

Systematic notes on Asian birds. 14.

Types of the Hirundinidae

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A list of the 110 names applied to Asian forms of species of swallows and martins (family Hirundinidae) is provided. This list provides information on the whereabouts of a type; where our information does not include reliable data we provide notes to explain the deficit and to stimulate others to offer additional data or sources of information.

Introduction

In our previous paper 'Systematic notes on Asian birds. 3. Types of the Eurylaimidae' (Dekker et al., 2000) we have explained the rationale for this comprehensive set of articles on the types of Asian birds. Readers are referred to that paper for a fuller introduction than the abbreviated one given here, and for more details on methodology.

Methodology

Our table shows the names applied to the taxa, with author(s) and date (these being reported in the 'References'), the acronym of a museum holding a type and, especially where this is lacking, we give the number of the comment following the

table. The arrangement of the list is by species and within that by subspecies. The sequence is that of Peters (1960).

The subspecies recognized here differ from those recognized in Peters's Check-list in two particulars. First, we include all subsequent names of which we are aware: *Pseudochelidon sirintarae* Thonglongya, 1968, *Riparia riparia dolgushini* Gavrilov & Savtchenko, 1991, and *Riparia diluta transbaykalica* Goroshko, 1993. Second, we apply the decisions made in the accompanying paper on this family (Dickinson & Dekker, 2001). The most obvious changes are the splitting of *Riparia riparia* into two species, *R. riparia* (Gmelin, 1789) and *R. diluta* (Sharpe & Wyatt, 1893), and the lumping of *Ptyonoprogne fuligula* (Lichtenstein, 1842) and *P. obsoleta* (Cabanis, 1850), but there are also changes made at subspecific level.

We stress, as before, that these decisions are preliminary in nature. Additional information and suggestions received before the 'Synopsis' may lead to modified treatment therein, see Introduction to 'Systematic notes on Asian birds' (Dickinson & Dekker, 2000).

We have again omitted 'new combinations' (wherein the generic name changed, but the specific epithet was maintained). Please advise us if you think we have missed anything that should appear in the definitive synonymies that will be in the Synopsis.

All names have been checked to the original citation and original spellings are used. In the case of unusual spellings we add the usual adjunction 'sic'.

In our reports on Asian types of the Eurylaimidae (Dekker et al., 2000), the Pittidae (Dickinson et al., 2000) and the Alaudidae (Dickinson et al., 2001), we investigated all the names that we found in synonymy, and we then went on to list each name in our type table. For every such name we explored what was known about the types. Our work on the Hirundinidae has persuaded us, in the context of certain old names, that a lesser investigation and a more limited report should suffice. When the literature reports a type locality far outside our range, the search for type specimens places a burden on us that may not be appropriate to take up. Our table now therefore sometimes includes a ¶ in place of a comment number. Like all listed names those with a ¶ have a citation in our list of references. The symbol explains that, once we know the terra typica or type locality, and after we have established the validity of the name, we have not pursued the type information because of the degree of irrelevance of the name to Asian ornithology. We accept that these exclusions marginally reduce the value of our survey, but the preparation of the planned Synopsis requires us to deliver the core of our work within a reasonable time span.

Our type-papers are intended to serve as a reference source for all these old names, by continuing to include those marked with a ¶ the citations appear in our list of References so that in the rare cases when the original information needs to be examined further it can be. A list of acronyms appears before the list of References.

Published type catalogues and data provided as part of the original description have remained our main sources, but an increasing community of interested museum curators and collection managers is providing a growing amount of help that is very welcome. In our personal searches for types, which one cannot safely describe as exhaustive, even for the few museums that we have visited, we have been privileged to be able to access and examine type material, as detailed under Acknowledgements. It should not be assumed however that we have re-examined any partic-

ular type. We have examined some where we had a particular reason to do so.

As regards the taxonomic treatments that have informed our views. The principal source has been Vaurie (1951, 1954). Although these antedate Peters (1960) they contain a wealth of details necessary to begin to understand the remaining taxonomic issues for the Asian swallows. The manuscript by Peters for the swallows, like that for the larks, was revised between the time of his death in April 1952 and publication in 1960 by Vaurie and by the volume editors (Mayr & Greenway, 1960). More information is contained in our preliminary review (Dickinson & Dekker, 2001).

Pseudochelidon sirintarae				
<i>Pseudochelidon sirintarae</i>	Thonglongya ¹	1968	ASRCT	1.
Riparia paludicola				
R. p. chinensis				
<i>Hirundo chinensis</i>	J.E. Gray	1830	Plate	2.
<i>Hirundo brevicaudata</i>	Horsfield	1840	BMNH	
<i>H[irundo]. Sinensis</i>	Jerdon	1840	Plate	2.
<i>Cotile obscurior</i>	Hume	1875	?	3.
<i>Clivicola bilkewitschi</i>	Zarudny	1910	?	4.
R. p. tantilla				
<i>Riparia chinensis tantilla</i>	Riley	1935	USNM	
Riparia riparia				
R. r. ijimae				
<i>Clivicola riparia ijimae</i>	Lönnerberg	1908	NRM	
R. r. innominata				
<i>R[iparia]. r[iparia]. innominata</i> ²	Zarudny	1916	?	4.
<i>Riparia riparia dolgushini</i>	Gavrilov & Savtchenko	1991	IZKA	
R. r. taczanowskii				
<i>Riparia riparia taczanowskii</i>	Stegmann	1925	ZISP	
<i>Riparia riparia stötzneriana</i>	Meise	1934	MTD	5.
Riparia diluta ³				
R. d. diluta				
<i>Cotyle subsocata</i>	Hodgs.? Adams	1859	?	6.
<i>Cotile diluta</i> ⁴	Sharpe & Wyatt	1893	BMNH	
<i>Riparia riparia plumipes</i>	Zarudny	1916	TASU	4.

¹ The full name is Kittī Thonglongya, in accordance with Thai custom this author was correctly addressed as Nai [= Mr] Kittī, but we believe he is properly indexed under T.

² See Loskot & Dickinson (2001), this issue.

³ The recently described *R. d. gavriloivi* Loskot, 2001 (Loskot, 2001) may well reach our area as a migrant, indeed it is perhaps more likely to do so that the nominate form which breeds further south.

⁴ The name *diluta* attaches to the breeding population of SE Kazakhstan (see Loskot & Dickinson, 2001, this issue). A description of the distinct northern race, to which none of the names here applies, is to be expected soon (Loskot, in prep.).

R. d. transbaykalica

Riparia duluta [sic] *transbaykalica* Goroshko 1993 ZMMU

R. d. tibetana

Riparia riparia tibetana Stegmann 1925 ZISP

R. d. fohkienensis

Cotile fohkienensis La Touche 1908 MCZ 7.

R. d. indica

*Riparia riparia indica*⁵ Ticehurst in Whistler 1916 BMNH

Ptyonoprogne rupestris

Hirundo rupestris Scopoli 1769 ? 8.

Hirundo rupicola Hodgson 1837 BMNH ? 9.

Hirundo inornata Jerdon 1844 BMNH

Cotile obsoleta sarda Arrigoni 1902 ? ¶

Riparia rupestris centralasica Stachanov 1933 ZISP

Ptyonoprogne fuligula**P. f. pallida**

Ptyonoprogne [sic] *Pallida* Hume 1872 BMNH

Ptyonoprogne concolor**P. c. concolor**

Hirundo concolor Sykes 1832 BMNH 10.

P. c. sintaungensis

Krimnochelidon concolor sintaungensis E.C.S. Baker 1933 BMNH

Hirundo rustica**H. r. rustica**

[*Hirundo*] *rustica* Linnaeus 1758 11.

Hirundo domestica Pallas 1811 ? ¶

Chelidon progne Forster 1817 ? ¶

Hirundo rustica orientalis Wright 1864 ? ¶

Hirundo riocouri Gurney 1866 ? ¶

Hirundo rustica sawitzkii Loudon 1904 ? 12.

Hirundo rustica loudoni Zarudny 1923 TASU

Hirundo rustica afghanica Koelz 1939 AMNH

H. r. gutturalis

Hirundo (gutturalis) Scopoli 1786 Plate. 13.

Hirundo panayana Gmelin 1789⁶ Plate. 13.

Hirundo Jewan Sykes 1832 ? 10.

Hirundo fretensis Gould 1865 BMNH

⁵ The name *Cotyle subsocata* Adams, 1859, is sometimes treated as relating to this form. For a discussion of this see Appendix 1.

⁶ We follow Apstein (1916) in dating pages 1-500 from 1788 and 501 to 1032 as 1789.

<i>Hirundo andamanensis</i>	“Tytler” Beavan	1867	?	14.
<i>Hirundo rustica ambigua</i>	Stresemann	1940	ZMB	
H. r. tytleri				
<i>Hirundo Tytleri</i>	Jerdon	1864	BMNH	
<i>Hirundo baicalensis</i>	Dybowski & Taczanowski	1884	MPHN	
H. r. saturata ⁷				
<i>Hirundo saturata</i>	‘Stejneger’ MS Ridgway	1883		
Jun. USNM				
<i>Hirundo rustica kamtschatica</i>	Dybowski	1883		
Nov.	MPHN			
<i>Hirundo borealis</i>	Dybowski & Taczanowski	1884	MPHN	
<i>Hirundo rustica mandschurica</i> ⁸	Meise	1934	MTD	
Hirundo tahitica				
H. t. domicola				
<i>Hirundo domicola</i>	Jerdon	1844	ZSI?	15.
H. t. javanica				
<i>Hirundo javanica</i>	Sparrman	1789	UUZM	
<i>Hypurolepis javanica abbotti</i>	Oberholser	1917	USNM	
<i>Hypurolepis javanica hypolampra</i>	Oberholser	1926	USNM	
<i>Hypurolepis javanica mallopega</i>	Oberholser	1926	USNM	
<i>Hirundo tahitica viridissima</i>	Meise	1929	AMNH	
<i>Hypurolepis javanica mesata</i>	Oberholser	1932	USNM	
H. t. namiyei				
<i>Chelidon namiyei</i>	Stejneger	1887	YIO	
Hirundo smithii				
H. s. filifera				
<i>Hi?[rundo] filifera</i>	Stephens	1826	Plate	16.
<i>Hirundo filicaudata</i>	Franklin	1831	?	17.
<i>Hirundo smithii bobrinskoi</i>	Stachanov	1930	ZISP	
Cecropis daurica				
C. d. daurica				
<i>Hirundo daurica</i>	Laxmann	1769	Lost?	18.
<i>L[illia]. intermedia</i>	Hume	1877	BMNH	19.
<i>L[illia]. substriolata</i>	Hume	1877	BMNH	
<i>Hirundo daurica gephyra</i>	Meise	1934	MTD	
<i>Hirundo daurica tibetana</i>	Schäfer	1937	ANSP	
C. d. japonica				
<i>Hirundo alpestris japonica</i>	Temminck & Schlegel	1844-45 ⁹	RMNH	

⁷ The description of *Cecropis rusticoides* Boie, 1844, is just its total length and the name must be treated as indeterminate. *Hirundo javanica* nec Sparrman Bonaparte, 1850, is a partial citation of the name Bonaparte used for an Australian form named *neoxena* Gould, 1843, and probably invalid.

⁸ For a view that this may warrant recognition see Dickinson & Dekker (2001), preceding article.

⁹ Peters (1960) dated this name from 1847. Holthuis & Sakai (1970) have shown that fascicle two (pp. 25-44) appeared about 14 Jul. 1845 and that plate 11 appeared with fascicle 1 and may have appeared in 1844. Past authors often attributed names from this work to Schlegel alone.

<i>Cecropis arctivitta</i>	Swinhoe	1871	BMNH	20.
C. d. nipalensis				
<i>Hirundo Nipalensis</i>	Hodgson	1837	BMNH	
C. d. erythrogygia				
<i>Hirundo erythrogygia</i>	Sykes	1832	BMNH	10.
C. d. hyperythra				
<i>Hirundo hyperythra</i> 'Layard'	Blyth	1849a	ZSI	
C. d. rufula				
<i>Hirundo rufula</i> 'Levaill.'	Temminck	1835	RMNH	
<i>L[illia]. Temmincki</i> nom. nov.	Hume	1877	RMNH	
<i>Hirundo scullii</i> or <i>H. rufula</i> b <i>scullii</i>	Seebohm	1883	?	21.
<i>Cecropis rufula ferghanensis</i>	Buturlin	1912	?	22.
Cecropis striolata				
C. s. striolata				
<i>Hirundo striolata</i>	'Temm.' Schlegel ¹⁰	1844	RMNH	
<i>Hirundo daurica rothschildiana</i>	Rensch	1931	ZMB	
<i>Hirundo striolata formosae</i>	Mayr	1941	AMNH	
C. s. mayri				
<i>Hirundo striolata mayri</i>	Hall	1953	AMNH	
<i>Hirundo daurica khasica</i>	Koelz	1954	UMMZ	
C. s. stanfordi				
<i>Hirundo striolata stanfordi</i>	Mayr	1941	AMNH	
C. s. vernayi				
<i>Hirundo daurica vernayi</i>	Kinnear	1924	BMNH	
Cecropis badia				
<i>Cecropis badius</i>	Cassin	1853	ANSP	23.
<i>C[ecropis]. archetes</i>	Hume	1877	BMNH	
Petrochelidon nigricans				
P. n. timoriensis				
<i>Petrochelidon timoriensis</i>	Sharpe	1885	BMNH	
P. n. nigricans				
<i>Hirundo nigricans</i>	Vieillot	1817	MNHN	24.
<i>Hirundo pyrrhonota australis</i>	Temminck & Schlegel	1845 ¹¹	?	25.
Names pending reassignment ¹² :				
<i>Hirundo pyrrhonota</i>	Vigors & Horsfield	1826	BMNH	
<i>Collocalia arborea</i> ¹³	Gould	1842	ANSP	
<i>Petrochelidon nigricans caleyi</i>	Mathews	1913	AMNH	26.
[<i>Petrochelidon nigricans</i>] <i>socialis</i>	Stresemann	1923	AMNH	

¹⁰ For reasons for this attribution, which differs from Peters (1960), see Mees (1971).

¹¹ Not cited in Peters (1960).

¹² Schodde & Mason (1999) have shown that *P. n. neglecta* breeds throughout mainland Australia and that the breeding of *nigricans* is limited to Tasmania. The types of names in synonymy need to be re-examined in this context and are not reassigned here.

¹³ This is the name in the text; on the plate it is called *Chelidon arborea*. The plate was issued in 1842 in part 9 (Waterhouse, 1885).

<i>Hylochelidon nigricans papua</i>	Mathews	1928	BMNH	
Petrochelidon fluvicola ¹⁴				
<i>Hirundo fluvicola</i>	Blyth	1855	Lost.	27.
<i>Lagenoplastes empusa</i>	Blyth	1866	?	28.
Petrochelidon ariel				
<i>Collocalia Ariel</i>	Gould	1843	ANSP	
<i>Petrochelidon ariel conigravi</i>	Mathews	1912	AMNH	
Delichon urbica				
D. u. urbica				
[<i>Hirundo</i>] <i>urbica</i>	Linnaeus	1758	?	11.
<i>Chelidon albigena</i>	Heuglin	1861	?	¶
<i>Hirundo urbica orientalis</i>	Ssomow	1896	?	29.
<i>Hirundo urbica vogti</i>	Kleinschmidt	1935	ZFMK	
D. u. lagopoda				
<i>Hirundo Lagopoda</i>	Pallas	1811	?	30.
<i>C[helidon]. whiteleyi</i>	Swinhoe	1863	BMNH	
D. u. meridionalis				
<i>Hirundo urbica meridionalis</i>	Hartert	1910	AMNH	
<i>Chelidon urbica alexandrovi</i>	Zarudny	1916	TASU	
Delichon dasypus				
D. d. cashmeriensis				
<i>Chelidon Cashmeriensis</i>	Gould	1858	BMNH	31.
D. d. nigrimentalis				
<i>Hirundo urbica nigrimentalis</i>	Hartert	1910	AMNH	
D. d. dasypus				
<i>Chelidon dasypus</i>	'Temm. Mus. Lugd.'			
	Bonaparte	1850 ¹⁵	RMNH	
<i>C[helidon]. blakistoni</i>	Swinhoe	1863	BMNH	
Delichon nipalensis				
D. n. nipalensis				
<i>Delichon nipalensis</i> '(Hodgs.)'	Moore in Horsfield & Moore	1854	BMNH	32.
<i>D[elichon]. Nipalensis</i>	Moore	1855	BMNH	32.
<i>Hirundo cuttingi ernstmayri</i>	Wolters	1952	BMNH	
nom. nov.				
<i>Delichon nipalensis bartletti</i>	Koelz	1952	UMMZ	
D. n. cuttingi				
<i>Delichon nipalensis cuttingi</i>	Mayr	1941	AMNH	

¶ = Not fully researched (see Introduction) but for references see "References".

¹⁴ The name *flumicola* P.L. Slater, 1867, is apparently a lapsus for this; it is also a nomen nudum. An older name that might be applicable is *H[irundo]. erythrocephala* Gmelin, 1789. This is based on "Latham [1783], Syn. II, 2, p. 571, n. 14. India." We believe this name is not preoccupied, and the fact that it is not in use suggests that it is considered insufficiently described to identify.

¹⁵ Peters (1960) dated this 1851. We follow Zimmer (1926), and others, in the view that the first 500 pages appeared in 1850.

Comments

1. Paratypes of this exceptionally rare bird are held at the AMNH, the USNM and the BMNH.

2. It is thought that no original specimen now exists and that the plate provided in Gray (1830) must serve in its place. Jerdon's name *sinensis*, an emendation, was explicitly based on the same plate. This name is preoccupied by *Hirundo sinensis* Gmelin, 1789 (p. 1021). Hartert (1892: 472 fn) considered this a species of *Cotyle* and referred to Sharpe (1885). Sharpe, in fact did not list Gmelin's name. Gmelin (1789) based the name on Sonnerat's Grand Martinet de la Chine, a vernacular name that suggests a swift not a small swallow (but swifts and swallows were then thought to be closely related and this may not be significant).

3. Hume's collection was obtained by the British Museum. Warren & Harrison (1971) do not list the type of this taxon. We have searched for this but not located it.

4. Balan (1966) reported that Zarudny named 238 new avian taxa and that 71 of these were represented by type material in the Department of Vertebrate Zoology, Tashkent State University, Uzbekistan. Some of the many others may be in the AMNH, New York or in Ashkhabad, Turkmenistan. Balan (1966) listed syntypes of *R. r. plumipes*. Loskot & Dickinson (2001) explain that although *plumipes* is, as previously understood, a synonym of *diluta*, the name *innominata* was provided for birds that differed and have recently been named *R. r. dolgushini*. As we understand it, in spite of the details of Balan's listed syntypes, Oleg Goroshko (in litt., 16 Oct. 2000) could not find a type of *R. r. plumipes* in Tashkent State University in 1992 that had, beyond doubt, been labelled by Zarudny as a type. This, of course, does not mean that the specimens found by Balan (1966) are not syntypes. However, many of the specimens he found labelled either *plumipes* or *diluta* (sensu Zarudny, 1916; see Loskot & Dickinson, 2001) were juveniles that are difficult to attribute. They may also represent more than just these two forms so that further examination seems necessary. This will also allow identification of one or more of these specimens as types of *innominata* and, depending on the number of forms represented, it may be desirable to designate an adult bird as the lectotype of *plumipes* and a separate adult lectotype of *innominata*.

5. Nine of the 13 syntypes are in Dresden. As there was a possibility that specimens of both *R. riparia* and *R. diluta* were involved (see Dickinson & Dekker, 2001), they have been re-examined. They appear to be uniform and to have the characteristics of *riparia* rather than *diluta*. The syntype in St. Petersburg, used by Russian authors for their work, is presumed to match them but direct comparison or photographic comparison is desirable to be certain.

6. No type has been traced. For a discussion see Appendix 1.

7. This is the correct original spelling, not *fokienensis* as used in Peters (1960).

8. Scopoli's name was based on a specimen in the collection of "Comitatu Tyrolensi"; no further information has yet come to hand.

9. Sharpe (1885) listed two Nepal specimens in the British Museum as types. Although these originated with Hodgson it is unclear what evidence existed to establish that these were the types. Hodgson (1837) described *H. rupicola* in the Journal of the Asiatic Society of Bengal before Blyth arrived in Calcutta, and before Blyth's arrival in 1841 it is unlikely that his specimens were deposited in the Asiatic Society's collections. BMNH accessions from Hodgson dated 1837 to 1840 would perhaps identify the "types" mentioned by Sharpe. Warren & Harrison (1971) could not trace them.

10. Although Sykes (1832) exhibited, at a meeting of the Zoological Society of London, some if not all of the novelties that he described, his collection was given to the India Museum in 1831 (Horsfield & Moore, 1854). Most of his types eventually reached the British Museum (Sharpe, 1885, 1906; Warren, 1966; Warren & Harrison, 1971).

11. Based on earlier descriptions in Fauna Svecica by Linnaeus, 1746 (*Hirundo rustica* no. 270; *Hirundo urbica* no. 271). The information listed by Lönnberg (1896) and Holm (1957) does not suggest that types now exist.

12. We do not know where Loudon's type material might be.

13. We have previously explained Scopoli's motivation for replacing Sonnerat's French names with conformist scientific ones (Dickinson et al., 2001). This name is based on Sonnerat's plate 76 (Scopoli, 1786). The subsequent names of Gmelin (1789) and of Lesson (1837) are based on the same plate. There are references in the literature to *Cecropis panaya* Lesson, 1837 (even rendered as *payana* in Sharpe, 1885). This name is both a new combination, and a lapsus, for Lesson actually used Gmelin's name *Hirundo panayana*.

14. We have not traced a type. The description suggests *gutturalis* or perhaps the nominate form. Baker (1930) accepted it as the former. Our placement of it in the synonymy of *gutturalis* is tentative. Other authors, since Baker, seem to have omitted it, perhaps believing it to be indeterminate. Type material may yet be found and we believe the name should not be forgotten.

15. Warren & Harrison (1971) listed no type. In general, Jerdon sent material both to the British Museum and to Blyth in Calcutta, some of which was passed on to the India Museum to be eventually absorbed by the British Museum. Blyth (1849b) listed a specimen from the Nilgiris received from Jerdon in 1844. Sclater (1892) did not list Jerdon as a correspondent of Blyth and seems not to have considered that there might be Jerdon type material in Calcutta.

16. Latham (1823) introduced the name "Wire-tailed Swallow", based on the drawings of Sir J. Anstruther, and *filifera* Stephens, 1826, was based on that. We use

the date employed by Baker (1930: 258) and Deignan (1963: 101), not 1825 as used by Peters (1960). It is unlikely that an original specimen still exists. Anstruther may have brought only the drawing from India. Latham's plate reproducing that drawing must be considered in place of a type. The type locality was restricted by Brooke (1974) to Kanpur, Uttar Pradesh, India.

17. Major James Franklin's collection was presented to the Zoological Society of London by the Physical Committee of the Asiatic Society of Calcutta, apparently at a time when the Asiatic Society could not maintain a collection (Sclater, 1892). The whole collection of the Zoological Society was dispersed in 1855. A comparison of the new names in Franklin (1831) with Warren (1966) and Warren & Harrison (1971) suggests that the specimens acquired by the British Museum included only one Franklin type, the holotype of *Certhia spilonota*.

18. This name is often attributed to Linnaeus, 1771 (e.g. by Peters, 1960), but see Deignan (1963: 101). Hume (1877) thought neither of these authors named it and that the name *daurica* had been introduced by Gmelin (1789), and like some earlier authors (e.g. Temminck & Schlegel, 1845) considered the earliest name to be *Hirundo alpestris* Pallas, 1776. Laxmann's description, which is comprehensive, antedates these names and is titled with the Latin diagnosis. Laxmann believed that specimens with the MS name *Hirundo Singoriensis* were to be found in St. Petersburg, which he regretted not seeing before his stay in Siberia and says he used this name on the labels of specimens he sent to St. Petersburg. On his return he discovered that the name *daurica* although unpublished had been in use for more than 30 years. He did not see the species in Dauria, where he visited the areas around Baikal, Selenga, Tschicoi, Dsida and Irkutsk, and spent the whole summer 1766. He did see it in Mt. Schlangen, Kolywanian Sawode, around the fortress Ustkamenogorskoi and in the Altai mountains, areas which he said belonged to the Singoria which was "destroyed by the Chinese some years ago". In conjunction with his introduction of the name *Hirundo daurica* his type specimen, which is depicted, appears to have been in Stockholm. "The type was here in the late 18th century but seems to have been lost before 1803." (P. Ericson, in litt., 17 Jan. 2001). The type locality has been restricted, in the context of Laxmann's name and the place name "Singora"¹⁶, by Brooke (1974) to "the Sung-hua Chiang, Heilungkiang, China near its confluence with the Amur River"; whether this restriction is correct in the light of Laxmann's words requires further research. Ustkamenogorskoi is in Eastern Kazakhstan on the Irtysh River some 80 km south of the Russia-Kazakhstan border, Kolywan' lies some 60 kms north of the border or 140 km north of Ustkamenogors. Both are near the western Altai mountains. If "Mt. Schlangen" can be identified, and proves to be near these mountains too then the restriction of the type locality is clearly incorrect.

19. It has generally been assumed that *intermedia* is a synonym of nominate *daurica* (see Seebohm, 1883; Baker, 1930), and Hume described it with an unstreaked rump

¹⁶ In view of Laxmann's comments probably also the name of a local people or tribe.

which would *seem* to fit. But Hume, at the same time, described *substriolata* as having a streaked rump and Hall (1953) has put this in the synonymy of nominate *daurica* as well (without discussing *intermedia*). We have examined the selected type specimen of *intermedia* (and a further syntype) and the holotype of *substriolata* and compared these with birds taken in the breeding season within the range. We have reached some tentative conclusions, which are discussed in the accompanying paper (Dickinson & Dekker, 2001), but we leave both names in the synonymy of nominate *daurica* pending more detailed study and a resolution of the true type locality of *daurica*.

20. Swinhoe (1871) said that his birds were breeding in Peking, a locality now included in the range of *japonica*. His name is here placed in synonymy of *japonica*, despite his insistence that the rump band was much narrower than in *japonica*. Young birds have much narrower red rumps, which apparently explains this discrepancy. Warren & Harrison (1971) did not list Swinhoe's type material, but three specimens have been located and one syntype selected (BMNH 1898.10.20.225 collected in August 1868).

21. Ticehurst (1933) discussed the original description and concluded that although a specimen in the British Museum had been thought to be the type it was from Nepal, not from Gilgit. It was from Gilgit that the type, a breeding female obtained by Scully, should have come. Ticehurst reported that Kinnear accepted that the Nepal specimen was not the type, and the Gilgit specimen had not been found.

22. Most Buturlin types are in Moscow, but this one has been sought for and is not in the ZMMU. Perhaps only about half Buturlin's collections survived the 1917-1918 revolution.

23. The citation in Peters (1960) is incorrect. Cassin's original spelling was *badius* not *badia*. Whether the original spelling should be retained requires review.

24. The *terra typica* of this was given as Nouvelle Hollande by Vieillot (1817) and corrected to Hobart by Mathews (1913). However the true provenance of the alleged types of this is in doubt; see the general account of the expedition's material by Stresemann (1951) who considered the labelling unreliable.

25. No type has been found in Leiden.

26. Given as *cayleyi* in Peters (1960). The original spelling is used here. We have not traced an emendation prior to Peters. Such a spelling would honour Neville W. Cayley, the well-known Australian ornithologist and author of "What bird is that?" and it is very possible that the author of the emendation thought this had been intended. However, the name Mathews gave probably relates to George Caley (M. LeCroy, in litt. 23 Jan. 2000).

27. Blyth's type was listed as missing by Sclater (1892).

28. The specimen that Blyth described was said to belong to Gould. There can be very little chance of this ever being found.

29. We believe that N.N. Ssomow (or von Ssomow) was Russian but we have no firm leads to where his type material might be.

30. Towards the end of his life Pallas lived in the Crimea. It is known that some specimens sent to Germany for illustration are now in the Zoological Museum, Berlin, but it is not known whether any of his types survive there.

31. The original spelling was '*Cashmeriensis*' as given here. The spelling in Peters Check-list is erroneous. The name was correctly spelled by Hartert (1910) when he described *nigrimentalis* and has also been spelled correctly by recent authors (e.g. Martens & Eck, 1995).

32. Peters (1960) ascribed this name to Horsfield & Moore (1854). Rule 50.1 of the International Code of Zoological Nomenclature, 4th edition (ICZN, 1999) includes the phrase "If a work is by more than one person but it is clear from the contents that only one of these is responsible for the name or act, then that person is the author." Moore intended that his original description should first appear in the 1854 volume of the Proceedings of the Zoological Society of London, and this is clear from his text. However, it appeared there in April 1855 (Duncan, 1937), some five months too late to come out first. There is nothing in the introduction to 'A Catalogue of Birds in the Museum of the Hon. East India Company' that states that Moore should take the sole credit for new names. Nonetheless, it is clear from the context that this was his new name and it should be credited to him. There are a number of similar cases in Horsfield & Moore (1854, 1856-1858), however in some cases the names involved did appear first in the Proceedings of the Zoological Society. There are also some new forms described without any reference to an intended prior publication in PZS (e.g. *Microtarsus olivaceus* Moore and *Criniger ochraceus* Moore). Interestingly these names have been credited to Moore alone in Peters's Check-list (Deignan, 1960). The type relates to the name as used by Moore (1854, 1855).

Summary of types of unknown whereabouts

We would specifically welcome information concerning the types of: *Cotile obscurior* Hume, 1875; *Clivicola bilkewitschi* Zarudny, 1910; *Cotyle subsoccata* Adams, 1859; *Riparia riparia innominata* Zarudny, 1916; *Hirundo rustica sawitzkii* Loudon, 1904; *Hirundo Jewan* Sykes, 1832; *Hirundo andamanensis* Beavan, 1867; *Hirundo domicola* Jerdon, 1844; *Hirundo filicaudata* Franklin, 1831; *Hirundo daurica* Laxmann, 1769; *Hirundo scullii* Seebohm, 1883; *Cecropis rufula ferghanensis* Buturlin, 1912; *Hirundo pyrrhonota australis* Temminck & Schlegel, 1845; *Lagenoplastes empusa* Blyth, 1866; *Hirundo urbica orientalis* Ssomow, 1896, and *Hirundo Lagopoda* Pallas, 1811.

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In preparing this work, mainly based at our own institutions or at The Natural History Museum, Tring, UK (ECD), one or more of us has visited the following additional museums: Abiko City (ECD 2000), Berlin (SS 1997), Moscow (ECD 2000), New York (ECD 1999), Paris (SS 1998, ECD & RD 1999) and St. Petersburg (ECD & RD 2000). At these museums we have been welcomed and assisted with work relevant to this paper by Robert Prys-Jones and Michael Walters and some of their predecessors at Tring, by Burkhard Stephan, Sylke Frahnert and the late Gottfried Mauersberger in Berlin, and by George Barrowclough, Mary LeCroy and Paul Sweet, and some of their predecessors in New York. ECD would also like to thank Pavel Tomkovich for his kindness in Moscow, and we all thank our friends and contributors. We have been further assisted with relevant material or information, on earlier visits, by K-L. Schuchmann and R. van den Elzen in Bonn, Bernd Nicolai and Rüdiger Holz in Halberstadt, Alain Hennache and Eric Pasquet in Paris, M. Robbins in Philadelphia, Helen Shapoval in St. Petersburg and Antonio Rolando and Pietro Passerin d'Entrèves in Turin.

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Acronyms

AMNH	American Museum of Natural History, New York.
ANSP	Academy of National Sciences, Philadelphia.
ASRCT	Applied Scientific Research Corporation of Thailand, Bangkok; now TISTR: Thailand Institute for Scientific and Technological Research.
BMNH	The Natural History Museum, Tring - formerly the British Museum (Natural History).
IZKA	Institute of Zoology, National Academy of Sciences, Almaty, Kazakhstan.
MCZ	Museum of Comparative Zoology, Harvard.
MNHN	Museum National d'Histoire Naturelle, Paris.
MPHN	Polish Museum of Natural History, Warsaw.
MTD	Staatliches Museum für Tierkunde Dresden.
NRM	Swedish Natural History Museum, Stockholm.
RMNH	National Museum of Natural History, Leiden - formerly Rijksmuseum van Natuurlijke Historie.
TASU	Tashkent State University, Uzbekistan.
UMMZ	University of Michigan Museum of Zoology, Ann Arbor.
USNM	United States National Museum, Washington DC.
UUZM	University of Uppsala Zoological Museum, Sweden.
YIO	Yamashina Institute for Ornithology, Abiko City, Chiba, Japan.
ZFMK	Zoologisches Forschungsinstitut und Museum A. Koenig, Bonn, Germany.
ZISP	Zoological Institute, St. Petersburg.
ZMB	Zoologisches Museum, Berlin.
ZMMU	Zoological Museum, Moscow University.
ZSI	Zoological Survey of India, Calcutta.

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¹⁷ Given as L. Taczanowski. This reflects the French spelling of the original Wladilas.

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¹⁸ Also spelled as Sarudny.

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Appendix 1

Cotyle subsoccata "Hodgs.?" Adams, 1859

The name *Hirundo subsoccata* Hodgson, 1844, is a nomen nudum. As in the case of the names given by Hodgson to unpublished pictures of skylarks such names cause problems (Dickinson et al., 2001: Appendix 1). It is our understanding that such names may become available when provided with a description, and authorship and priority attach to the describer.

It may, in this case, be worth mentioning that a specimen (BMNH 1843.1.13.181) is labelled as the type of *subsoccata* Hodgson, but as the name is a nomen nudum it is not a valid type. This is no doubt one of two such specimens mentioned by Warren & Harrison (1971). It was included in a tray of specimens reputed to be *Riparia riparia indica* (here treated as a race of *diluta*). Sharpe (1885: 106) had listed the two types as specimens of *Cotyle sinensis* (which, if valid, would be a synonym of *Riparia paludicola chinensis*). The issue here is not the identity of these specimens, which we did not pursue, but the later use of the name *subsoccata*.

A description was provided by Adams (1859) for *Cotyle subsoccata* "Hodgs.?" and the name was used by Jerdon (1863). Baker (1926) used the same name. Neither author attributed the name to Adams; Jerdon attributed it to Hodgson, and Baker to Jerdon. Nor did they use it for *Riparia paludicola*; they used it for a form of *Riparia riparia*. Ticehurst (1927: 348), noting this, wrote that when he gave this sand martin the name *indica* he "went pretty thoroughly into any possible names already available". He added "it is true that Jerdon's *subsoccata* refers to this Sand Martin but Jerdon who did not know the bird quotes what Adams said about it".

Ticehurst (1927) believed that Adams had described it well, but he did not mention the examination of a type and indeed none may survive. Certainly Sharpe (1885: 105), who gave *subsoccata* Adams in the same synonymy as *subsoccata* Hodgson, did not list one. Adams (1859) referred to finding the "bird abundant in July on the Chimouraree lake, Ladakh and during the cold months on lakes and pools among the Salt ranges of the Punjab". His description and measurements suggest that he had a specimen. But was it a July bird from Ladakh or a winter bird from Punjab? The description refers to a dirty white, and not a plain white, throat suggesting that the species will have been *diluta*. However, in Ladakh highland breeding birds might be nominate *diluta* rather than *indica*, and winter birds in the Salt ranges may have been migrants of the nominate form or of another northern form. Ticehurst's *indica* by contrast attaches to a type specimen collected on 22 March 1914, taken from a breeding colony on the Jhelum River (Pakistan). Ticehurst thought an October juvenile taken by Whistler the previous October was *diluta* (by its measurements).

Kinnear (1935) discussed the name *subsoccata* Hodgson and argued that because the name had been placed in the synonymy by Gray (1848) it must remain there. Nowadays nomina nuda are not listed in synonymies. Kinnear seems not to have taken into account the possibility that the name *subsoccata* Adams might be both valid and based on a different species.

We believe that, under current rules (ICZN, 1999), the name *subsoccata* Adams is a valid name. Adams (1859) introduced it with a description, and this appears to be the

first use of Hodgson's name with a description. It was based upon material, or possibly just a description, supplied to Sir William Jardine (Adams, 1858). One might suppose this to have come from the Punjab, except for the above statement in Adams (1859). We do not believe it to be desirable to treat the name as a senior synonym of *indica* for the reason that it may as easily have been nominate *diluta*. One could perhaps argue that it is indeterminate, and this is probably true at subspecific level. We consider the name most probably a senior synonym of nominate *diluta*. Under the terms of Article 23.9. of the International Code of Zoological Nomenclature we are able to state that the name *diluta* has been consistently used since 1893 and that the name *subsoccata* has not been used for this taxon. The name was used by Baker (1926), but misattributed and attached to the taxon breeding in the lowlands that has been called *indica* by all more recent authors, following Ticehurst (1927). Its recent use was therefore very brief. We believe there can be no merit in bringing *subsoccata* into use in these circumstances. Treating it as a nomen oblitum that does not get on the Official List of Rejected Names, as is implied by our statement in relation to Article 23.9, has the advantage that it is a reversible decision.