodgson to Brit. Mus.* (2nd ed.), p. 40, no. 245.
1870. *Brachypteryx cruralis*, Godwin Austen, *J. Asiat. Soc. Bengal* XXXIX, p. 102.
1872. *Brachypteryx ?cruralis*, Blanford, *J. Asiat. Soc. Bengal* XLI, p. 160.
1875. *Brachypteryx cruralis*, Hume, *Nests & Eggs Indian Birds* I, p. 219.
1875. *Brachypteryx cruralis*, Ramsay, *Ibis* (3) V, p. 352.
1875. *Brachypteryx cruralis*, Blyth, "*Catal. Mamm. & Birds Burma*", *J. Asiat. Soc. Bengal* XLIV (2), Extra Number, p. 99.
1883. *Brachypteryx cruralis*, Oates, *Handb. Birds Brit. Burma* I, p. 19.
1883. *Brachypteryx cruralis*, Hodgs. [=Bly.], Sharpe, *Catal. Birds Brit. Mus.* VII (Turdidae), p. 26.
1888. *Brachypteryx cruralis*, Hume, *Str. Feath.* XI, p. 121.
1889. *Drymochares cruralis*, Oates, *Fauna Brit. India, Birds* I, p. 188.
1892. *Drymocharis cruralis*, Selater, *Ibis* (6) IV, p. 76.
1901. *Drymochares cruralis*, Finn, *List Birds Indian Mus.*, Part I, pp. ix, xiii and 69.
1904. *Drymocharis cruralis*, Osmaston, *J. Bombay nat. Hist. Soc.* XV (3), p. 511.
1921. *Brachypteryx cruralis cruralis*, Hartert, *Vögel paläarkt. Fauna* III, Heft 17, p. 2134.
1924. *Heteroxenicus cruralis*, Stuart Baker, *Fauna Brit. India, Birds* (2nd ed.) II, p. 17.
1926. *Brachypteryx cruralis cruralis*, Rothschild, *Novit. Zool.* XXXIII, p. 271.
1930. *Heteroxenicus cruralis*, Stuart Baker, *Fauna Brit. India, Birds* (2nd ed.) VII, p. 97.
1930. *Brachypteryx cruralis*, Delacour, *Ibis* (12) VI, p. 576.
1931. *Brachypteryx cruralis*, Delacour and Jabouille, *L'Oiseaux l'Indochine Française* III, p. 100.
1933. *Heteroxenicus cruralis*, Stuart Baker, *Nidific. Birds Indian Emp.* II, p. 7.
1933. *Heteroxenicus cruralis cruralis*, Greenway, *Bull. Mus. compar. Zool. Harvard* LXXIV, p. 139.
1935. *Brachypteryx cruralis cruralis*, Hartert and Steinbacher, *Vögel paläarkt. Fauna, Ergänzungsbd.*, Heft 4, p. 331.
1938. *Heteroxenicus cruralis cruralis*, Stanford and Ticehurst, *Ibis* (14) II, p. 221.

¹ This reference is presumably the same as the following one given by Sharpe (1883, p. 26):—" *Brachypteryx cruralis*, Hodgs. *Icon. ined. in Brit. Mus. App.* pl. 73 (no. 589)" [no date]. In the *Catal. Books Manuscripts, etc. in Brit. Mus. (Nat. Hist.)*, vol. II, E-K, p. 852 (1904), there is no reference with the above title, but the references of Hodgson (1846 and 1863) given in the present paper are mentioned.

1939. *Brachypteryx cruralis*, Ticehurst, *Ibis* (14) III, pp. 349, 350.

1939. *Heteroxenicus cruralis*, Roonwal, *Rec. Ind. Mus.* XLI, p. 287.

1940. *Brachypteryx cruralis*, Smythes, *Birds Burma*, p. 88.

1940. *Brachypteryx cruralis*, Delacour and Greenway, *L' Oiseau et Rev. Fr. d' Orn.*, 1940, p. 41.

Type-specimen.—Sharpe (1883, p. 26) had overlooked Blyth (1843) and assigned the authorship of *cruralis* to Hodgson (no date, but presumably 1846, *vide* foot-note on previous page). Accordingly, he had claimed specimens *a* and *b* of the *British Museum Catalogue* as the types of "*Brachypteryx cruralis*" Hodgson (as well as of "*Larvivora homochroa*" Hodgson).

In his original description, Blyth (1843, pp. 933-934) gave the following characters of *cruralis*:— greeing with *Larvivora* (= *Calliope*) *cyana* Hodgson, being "only distinguishable from that bird, on its upper parts, by a very slight and inconspicuous character; whilst the lower, being concolorous with the former, but paling a little on the belly, affords a very striking contrast with those of *C[alliope] cyana*, wherein they are wholly bright ferruginous with the exception of the lower tail-coverts: the tarsi, also, of our present species are considerably longer as in my *Cinclidium frontale*, and of a dark colour: its wings are shorter and rounder than in other species of *Calliope*; and the tail rather shorter and weak. Colour a full deep cyaneous or dark greyish-blue, paling on the belly, and relieved by a white superciliary streak, confined to the bases of the feathers and yet showing conspicuously: bill black; and legs (in the dry specimen) brownish-dusky." The dimensions (in inches) are given as follows: Length $5\frac{1}{4}$; wing $2\frac{5}{8}$; tail $1\frac{3}{4}$; tarsus $1\frac{1}{4}$; bill (to forehead, through feathers) $\frac{5}{8}$. These dimensions work out at: W. 67; Tl. 44; Tr. 31.5; and B. 16 mm.

In his *Catalogue*, Blyth (1849, p. 178, no. 1056) lists two specimens of "*Brachypteryx cruralis*" (= *Calliope cruralis* Blyth) as follows:—

"HAB. Sikkim. A. Male. Purchased (1842). B. Female. Purchased (1849). Both from Darjiling."

Both these specimens are present in the Zoological Survey of India (Indian Museum) Collection, and are marked as "types" They bear the following labels:—

(i) "Type No. 1056. *Brachypteryx cruralis* Blyth.

a. ♂ Purchased 1842. Darjiling. A. S. B."¹

(ii) "Type No. 1056. *Brachypteryx cruralis* Blyth.

Darjiling. ♀ Purchased 1842. A. S. B."

The paper wrapper of each specimen bears the following identical inscription:—"Type No. 1056. *Brachypteryx [Drymochares] cruralis* Blyth. Type. Blyth. Sikkim. Purchased."

The question to decide is which of these two specimens (or both) should be regarded as the type(s).

Sclater (1892, p. 76), who gave a list of the type-specimens in the Indian Museum, Calcutta, mentioned *two* type-specimens, without giving any further particulars, except: "Sikkim. Purchased." Finn (1901), who gave a list of the bird-specimens in the Indian Museum, made conflicting

¹ "A.S.B." denotes "Asiatic Society of Bengal, Calcutta".

statements. On page xiii, he mentioned (following Selater) *two* type-specimens. On page 69, however, he listed four specimens (this number being confirmed in "Systematic index", page ix), including *one* type-specimen about which he wrote as follows: "1056, Sikkim. A. S. B. (TYPE OF SPECIES, Blyth,)." Since, out of the four specimens listed by Finn, three have Indian Museum Numbers only (18147, 18214, 10982), they are excluded from being Blyth's specimens; so that only *one* specimen (1056, A. S. B.) remains as the type, as against the two listed by him on an earlier page. But Finn did not state whether he meant specimen No. 1056*A* or 1056*B* of Blyth's *Catalogue*, nor did he give the sex, year etc., so that it is impossible to say which of the two specimens of Blyth he referred to.

Coming to the two original specimens of Blyth, one of them, No. 1056*A*, ♂, agrees with Blyth's (1843) original description as regards its dark greyish-blue colour (it is evident that Blyth was describing a male) and its size (see Table 1) which closely agrees with the dimensions given by Blyth. The particulars on the label of the specimen also agree with those given in Blyth's *Catalogue*.

On the other hand, the second specimen, No. 1056*B*, ♀, differs from Blyth's (1843) account in colour and size—it is a brown ♀, and is much smaller (W. 57, Tl. 39, Tr. 29, B. 15.5 mm.). In addition, the particulars given on the label differ from those given in Blyth's *Catalogue* firstly, in the absence of a complete number (only 1056 is given, instead of 1056*B*); and secondly, the year of collection is given as 1842 instead of 1849. The specimen, in fact, is not *H. cruralis* Bly. at all, but a female of *H. nipalensis* (Horsf. & Moore)!

Consequently, specimen No. 1056*A*, ♂, must be regarded as the *Holotype* of "*Calliope cruralis* Blyth" (Pl. I, Fig. 1.)

Type-locality.—Since, as already pointed out, Sharpe (1883) wrongly considered Hodgson as the author of *cruralis*, he regarded Nepal (whence Hodgson's specimens came) as the type-locality. This mistake has been repeated by several subsequent authors, even though the latter have recognised Blyth, and not Hodgson, as the author of *cruralis*. Thus, both Hartert (1921, p. 2134) and Rothschild (1926, p. 271) give Nepal as the type-locality of *cruralis* Blyth.

Blyth (1843, p. 935) clearly gave the type-locality as "Darjeeling" in N. Bengal (formerly in Sikkim), and the particulars on the label of the type-specimen bear this out.

Plumage, etc.—The following description is based on the specimens, including the holotype and a number of topotypes, present in the Zoological Survey of India.

Adult ♂ (Pl. I, Fig. 1; and Pl. II, Figs. 1 and 2).—Whole of upper surface deep indigo-blue. A partly concealed supercilium above the eye white due to the concealed feathers either partly (on outer and lower portions) or wholly white. Nares partly covered by black, rather stiff feathers. Ear-coverts indigo blue-black. A narrow greyish-white band on rump produced by the feathers having a subterminal band of that colour, the tips being darker. Wing-quills black on the outside,

with the exposed edges dusky-brown ; upper wing-coverts black. Lower surface like upper, but paling considerably on the abdomen and gradually merging at the sides into the deeper tint of the dorsum. Chin, throat and upper breast dark indigo-blue. Abdomen and the long feathers at its sides pale ashy-violet, with several of the feathers broadly but irregularly tipped whitish. Inner surface of wing-quills pale ashy-brown ; under wing-coverts ashy-brown ; axillaries indigo-blue. Tail, both above and below, deep indigo-blue like upper surface of body ; upper tail-coverts like tail ; under tail-coverts ashy-blue with white margins.

Adult ♀ (Pl. I, Fig. 2 ; and Pl. II, Figs. 3 and 4).—General colour above dark olivaceous-brown. A partly concealed supercilium above the eye golden-brown instead of white as in male¹. Lores, frontal edge of forehead, a narrow ring around the eye, and the feathers abutting on the gape and those below the front end of eye, russet-golden-brown ; this colour also present, although to a less pronounced degree, on the outer edges of the wing-quills on outside and on upper wing-coverts. Ear-coverts like back but with pale shafts. Nares partly covered by stiff feathers which are russet mixed with black. A narrow, greyish-white band on rump produced by the feathers having a subterminal band of that colour, the tips being pale brown. Outer surface of wing-quills like back but with more of brown and less of olive-green. Lower surface brownish. Chin, throat, chest and abdomen pale ashy-brown, the individual feathers with pale centres, giving the whole of the lower surface a patchy appearance. Long feathers at the sides of abdomen pale ashy-brown with a whitish subterminal band and pale-brown margin. Inner surface of wing-quills pale ashy-brown ; under wing-coverts and axillaries pale fulvous. Tail russet above, similar but more olivaceous below ; upper tail-coverts like upper surface of tail ; under tail-coverts fulvous.

Young ♂.—According to Sharpe (1883, p. 27), it is characterized as follows : “ Similar to adult female, but with a black lores and a concealed silky white spot over the eye ; underneath deeper olive.” (Also *vide* foot-note on this page). Delacour and Jabouille (1931, p. 100) stated that in Indo-China they obtained several males in juvenile plumage, and that these remain so throughout the year and breed in that plumage.

Soft parts.—Iris brown ; bill blackish ; legs olive-brown (Delacour and Jabouille, 1931). In dry specimens : Bill brownish black ; legs and feet dusky olivaceous-brown ; claws olivaceous-brown.

Measurements.—Measurements of eight Indian specimens (from Darjeeling, Manipur, etc.) are given in Tables 1 and 2. The length of the wing (W.), tail (Tl.) and tarsus (Tr.) were measured in the usual way (*vide* Roonwal², 1941, p. 289). The length of the upper bill

¹ No. 26942 (Nanglea Atrow, 14 Feb. 1936), has a white supercilium but is otherwise like the remaining females. It is labelled ♀ but might be a young ♂.

² Roonwal, M. L. 1941. *Revue Ind. Mus.* XI-III, pp. 281-360.

TABLE I.

Heteroxenicus crurali cruralis (Blyth).

The sex is given within brackets when determined by plumage alone and not by examination of the gonads. (W., Tl., Tr., length of wing, tail and tarsus respectively; B., length of bill from base; b., width of bill across middle of nares.)

Registered Number.	Locality.	Date of collection.	Collector.	Sex.	Measurements (in mm.).					Percentage of tarsus-length to wing-length. ($\frac{\text{Tr.}}{\text{W.}} \times 100$)	Percentage of tail-length to wing-length. ($\frac{\text{Tl.}}{\text{W.}} \times 100$)
					W.	Tl.	Tr.	B.	b.		
1056A (A.S.B.) (Holotype) ..	Darjeeling (N. Bengal)	1842	Purchased ..	♂	64	46	32	15	3.8	50.0	71.9
10982 (Z.S.I.)	28th June 1875 ..	W. E. Brooks. (Exchange.)	♂	71	48	33	15	4.0	46.5	67.6
18214 (Z.S.I.)	Darjeeling ..	Before 1889 ..	G. Masson ..	(♂)	68	48	31	15	4.0	45.6	70.6
18147 (Z.S.I.)	Ditto ..	Ditto ..	Ditto. ..	(♂)	70	45	32	15	4.5	45.7	64.3
26940 (Z.S.I.)	Nanglea Atrow, 63 miles W. of Imphal on Silchar Road, Manipur.	13th Feb. 1936 ..	Z.S.I. Naga Hills & Manipur Survey.	♂	71	48	32	..	4.1	45.1	67.6
24201 (Z.S.I.)	Before 1902 ..	E. C. Stuart Baker. (Purchased).	(♀)	68	47	31	15	5.1	45.6	69.1
26941 (Z.S.I.)	Nanglea Atrow, Manipur.	14th Feb. 1936 ..	Z.S.I. Naga Hills & Manipur Survey.	♀	68	47	29	15	4.1	42.6	69.1
26942 (Z.S.I.)	Ditto ..	Ditto ..	Ditto ..	♀*	65	46	30	..	4.1	46.2	70.8

*Juvenile male?—See foot-note, on previous page

(B.) was measured from the tip to the base (through the feathers) where it meets the skull ; and the width (b.) across the middle of the nares.

TABLE 2.

Heteroxenicus cruralis cruralis (Blyth).
Summary of measurements (in mm.), etc. (From Table 1.)

Sex, etc.	W.	Tl.	Tr.	B.	b.	$\frac{\text{Tr.}}{\text{W.}} \times 100$	$\frac{\text{Tl.}}{\text{W.}} \times 100$
5 ♂♂	Range ..	64-71	45-48	31-33	15	3.8-4.5	45.1-50.0
	Average ..	(68.8)	(47)	(32)	(15)	(4.1)	(46.6)
3 ♀♀	Range ..	65-68	46-47	29-31	15	4.1-5.1	42.6-46.2
	Average ..	(67)	(46.7)	(30)	(15)	(4.4)	(44.8)

The males are slightly larger than the females as regards the wing-, tail- and tarsus-lengths. The bill is equally long in both sexes, but is appreciably wider in females than in males. The percentages of tail-length and tarsus-length to wing-length are given for comparison with allied species as these ratios are of systematic importance (*vide* Ticehurst, 1939 ; and Roonwal, 1939).

Comparisons.—The following key would separate *H. cruralis* from *H. nipalensis* :—

- Chin and throat white. Size smaller.
Wing¹ 57-64 ; tail 27-39 mm. *nipalensis*.
- Chin and throat indigo-blue (adult ♂)
or pale ashy-brown (adult ♀ and juvenile² ♂).
Size larger. Wing 64-71 ; tail 45-48 mm. *cruralis*.

Distribution, etc.—The following is the known range of *H. c. cruralis* :—Himalayan region from Nepal eastward, across Sikkim, N. Bengal (Darjeeling, type-locality), Assam (including Manipur) and northern and central Burma to south Yunnan (*vide infra*) in China and in Tongking [Tonkin], “ Haut-Mékong ” and Luang Rabang in northern French Indo-China. Occurs between about 1,000 to 10,000 feet altitude above sea-level, probably even higher in the breeding season.

Some further remarks are necessary in amplification of the above statement. Stuart Baker (1924, p. 18) included some areas west of Nepal, *viz.*, the Simla Hills (Punjab) and Garhwal (United Provinces), but these inclusions seem to be without authority. In Burma *H. c. cruralis* has been recorded from north-western Burma (the Chin and

¹ Occasionally very large specimens are met with, like the female recorded by Roonwal (1939, p. 287) from Gish in the Bengal Duars which measured as follows : W. 70 Tl. 45 ; Tr. 26 ; C. (culmen) 16 mm.

² Males sometimes breed in juvenile plumage.

Kachin Hills ; and the Upper Chindwin District) and central Burma (Karenni Hills), but it does not extend, according to Smythes (1940, p. 88), to Arakan, the Shan States and further south to Tenasserim. Sharpe's (1883, p. 26) inclusion of "Tenasserim" within its range was evidently an error, but probably explicable on the basis that in those days "Tenasserim" implied not merely south Burma but also a considerable portion of central Burma.

Besides *H. c. cruralis*, two other subspecies have been described, both from southern China, as follows :—

H. c. formaster, Thayer and Bangs, *Mem. Mus. compar.-Zool Harvard* XL, no. 4, p. 169 (1912), type-locality Washan Mt., 10,000 ft., W. Szechwan.

H. c. laurentei, La Touche, *Bull. Brit. orn. Cl.* XLII, p. 29 (1921), type-locality Mengtz, S. E. Yunnan, 4,000 ft. According to Greenway (1933, p. 139) and Delacour & Greenway (1940, p. 41) it is synonymous with *H. c. formaster* ; and further, the Yunnan birds which Rothschild (1926) called *H. c. cruralis* are probably *formaster*.

It is also probable that the Chinese Short-wing, *H. sinensis*¹ Rickett and La Touche, *Bull. Brit. orn. Cl.* VI, p. 50 (1897), type-locality Kuatun, N. Fohkien, China, is a race of *H. c. cruralis* very close to, if not identical with, *H. c. formaster*.

Breeding.—*H. c. cruralis* breeds all over its range from about 5,000 to 10,000 feet altitude above sea-level. The breeding season is from early May to the end of July. Hume (1875) gave the breeding season as April and May in Nepal and Darjeeling, but from the data provided by several later observers the breeding season all over the range is from early May to the end of July.

¹The specimens from Assam recorded by Stuart Baker, *Fauna Brit. India, Birds*' 2nd ed., II, p. 20 (1924), as *H. sinensis* are really *H. cruralis*, as shown by Ticehurst, *Ibis* (14) IV, p. 724 (1940). Since these were the sole "Indian" specimens, *H. sinensis* does not belong to the Indian fauna at all.