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Eleven new sub-species of babbler (Passeriformes: Timaliinae) from Kon Tum Province, Vietnam

by Jonathan C. Eames

Received 30 July 1999; revision received 15 September 2001

The BirdLife International Vietnam Programme, in collaboration with the Forest Inventory and Planning Institute (FIPI), recently completed a project to identify and incorporate terrestrial forest sites of international importance for biodiversity conservation within a revised system of protected areas. During spring 1996, 1998 and 1999, BirdLife and FIPI teams undertook preliminary ornithological exploration of hitherto unexplored high mountains in the Central Highlands of southern Vietnam, as part of management planning activities for the establishment of three new nature reserves, in Kon Tum, Gia Lai and Quang Nam Provinces (Fig. 1) (Le Trong Trai *et al.* 1999, Le Trong Trai *et al.* 2000, Tordoff *et al.* 2000). In 1996 and 1998, BirdLife and FIPI field activities were focused on the southerly aspect of Mt Ngoc Linh in northern Kon Tum Province. Rising to 2,598 m asl, Mt Ngoc Linh (15°04'N, 107°59'E) is the dominant landscape feature and the highest peak in the Central Highlands. In spring 1999, a BirdLife/FIPI team investigated Mt Kon Ka Kinh (14°19'N, 108°24'E), 1,748 m asl, one of the highest peaks in the massif and 95 km SE of Mt Ngoc Linh. Also in

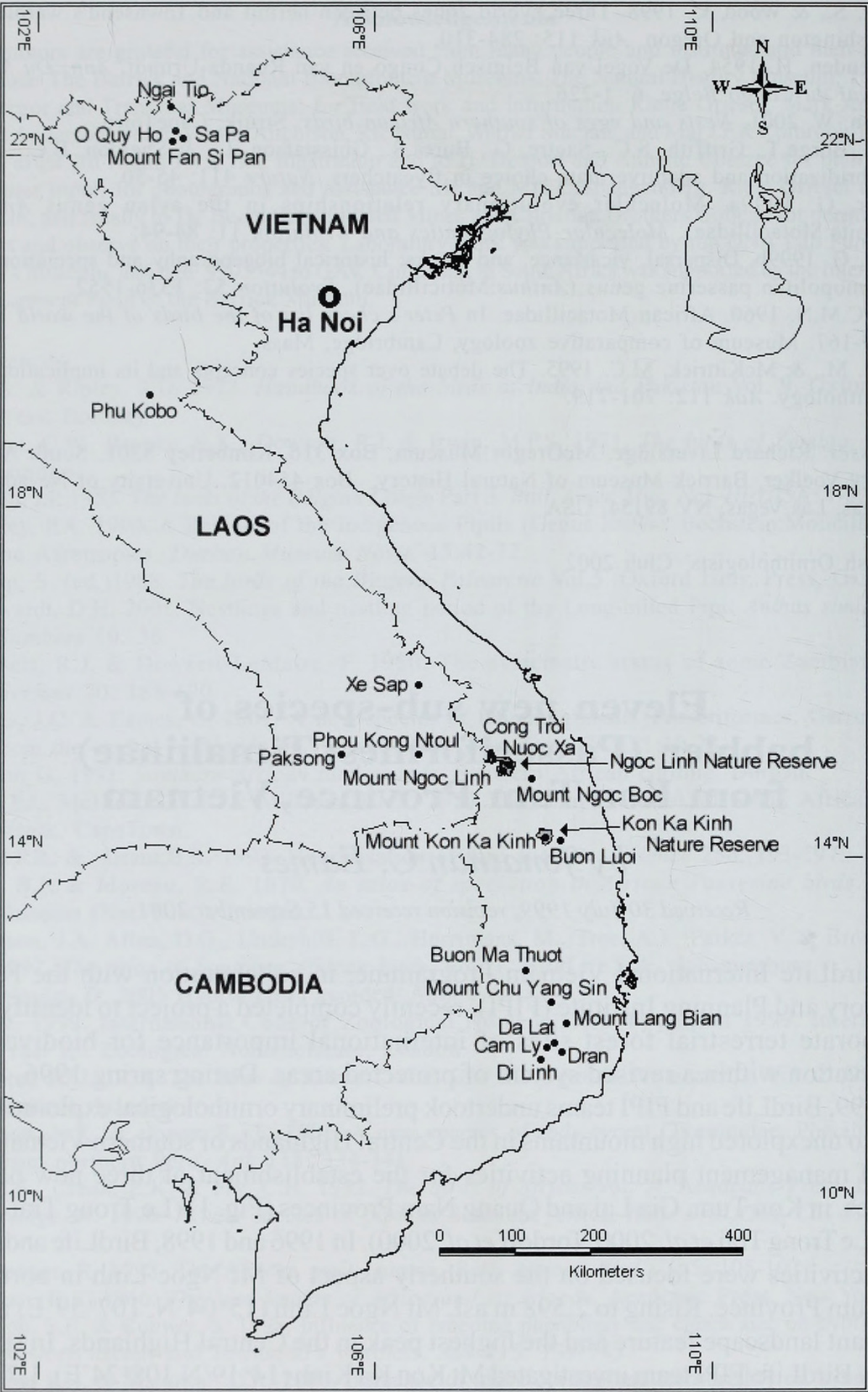


Figure 1. Localities mentioned in the text.

spring 1999, a survey team visited the northern slopes of Mt Ngoc Linh in Quang Nam Province with a view to researching a feasibility study for a nature reserve, which would be contiguous with the protected area in adjacent Kon Tum Province. In addition to BirdLife and FIPI staff, this survey team also included ornithologists from the Department of Ornithology at the American Museum of Natural History (AMNH) and colleagues from the Institute for Ecology and Biological Resources (IEBR) in Hanoi.

From the geographical isolation of these mountains, their height and lack of earlier exploration, we expected to make interesting ornithological findings. On Mt Ngoc Linh in Kon Tum Province it was immediately apparent that the area supported several undescribed taxa of babbler (Passeriformes: Timaliinae). This was not so on Mt Kon Ka Kinh, but at both localities we attempted to collect a representative sample of Timaliinae and other bird specimens we believed would most likely prove to be undescribed forms. A paper detailing these collections, including the major collection made by ornithologists from the AMNH, will be published at a later date. Arising from the BirdLife/FIPI work on Mt Ngoc Linh, my colleagues and I previously described two new species of Timaliinae, the Black-crowned Barwing *Actinodura sodangorum*, and Golden-winged Laughingthrush *Garrulax ngoclinhensis* (Eames *et al.* 1999a; Eames *et al.* 1999b). A third new species, the Chestnut-eared Laughingthrush *Garrulax konkakinensis*, was described from Mt Kon Ka Kinh (Eames & Eames 2001). Specimens collected from Mt Ngoc Linh, the nearby Cong Troi (15° 14' N, 107° 41' E), and Mt Kon Ka Kinh by Le Trong Trai (LTT), Nguyen Cu (NC) and myself (JCE), I diagnosed during visits to the bird skin collections at the Natural History Museum, Tring (BMNH), between 1996 and 2001, the AMNH in 1999 and 2001, The United States National Museum (USNM) in 2001, the Thailand Institute of Scientific and Technological Research (TISTR), Bangkok and the National Science Museum (NSMT), Patumthani, Bangkok, Thailand in 1999. I here describe 11 new subspecies of Timaliinae.

Etymology

In this paper I have elected to choose commemorative sub-species names. My principle motivation in doing so has been to honour ornithological friends and colleagues either from, or active in, Vietnam, or from amongst those who have made recent and substantial contributions to the ornithology of the Indochinese subregion. In doing so I have followed a number of self-imposed guidelines. In the case of Vietnamese and Thai names, I have chosen subspecific names based on the persons' given name, whereas, I have chosen patronyms when the name is based on an English or Russian surname. In Vietnamese and Thai it is the given name (rather than the family name) that is used (together with the appropriate pronoun) when addressing an individual. The fact that in Thai the given name is written preceding the family name (as in English and Russian), whilst in Vietnamese it follows the family name, is therefore irrelevant in this context. Using only the Vietnamese given name avoids the confusion

that would arise if the family name were used, since in Vietnamese these are relatively few and some (i.e. Nguyen) are predominant. Using only the Thai given name avoids using often very long multi-syllable family names that are common in Thailand. This additionally, and most importantly, reduces the opportunities for the subsequent future misspelling of these new subspecific names.

In each case the subspecific names have been constructed as nouns in the Latin genitive (possessive) case. Since names based on surnames (family names) are considered masculine, where relevant, the subspecific epithet for English and Russian names has been created by the addition of merely “i”. I have applied this to create the subspecies names derived from the Thai and Vietnamese male given names. In two instances this results in the epithet ending in “ii”. In one instance below the subspecific name is based on a woman’s given name that ends in an “a”. I have elected to drop one “a” so that the name may be rendered more easily.

Subspecies accounts

In terms of their presentation, the subspecific accounts follow widely accepted conventions. Each account contains a brief introduction introducing the new taxon, in which a summary of the comparative material examined is mentioned. This is followed by a brief description and diagnosis of the holotype, and paratypes where relevant. The soft-part colourations are given as noted in the field, at or soon after death and measurements are given for maxilla, wing (flattened chord), tarsus (from ankle joint to last complete scutum before the phalanges) and tail (from the tip of pygostyle to the end of longest rectrix). Detailed plumage descriptions are omitted (principally for reasons of space). The initials of the collectors and preparators concerned are given. Very brief notes on ecology and behaviour, habitat, distribution and etymology then follow. The last section presents specimen data for all specimens examined, in the form: trinomial scientific name, institution where examined, (abbreviated as above, no prefix is used for specimens retained at the BirdLife International Vietnam Programme office in Hanoi), registration number as on the specimen label, status as holotype, paratype or topotype in parentheses if relevant, date of collection, sex, if known, and collecting locality, as per the label. If omitted on the label the country of collection has been added in the text. Where precise dates of collection are unknown, month and year, or sometimes only year, are given. The species order follows Inskipp *et al.* (1996).

BLACK-HOODED LAUGHINGTHRUSH *Garrulax milleti*

A series of four, comprising two collected from Cong Troi, and one each from Mt Ngoc Linh and Mt Kon Ka Kinh, were compared with 19 specimens including the holotype, three paratypes and four topotypes of the nominate form (Robinson & Kloss 1919). The specimens from Cong Troi, Mt Ngoc Linh and Mt Kon Ka Kinh are sufficiently distinct to be named as:

Garrulax milleti sweeti, subsp. nov.

Holotype. BMNH registration number 1998.71.5, adult female collected at Cong Troi (15° 14'N, 107° 41'E), Kon Tum Province, Vietnam, c. 1,500 m asl, 23 April 1998. Collected by LTT and prepared as a standard museum skin by JCE (Figs. 2 and 3)

Paratypes. Registration number 2001.8.1, adult male also collected at Cong Troi (15° 14'N, 107° 41'E), Kon Tum Province, Vietnam, c. 1,500 m asl, 13 April 1998, and registration number 2001.8.2, adult male collected on Mt Kon Ka Kinh, Gia Lai Province, Vietnam, 1,400 m asl, 26 March 1999. Both specimens were collected and prepared as standard museum skins by JCE and are retained at the BirdLife office in Hanoi. AMNH 833160, adult male (testis 12x8 mm), light fat, collected 11 km south-west of Nuoc Xa, Mt Ngoc Linh, Quang Nam Province, Vietnam at 920 m asl on 15/03/99. AMNH 833161, adult female collected 11 km south-west of Nuoc Xa, Mt Ngoc Linh, Quang Nam Province, Vietnam, 920 m asl, 21 March 1999. Both specimens were collected and prepared as a standard museum skin by Paul Sweet (PRS). AMNH 833161 is currently deposited at IEBR in Hanoi.

Diagnosis. Very similar to the nominate form but lacks brown tones in plumage. The head and upper breast is black, rather than blackish-brown. The narrow white breast-band is pure white rather than off-white and the entire underparts are cold grey. The mantle, back, rump and wing coverts are olive-grey rather than grey-brown as in the nominate form. The remiges and rectrices are blacker and lack the brown tones found in the nominate race (Figs 2 and 3). Reference was recently made to the diagnostic features of this subspecies in Robson (2000).

Measurements (mm) and bare-part colouration. **Holotype.** Maxilla 36; tarsus 48; wing 132; tail 115; iris brown; legs blackish-brown; bill black. **Paratypes.** 2001.8.1 Maxilla 9.5; tarsus 42.5; wing 135; tail 129; iris dark brown; legs black-horn; bill black. 2001.8.2 Maxilla 31; tarsus 48; wing 129; tail 121; iris dark brown; legs grey-horn; bill black-horn. AMNH 833160 Maxilla 30; tarsus 45.5; wing 133; tail 120.5; iris reddish brown; legs bluish-grey, soles yellow; bill charcoal grey.

Ecology and behaviour. At Cong Troi and Mt Kon Ka Kinh this taxon was typically observed in large noisy flocks moving through the forest lower storey. This is a wary species which when disturbed generally retreats up into the forest canopy and then approaches the observer from this vantage point of comparative safety. At Cong Troi on 13 April 1999, I observed a flock of Black-hooded Laughingthrushes associating together with a flock of Red-tailed Laughingthrushes *Garrulax milnei*.

Habitat. At Cong Troi, Mt Ngoc Linh and on Mt Kon Ka Kinh this taxon was typically found in lower montane evergreen forest. This is a forest laughingthrush and I have never once seen it in scrub, bamboo or secondary growth at forest edge.

Distribution. This species was previously considered to be endemic to the Da Lat Plateau Endemic Bird Area (EBA) (Stattersfield *et al.* 1998). However, two specimens of this species were previously collected on 12 July 1984 and 21 April 1986 at Buon Luoi, Gia Lai Province. Measurements are: Maxilla 29, 28; tarsus 49, 50; wing 132, 134; tail 118, 117 (Stepanyan 1995). These specimens are deposited in either Moscow or St



Figure 2. Ventral view of the holotype of *Garrulax milleti sweeti* (centre) together with four specimens of *G. m. milleti* (from left to right); BMNH 1919.12.20.268 (Paratype), BMNH 1919.12.20.266 (Holotype), BMNH 1919.12.20.527 (Topotype), and BMNH 1919.12.20.267 (Topotype) (photograph by J.C. Eames).



Figure 3. Dorsal view of the holotype of *Garrulax milleti sweeti* (centre) together with four specimens of *G. m. milleti* (from left to right); BMNH 1919.12.20.268 (Paratype), BMNH 1919.12.20.266 (Holotype), BMNH 1919.12.20.527 (Topotype), and BMNH 1919.12.20.267 (Topotype) (photograph by J.C. Eames).

Petersburg and have not been subspecifically diagnosed. However, since Buon Luoi (14° 15' N, 108° 37' E) is located only 20 km from Mt Kon Ka Kinh, the Stepanyan specimens are very likely to be *G. m. sweeti*. The discovery of the species at Cong Troi in northern Kon Tum Province and on Mt Ngoc Linh in northern Quang Nam Province represents a significant northward range extension. There are additionally recent sightings of the species at Xe Sap in southern Laos and the species can no longer be considered a true Vietnamese endemic (Thewlis *et al.* 1998). However, without specimens it is not possible to know to which form the Laos birds should be assigned, or indeed whether they may represent another, as yet undescribed form. This species, and very likely *G. m. sweeti*, was recently observed at various localities about Mt Ngoc Boc in southern Kon Tum Province which is located between Mt Ngoc Linh and Mt Kon Ka Kinh (Eames *et al.* 2001).

On the basis of our current knowledge these two forms occupy disjunct ranges that are separated by unsuitable (lowland) habitat in northern Dak Lak and southern Gia Lai Provinces. They are therefore unlikely to meet and intergrade. No specimens have yet been collected from Mt Chu Yang Sin in southern Dak Lak Province within the Da Lat Plateau EBA, from where there are recent sight records (Eames 1995, Hill *et al.* 2001). Birds from Mt Chu Yang Sin, on the basis of range, should prove to be the nominate form.

Etymology. This subspecies is named in honour of Paul Sweet, Collections Manager at the Department of Ornithology at the AMNH.

Specimens examined. *G. m. milleti*: BMNH 1919.12.20.266 (Holotype) 04 April 1918, Male, Da Lat, Vietnam; BMNH 1919.92.20.527, 11 May 1918, Male, Dran, Vietnam; BMNH 1919.12.20.287 (Topotype), 02 May 1918, Female, Da Lat, Vietnam; BMNH 1919.12.20.268 (Topotype), 01 May 1918, Male, Da Lat, Vietnam; BMNH 1927.6.5.948, 10 March 1927, Male, Di Linh, Vietnam; BMNH 1927.6.5.951, 09 March 1927, Male, Di Linh, Vietnam; BMNH 1927.6.5.950, 10 March 1927, Female, Di Linh, Vietnam; BMNH 1927.6.5.949, 02 March 1927, Female, Di Linh, Vietnam; BMNH 1927.6.5.952, 04 March 1927, Male, Di Linh, Vietnam; AMNH 587174 (Topotype), 01 May 1918 Male, Da Lat, Vietnam; AMNH 587175 (Topotype), 01 May 1918, Female, Da Lat, Vietnam; AM587176, 09 March 1927, Female, Di Linh, Vietnam; USNM 278399 (Paratype), 07 April 1918, Male, Da Lat, Vietnam; USNM 278398 (Paratype), 07 April 1918, Male, Da Lat, Vietnam; USNM 278400 (Paratype), 11 May 1918, Male, Da Lat, Vietnam; USNM 360882, February 1940, Male, "along road to Ban Me Thuot 60 km, from Saigon road 36 km," Vietnam; USNM 359051, July 1939, Female, Forests of Cam Ly, Vietnam; USNM 359050, July 1939, Female, Forests of Cam Ly, Vietnam; USNM 359052, July 1939, Female, Forests of Cam Ly, Vietnam. Also examined were two specimens of the very closely related *G. strepitans ferrarius* as follows: USNM 324310, 27 December 1929, Male, Kao Kuap, Krat, Siam and USNM 324311, 27 December 1929, Male, Kao Kuap, Krat, Siam. This locality lies within the present borders of the Kingdom of Cambodia.

CORAL-BILLED SCIMITAR BABBLER *Pomatorhinus ferruginosus*

Five specimens collected at two localities, both on Mt Ngoc Linh, plus three specimens collected at Mt Kon Ka Kinh, were compared with 16 specimens including one topotype of *P. f. standfordi*, three topotypes of *P. f. albogularis*, and the holotype of *P. f. namdapha*, representing the four subspecies with the closest geographical ranges (Deignan 1964, Ripley 1980), and are sufficiently distinct to be named as:

***Pomatorhinus ferruginosus dickinsoni*, subsp. nov.**

Holotype. BMNH registration number 1998.71.7, adult male collected at c. 2,200 m asl, Mt Ngoc Linh, 7 April 1998. The holotype was collected and prepared as a standard museum skin by JCE (Fig. 4).

Paratypes. An additional specimen was collected at c. 2,000 m asl, Mt Ngoc Linh, 24 March 1998 and is currently held at the BirdLife office in Hanoi, registration number 2001.8.3. This paratype was collected and prepared as a standard museum skin by LTT. Eight further specimens of this taxon were collected by PRS and Terry Chesser (RTC), AMNH, c. 1,450 m asl, 12 km south-west of Nuoc Xa, Mt Ngoc Linh, Quang Nam Province, 20 - 28 March 1999. Three of these were prepared as standard museum skins and can be considered **Paratypes**. They are held in the AMNH. They comprise AMNH 833150 a female, collected 20 March 1999 and prepared by PRS, AMNH 833151 a female, also collected 20 March 1999 by RTC, and AMNH 833152 another female, collected on 25 March 1999 also by PRS. Three further specimens were collected on Mt Kon Ka Kinh, Gia Lai Province as follows: 2001.8.4, 26 March 1999, male; 2001.8.5, 27 March 1999, female; 2001.8.6 March or April 1999 female. These three paratypes were collected and prepared as standard museum skins by JCE and are held at the BirdLife office in Hanoi.

Diagnosis. The seven taxa currently assigned to this species have predominately orange or strongly buff underparts. The diagnostic features of *P. f. dickinsoni* are its entirely white throat, breast and centre to the belly and only slight olive-brown or buff flanks. In *P. f. orientalis* the entire underparts, except the white chin and throat, are rich buff. The upperpart colouration of *P. f. dickinsoni* is slightly more olive than *P. f. orientalis* especially on the remiges and rectrices and less rufous than *P. f. orientalis*. The underside of the rectrices in *P. f. dickinsoni* are also less rufous, more grey-brown (Fig. 4). Reference was recently made to the diagnostic features of this subspecies in Robson (2000).

Measurements (mm) and bare-part colouration. Holotype. Maxilla 26.5; tarsus 35; wing 92; tail 105; iris yellow; legs brown horn; bill scarlet-orange. **Paratypes.** 2001.8.3 Maxilla 28.5; tarsus 32; wing 88; tail unknown as broken during collection; iris colour not noted; legs brown horn; bill red; AMNH 833150 Maxilla 39.5; tarsus 35; wing 89; tail 102; iris colour pale yellow; legs; bill red; AMNH 833151 Maxilla 38.5; tarsus 34.5; wing 88; tail 102.5; iris colour pale yellow; tarsi and toes horn brown; bill red-orange.

AMNH 833152 Maxilla 38.5; tarsus 36.5; wing 92; tail 106; iris colour pale yellow; legs horn; bill red. 2001.8.4 Maxilla 28; tarsus 33; wing 93; tail 112; iris yellow; legs yellow horn; bill coral orange: 2001.8.5 Maxilla 29; tarsus 33; wing 89; tail 99; iris yellow; legs flesh-brown; bill coral orange: 2001.8.6 Maxilla 27.5; tarsus 36; wing 94; tail 110; iris yellow; legs grey flesh; bill coral red.

Ecology and behaviour. Typically forages in small flocks. Wary and quickly moves away through forest undergrowth, calling loudly when disturbed by the approach of an observer.

Habitat. Typically observed in bamboo and undergrowth in lower montane evergreen forest, especially in second growth containing bananas, at forest edge.

Distribution. In addition to the specimen records detailed here from the northern and southern slopes of Mt Ngoc Linh and Mt Kon Ka Kinh, I have observed this taxon at Cong Troi and on Mt Ngoc Boc in Kon Tum Province (Eames *et al.* 2001 and Le Trong Trai *et al.* 1999). This species, and possibly this subspecies, has also now been observed in Dong Hua Sao National Biodiversity Conservation Area on the Bolovens Plateau in southern Laos (Thewlis *et al.* 1996). A colour photograph of a Coral-billed Scimitar Babbler trapped in Nakai-Nam Theun National Biodiversity Conservation Area in Laos in 1994, matching the description of *P. f. dickinsoni*, is published in Duckworth *et al.* (1999).

Etymology. I name this taxon in honour of Edward C. Dickinson, co-author of the first comprehensive field guide to the birds of South-east Asia (*q.v.* King *et al.* 1975).

Specimens examined. *P. f. standfordi*: BMNH 1941.12.1.125 (Topotype), 1 May 1934, Female, Kambaili near Myitkyina, Burma; BMNH 1939.12.8, 8 January 1939, Female, Htingnan, Upper Burma; BMNH 1939.12.8.142, 20 August 1938, Male, Nam Tamai Valley, Upper Burma; BMNH 1939.12.8.141, 29 August 1938, Female, Nam Tamai, Upper Burma. *P. f. albogularis*: BMNH 1924.12.22.19, 3 January 1924, Female, Toak Plateau, Tenasserim, Burma; BMNH 86.10.1.3572, 10 April 1878, Male, Mwalabo, Tavoy District, Burma; BMNH 86.10.1.3570, 3 February 1877 (Topotype), Male, Mooleyit Range, Burma; BMNH 86.10.1.3571, 31 January 1877 (Topotype), Male, Mooleyit Range, Burma. *P. f. albogularis (mariae)*: BMNH 1948.30.1966, 14 April 1940, Male, Nattaung, Karenni District, Burma; BMNH 1948.29.1965 (Topotype), 3 November 1939, Female, Tahndaung, Toungoo District, Burma; BMNH 88.4.20.725, 16 April 1875, Female, Karen Hills, Burma; TISTR 53-2495, 28/10/65, Female, Doi Pha Hom Pok, Thailand; TISTR 53-1389, 16 November 1965, Male, Doi Pha Hom Pok, Thailand. *P. f. orientalis*: BMNH 1930.7.16.175, 15 November 1929, Male, Sa Pa, Vietnam; BMNH 1930.7.16.176, 15 November 1929, Female, Sa Pa. *P. f. namdapha*: USNM 583153 (Holotype), 22 March 1979, Male, Mi Camp East of Miao, Nos Dihing River Road, Arunachal Pradesh, India. Details of the three dark orange-breasted races (*P. f. ferruginosus*, *P. f. formosus*, and *P. f. phayrei*) examined are not included here.



Figure 4. Ventral view of the holotype of *Pomatorhinus ferruginosus dickinsoni* (centre) together with (from left to right) *P. f. orientalis* BMNH 1930.7.16.175 and BMNH 1930.7.16.176, *P. f. standfordi* BMNH 1941.12.1.125 (Topotype) and *P. f. albogularis* BMNH 86.10.1.3570 (Topotype) (photograph by J.C. Eames).



Figure 5. Ventral view of the holotype of *Cutia nipalensis hoae* (centre) together with (from left to right) *C. n. legalleni* BMNH 1919.12.20.333 (Paratype) and BMNH 1919.12.20.530 (Topotype), and *C. n. melanchima* BMNH 1900.12.20.430 and BMNH 1903.12.24.410 (photograph by J.C. Eames).

CUTIA *Cutia nipalensis*

Three males collected on Mt Ngoc Linh were compared with 31 male specimens including two paratypes and 11 topotypes of *C. n. legalleni*, and 20 specimens of *C. n. melanchima*, which have the closest geographical ranges (Deignan 1947 and Deignan 1964). The series of three differed sufficiently to be named as:

***Cutia nipalensis hoae*, subsp. nov.**

Holotype. BMNH registration number 1998.71.8, adult male collected at c. 2,200 m asl, Mt Ngoc Linh, 1 April 1998 by LTT and prepared as a standard museum skin by JCE (Fig. 5).

Paratypes. Two additional males were collected at c. 2,300 m asl, Mt Ngoc Linh, 7 April 1998 and are both deposited at the BirdLife office in Hanoi, registration numbers 2001.8.7 and 2001.8.8. Both specimens were collected and prepared as standard museum skins by LTT.

Diagnosis. *Cutia nipalensis hoae* is intermediate between *C. n. melanchima* and *C. n. legalleni*, and is closer to the latter form but has very distinctive and uniquely patterned underparts. *C. n. hoae* differs from *C. n. melanchima* and *C. n. legalleni* in the following respects: the colour of the mantle, back and upper-tail coverts of *C. n. hoae* is very similar to *C. n. melanchima*, being paler and more orange in these two forms than the deeper chestnut of *C. n. legalleni*. The scapulars in *C. n. hoae* are dark grey with olive tips. In *C. n. melanchima* however, the scapulars are olive with traces of chestnut-orange and in *C. n. legalleni*, the scapulars are browner with dark brown centres. In *C. n. hoae* the chin, throat and centres to the breast and belly are white. The sides of the breast and flanks are white, finely barred (vermiculated) very dark brown or black. In *C. n. melanchima* the chin, throat and breast are white, whilst the black barring on the underparts is much broader but is confined to the flanks, the ground colour of which are pale buff, whilst the centre of the belly and breast varies from off-white to greyish white. The barring on the underparts of *C. n. legalleni* covers the entire underparts, including the throat and centre of the breast and belly. Underpart barring in *C. n. legalleni* is broader than in *C. n. hoae* but very much narrower in both these forms than on *C. n. melanchima*. In the diagnosis of this new taxon specimens of *C. n. melanchima* were examined from Thailand and various localities in Burma, including Mt Victoria. E. C. Dickinson (*in litt.* 1999) informed me that birds from this latter locality are atypical, although this was not borne out by direct observation by me at this site in January 2002 and comparison of eight specimens from this locality with birds from elsewhere in Burma and Thailand revealed no obvious differences. Although *C. n. melanchima* has a large geographical range the underpart pattern was consistent in all 14 specimens examined. Specimens were not examined from north-west Vietnam. Reference was recently made to the diagnostic features of this new subspecies in Robson (2000).

Measurements (mm) and bare-part colouration. Holotype. Maxilla 24; tarsus 28; tail 63; wing 94; bill black horn, but gunmetal at base of lower mandible; legs mustard

yellow; iris dark brown. **Paratypes.** Specimen number 2001.8.7: Maxilla 25; tarsus 27.5; tail 70; wing 91; bill black; legs yellow; iris black. Specimen Number 2001.8.8: Maxilla 25.5; tarsus 30; tail 64.5; wing 91; bill black; legs yellow; iris black.

Ecology and behaviour. The holotype was singing from the lower canopy immediately prior to its collection.

Habitat. Upper montane evergreen forest above 2,200 m asl.

Distribution. This taxon is currently known only from Mt Ngoc Linh, Kon Tum Province, Vietnam. However, a pair of *Cutias* was also observed on Mt Kon Ka Kinh and the female collected (Le Trong Trai *et al.* 2000). The subspecific diagnosis of this female specimen can only be completed once females have been collected from Mt Ngoc Linh; however the underpart pattern strongly resembles *C. n. hoae*.

Etymology. I name this taxon in honour of Ms Dinh Thi Hoa who was present at the collection of the holotype.

Specimens examined. *C. n. melanchima*: BMNH 95.7.14.2365, January 1895, male, Daphla, Burma; BMNH 1903.12.28.57, undated, male, Southern Shan States, Burma; BMNH 1941.12.1.390, 13 May 1934, male, Kambaiti, Myitkyina, Burma; BMNH 1903.12.24.410, undated, male, Southern Shan States, Burma; BMNH 94.7.3.40, March 1894, male, Byingyu, Shan States, Burma; BMNH 1903.12.24.56, undated, male, Loi Maw, Southern Shan States, Burma; BMNH 1900.12.20.430, undated, male, Southern Shan States, Burma; BMNH 1905.9.10.384, 1904, male, Mt Victoria, Chin Hills, Burma; BMNH 1905.9.10.386; 1904, male, Mt Victoria, Chin Hills, Burma; BMNH 1905.9.10.385, 1904, male, Mt Victoria, Chin Hills, Burma; USNM 330608, 01 May 1931, male, Pang Me Ton (Doi Nang Ka), Thailand; USNM 534951, 04 November 1965, male, Doi Pha Hom Pok, Thailand; USNM 330609, 06 November 1930, male, Doi Nang Ka, Thailand; USNM 534952, 04 November 1965, male on plumage (label says female), Doi Pha Hom Pok, Thailand. *C. n. legalleni*: BMNH 1928.6.26.1483, 20 March 1927, male, Di Linh, Vietnam; BMNH 1928.6.26.1482, 20 March 1927, male, Di Linh, Vietnam; BMNH 1928.6.26.1401 (Topotype), 30 July 1927, male, Da Lat, Vietnam; BMNH 1919.12.20.333 (Paratype), 01 May 1918, male, Da Lat, Vietnam; BMNH 1919.12.20.530 (Topotype), 04 May 1918, male, Da Lat, Vietnam; BMNH 1927.6.5.1052, 13 March 1927, male, Di Linh, Vietnam; USNM 278470 (Paratype), 04 May 1918, male, Da Lat, Vietnam; USNM 359090 (Topotype), June 1939, male, Langbian Peaks, Vietnam; USNM 359088 (Topotype), June 1939, male, Langbian Peaks, Vietnam; USNM 359081 (Topotype), June 1939, male, Langbian Peaks, Vietnam; USNM 359089 (Topotype), June 1939, male, Langbian Peaks, Vietnam; USNM 359080 (Topotype), June 1939, male, Langbian Peaks, Vietnam; USNM 359087 (Topotype), June 1939, male, Langbian Peaks, Vietnam; USNM 475765 (Topotype), 22 May 1961, male, Mt Lang Bian, Vietnam; USNM 475766 (Topotype), 29 May 1961, male, Mt Lang Bian, Vietnam; USNM 475769, 11 June 1961, male, Da Lat 6 km s, Vietnam; USNM 475767 (Topotype), 29 May 1961, male, Mt Lang Bian, Vietnam. Specimens of *C. n. nipalensis* from Nepal, Bhutan and Darjeeling and *C. n. cervinocrissa* from Selangor, Malaysia in the BMNH collection were also examined but are not detailed here.

CHESTNUT-TAILED MINLA *Minla strigula*

The two specimens collected from Mt Ngoc Linh possess a striking head pattern and thus differ markedly from 28 specimens examined, including two topotypes of *M. s. yunnanensis* and three topotypes of *M. s. castanicauda*, which are the two subspecies with the closest geographical ranges (Hume 1877, Rothschild 1921, Deignan 1964), and I thus propose the name:

***Minla strigula traii*, subsp. nov.**

Holotype. BMNH registration number 1998.71.13 adult female collected at c. 2,300 m asl, Mt Ngoc Linh, 5 April 1998 by LTT and prepared as a standard museum skin by JCE (Figs. 6 and 7).

Paratype. An additional specimen was collected at c. 2,350 m asl on Mt Ngoc Linh, 29 March 1998, and is held at the BirdLife office in Hanoi, registration number 2001.8.9. The paratype was collected and prepared as a standard museum skin by LTT.

Diagnosis. The olive-brown mantle of *M. s. traii* more closely approaches that of *M. s. castanicauda* from Thailand and Burma than the more chestnut mantle of *M. s. yunnanensis* from north-west Vietnam and China. It should be noted however, that whilst the back, rump and upper tail coverts of *M. s. yunnanensis* were described as very strongly marked with olive-yellow, when worn these parts are dark grey only slightly tinged with olive (Rothschild 1921), all the specimens I examined showed olive-chestnut upperparts rather than olive-yellow or dark grey, tinged olive. In *M. s. traii*, the basal half of the rectrices are chestnut-brown, as in *M. s. yunnanensis*, rather than the orange-brown of *M. s. castanicauda*. Comparison of the underpart colouration is difficult because of the tendency of the yellow pigment to fade. However, the underpart colouration of *M. s. traii* is bright canary yellow, grading to slight olive tones on the flanks. All skins examined of *M. s. castanicauda* and *M. s. yunnanensis* had dirty olive-grey underparts but *M. s. yunnanensis* showed more traces of yellow. The chin and throat feathers of *M. s. traii* are yellow, narrowly fringed with black, which is more conspicuous on the sides of the throat. This is in particular contrast to both *M. s. yunnanensis* and *M. s. castanicauda* which, at least in all specimens examined, have white or yellow-white chins and throats with feathers more broadly tipped black. In both these latter forms, the black extends across the entire throat. In *M. s. yunnanensis* and *M. s. castanicauda* the lores and ear-coverts are grey-olive with pale central shaft streaks (sometimes yellowish) and a black feather tip. The lores are much duskier in *M. s. castanicauda* than in *M. s. yunnanensis*. However, in *M. s. traii* the lores are off-white and there is a broad off-white line extending from the gape, beneath the eye, to behind the ear-coverts that contrasts with its broad black malar stripe, which becomes much broader on the cheek. This broad off-white line and solid black malar stripe are absent in both *M. s. castanicauda* than in *M. s. yunnanensis* (Figs. 6 and 7). The distinctive head pattern of this subspecies has recently been illustrated in comparison with *M. s. castanicauda* (Robson 2000).



Figure 6. Ventral view of the holotype of *Minla strigula traii* (centre) together with (from left to right) *M. s. yunnanensis* BMNH 1930.7.16.303 and BMNH 1930.7.16.304, and *M. s. castanicauda* BMNH 86.10.1.6789 (Topotype) and BMNH 86.10.1.6788 (Topotype) (photograph by J.C. Eames).



Figure 7. Profile view of the holotype of *Minla strigula traii* (centre) together with (from left to right) *M. s. yunnanensis* BMNH 1930.7.16.303 and BMNH 1930.7.16.304, and *M. s. castanicauda* BMNH 86.10.1.6789 (Topotype) and BMNH 86.10.1.6788 (Topotype) (photograph by J.C. Eames).

Measurements (mm) and bare-part colouration. Holotype. Maxilla 16; tarsus 28; tail 78; wing 74; bill black; iris dark brown; legs dark flesh. **Paratype.** Maxilla 17; tarsus 28; tail 75.5; wing 72; bill black; iris brown; legs dark flesh.

Ecology and behaviour. Only observed in the forest canopy near the summit of Mt Ngoc Linh.

Habitat. Upper montane evergreen forest above c. 2,300 m asl.

Distribution. Currently known only from Mt Ngoc Linh, Kon Tum Province, Vietnam.

Etymology. I name this taxon in honour of my colleague Le Trong Trai, who collected both the holotype and the paratype. Le Trong Trai is co-author of *Chim Viet Nam* (Nguyen Cu *et al.* 2000).

Specimens examined. *M. s. yunnanensis*: BMNH 1930.7.16.305, 07 December 1929, female, Fan Si Pan, Vietnam; BMNH 1930.7.16.307, 21 November 1929, female, O Quy Ho, Vietnam; BMNH 1930.7.16.301, 11 October 1929, male, Fan Si Pan, Vietnam; BMNH 1930.7.16.302, 13 December 1929, male, Fan Si Pan, Vietnam; BMNH 1930.7.16.306, 27 November 1929, unsexed, O Quy Ho, Vietnam; BMNH 1930.7.16.303, 14 December 1929, female, Fan Si Pan, Vietnam; BMNH 1930.7.16.304, 14 December 1929, male, Fan Si Pan, Vietnam; BMNH 1930.7.16.300, 1 March 1929, male, Fan Si Pan, Vietnam; USNM 296448 (Topotype), 21 April 1923, male, Li Kiang Mtains, Yunnan, China; USNM 296444 (Topotype), August 1923, male, Li Kiang Mtains, Yunnan, China; USNM 314129, October 1923, male, Ndamucho, Yunnan, China; USNM 390381, 1 May 1947, male, Dreyi, Mishmi Hills, Assam, India; USNM 296457, November 1923, male, Mtains of Hofuping, Mekong Valley, China. *M. s. castanicauda*: BMNH 86.10.1.6787 (Topotype), 31 January 1877, male, Moolayit, Burma; BMNH 86.10.1.6789 (Topotype), 19 February 1977, male, Moolayit, Burma; BMNH 86.10.1.6788 (Topotype), 31 January 1977, male, Moolayit, Burma; BMNH 88.4.20.1210, 13 April 1977, female, Simborg (Moolai), Burma; USNM 534454, 04 November 1964, male, Doi Angka, Thailand; USNM 534972, 2 November 1965, male, Doi Pho Hom Pok, Thailand; USNM 534973, 13 November 1965, male, Doi Pho Hom Pok, Thailand; USNM 534974, 22 November 1964, female, Doi Inthanon, Thailand; USNM 534975, 28 November 1964, male, Doi Inthanon, Thailand; TISTR 53-1423, 21 October 1965, male, Doi Pha Hom Pok, Thailand; TISTR 53-2582, 1 February 1971, male, Doi Inthanon, Thailand; NRST 53-2585, 2 February 1971, female, Doi Inthanon, Chom Thong, Thailand; TISTR 53-2583, 1 February 1971, female, Doi Inthanon, Chom Thong, Thailand; NRST 53-2586, 5 February 1971, female, Doi Inthanon, Chom Thong, Thailand; NRST 53-2586, 5 February 1971, female, Doi Inthanon, Chom Thong, Thailand.

GOLDEN-BREASTED FULVETTA *Alcippe chrysotis*

Two specimens collected from Mt Ngoc Linh compared with 18 specimens, including three topotypes of *A. c. amoena* and two of *A. c. forresti*, the two subspecies with the closest geographical ranges (Deignan 1964, Rothschild 1926, Stanford and Mayr 1941), were sufficiently distinct to be named:

***Alcippe chrysotis robsoni*, subsp. nov.**

Holotype. BMNH registration number 1998.71.15, age and sex undetermined, collected at c. 1,900 m asl, Mt Ngoc Linh, 20 March 1998 by LTT and prepared as a standard museum skin by JCE (Fig. 8).

Paratype. An additional specimen was collected on Mt Ngoc Linh, 5 April 1998 and is held at the BirdLife office in Hanoi, registration number 2001.8.10. The paratype was collected by LTT and prepared as a standard museum skin by JCE.

Diagnosis. The nominate form, *A. chrysotis forresti* and *A. c. amoena* all show a grey chin and throat, sometimes with whitish or silvery tips, whereas *A. c. robsoni* shows an entirely yellow throat and chin (the throat of the paratype was damaged during collection). The nominate form has a charcoal-grey crown and sometimes shows an indistinct, white central crown stripe though this is more often absent. In *A. c. forresti* and *A. c. amoena* the colour of the crown varies from charcoal-grey to black and both forms show a broad but sometimes broken, white median crown stripe. In *A. c. robsoni* the crown is drab olive-grey and the central crown stripe is pronounced and has an off-white hue. The ear-coverts in *A. c. robsoni* are olive-grey but are silver-grey in the nominate form, *A. c. forresti* and *A. c. amoena*. The secondaries of *A. c. robsoni* are edged bright orange but in the nominate form, *A. c. forresti* and *A. c. amoena* they are usually yellow or sometimes yellow-orange. The nominate form lacks an eye-ring and in *A. c. forresti* it is narrow, broken or absent. In *A. c. amoena* and *A. c. robsoni* an eye-ring is present (Fig. 8).

Measurements (mm) and bare-part colouration. **Holotype.** Maxilla 9; tarsus 21; wing 49; tail too damaged/loose to measure accurately; iris dark brown; bill grey-horn/gun-metal; legs pale-flesh. **Paratype.** Maxilla 9.5; tarsus 22; wing 52; tail 49; iris colour not noted; bill brown horn; legs flesh.

Ecology and behaviour. Forages in small flocks. Tame and confiding.

Habitat. Found in bamboo and undergrowth in montane evergreen forest above c. 1,900 m asl.

Distribution. Currently known only from Mt Ngoc Linh, Kon Tum Province, Vietnam.

Etymology. I name this taxon in honour of Craig R. Robson, author of a *Field guide to the birds of Thailand and South-east Asia* (q.v. Robson 2000).

Specimens examined. *A. c. chrysotis*: BMNH 1937.17.281, 1 March 1936, male, East Bhutan; BMNH 1.17.280, 29 February 1936, male, East Bhutan; BMNH 193.1.17.283, 22 November 1936, female?, Yonpuha, East Bhutan. *A. c. forresti*: BMNH 1921.7.15.280 (Topotype), December 1919, male, Shweli-Salwin divide, Yunnan, China; BMNH 1922.12.7.231; 15 December 1921, male, Lichiang Range, Yunnan, China; BMNH 1941.5.30.4176, 26 April 1934, male, Kambaiti, Myitkyina District, Burma; BMNH 1941.12.1.509, 22 May 1935, male, Kambaiti, Myitkyina District, Burma; BMNH 1921.7.15.281 (Topotype), December 1919, female, Shweli-Salwin divide, Yunnan, China; BMNH 1933.11.13.300, April 1931, unsexed, Ta Li Shu, Yunnan, China. *A. c. amoena*:



Figure 8. Ventral view of the holotype of *Alcippe chrysotis robsoni* (centre) together with (from left to right) *A. c. amoena* BMNH 1930.4.16.335 (Topotype) and BMNH 1930.7.16.336 (Topotype), and *A. c. forresti* BMNH 1921.7.15.281 (Topotype) and BMNH 1921.7.15.280 (Topotype) (photograph by J. C. Eames).



Figure 9. Profile view of the holotype of *Alcippe castaneiceps stepanyani* (centre) together with (from left to right) *A. c. exul* BMNH 1932.5.14.161 (Topotype) and BMNH 1930.9.16.328, and *A. c. klossi* BMNH 1919.12.20.301 (Paratype) and 1939.12.11.32 (Topotype) (photograph by J. C. Eames).

BMNH 1930.7.16.336 (Topotype), 26 November 1929, female, Sa Pa, Vietnam; BMNH 1930.7.16.332, 19 November 1929, male, O Quy Ho, Vietnam; BMNH 1930.7.16.334; 28 November 1929, male, O Quy Ho, Vietnam; BMNH 1930.4.16.335 (Topotype), 18 November 1929, unsexed, Sa Pa, Vietnam; BMNH 1924.12.21.184, 20 June 1924, male, Ngoi Tio, Vietnam; BMNH 1924.12.21.188, 6 June 1924, female, Ngoi Tio, Vietnam; BMNH 1930.7.16.333, 16 November 1929, male, O Quy Ho, Vietnam; BMNH 1924.12.21.189, 19 June 1924, female, Ngoi Tio, Vietnam; BMNH 1930.7.16.334 (Topotype), 11 December 1929, unsexed, Fan Si Pan, Vietnam.

RUFIOUS-WINGED FULVETTA *Alcippe castaneiceps*

Three specimens collected from Mt Ngoc Linh, when compared with 15 specimens including two paratypes and five topotypes of *Alcippe castaneiceps klossi* and one topotype of *A. c. exul* (Robinson & Kloss 1919, Delacour 1932, Deignan 1964,) the two subspecies with the closest geographical ranges in Indochina, were sufficiently distinct to be named:

***Alcippe castaneiceps stepanyani*, subsp. nov.**

Holotype. BMNH registration number 1997.7.12, adult male (enlarged testis) collected at c. 2,200 m asl, Mt Ngoc Linh, 9 May 1996. Collected and prepared as a standard museum skin by JCE (Fig. 9).

Paratypes. BMNH registration numbers 1997.7.13, adult male and 1997.7.14, adult female, both also collected at c. 2,200 m asl, Mt Ngoc Linh, 9 May 1996. Collected and prepared as standard museum skins by JCE.

Diagnosis. This form is intermediate between *A. c. exul* and *A. c. klossi* in the colouration of the crown but has a distinctive pattern on the remiges. The mantle and back of *A. c. stepanyani* are olive brown, very similar to *A. c. exul* from Laos and barely distinguishable in series from *A. c. klossi* and *A. c. exul*. *A. c. exul* from north-west Vietnam shows, however, a slightly more chestnut-olive mantle and back, whilst *A. c. klossi* tends more towards chestnut. The crown and nape of *A. c. stepanyani* is a darker maroon-brown than the chestnut-brown of *A. c. exul* and the central shaft-streaks appear whiter, less cream. The crown and nape of *A. c. stepanyani* are rich chestnut-brown with yellow-buff central shaft streaks. In *A. c. klossi* the crown and nape are darker, more black-brown (almost burgundy as a consequence of foxing) and the central shaft streaks are dirty white, lacking any yellow or cream tones. In *A. c. exul* the crown and nape are more ginger and less chestnut. The chin, throat, breast and belly in *A. c. stepanyani* are creamy-white or pale buff with chestnut-buff sides to the breast and flanks. The underparts of *A. c. stepanyani* are therefore distinguishable from the underparts of *A. c. klossi* and *A. c. exul* from Laos, which are whiter and lack extensive chestnut-buff flanks. The underparts of *A. c. stepanyani* show closest similarity in both ground colour and the extent of chestnut-buff flanks to *A. c. exul* from north-west Vietnam. However, *A. c. exul* shows a greater extent of chestnut-buff on the flanks. The wing pattern (but not colouration) in *A. c. stepanyani*

is closer to *A. c. exul* but the colour differs as follows: in *A. c. stepanyani* the greater and primary coverts are black as in *A. c. exul* but the outer webs of primaries 4-8 are chestnut rather than orange. In *A. c. klossi* only the primary coverts are entirely black and there is no orange wing panel. The outer webs of primaries 4-8 are pale chestnut-brown (Fig. 9). Dickinson (*in litt* 1999). has pointed out that this species suffers from colour change after collection.

Measurements (mm). *Holotype*. Maxilla 11.5; tail 47; tarsus 21; wing 60. *Paratypes*. BMNH Registration number 1997.7.13: Maxilla 12; tarsus 22; tail 41; wing 60. BMNH Registration number 1997.7.14: Maxilla 10; tarsus 20; tail 43; wing 56.

Ecology and behaviour. Forages in small flocks sometimes associating with mixed feeding parties of small passerines. Frequently climbs and descends tree trunks in a manner similar to treecreepers *Certhia* spp.

Habitat. Undergrowth in montane evergreen forest above c. 2,000 m asl.

Distribution. Known only from Mt Ngoc Linh, Kon Tum Province, Vietnam. However, this species was recently observed on Mt Ngoc Boc in southern Kon Tum Province and Mt Kon Ka Kinh in Gia Lai Province (Le Trong Trai *et al.* 2000, Eames *et al.* 2001). Birds at these locations are likely to belong to the form *A. c. stepanyani*.

Etymology. I name this taxon in honour of Leo Surenovich Stepanyan who led 11 ornithological expeditions to Vietnam over 13 years (1978-1990) on behalf of the Russian Academy of Sciences, and who is the author of *Birds of Vietnam* (q.v. Stepanyan 1995).

Specimens examined. *A. c. exul*: BMNH 1932.5.14.162 (Topotype), 26 January 1932, male, Phou Kong Ntoul, Laos; BMNH 1932.5.14.161, 21 December 1931, female, Paksong, Laos; BMNH 1930.7.16.324, 11 November 1929, male, Sa Pa, Vietnam; BMNH 1930.7.16.323, 14 November 1929, unsexed, Sa Pa, Vietnam; BMNH 1930.7.16.328, 7 December 1929, female, Fan Si Pan, Vietnam; BMNH 1930.7.16.331, 20 November 1929, unsexed, O Quy Ho, Vietnam; USNM 350172, 10 April 1936, male, Doi Pu Kha, Thailand; USNM 350173; 10 April 1936, female, Doi Pu Kha, Thailand. *A. c. klossi*: BMNH 1939.12.11.32 (Topotype), 7 March 1939, unsexed, Lang Bian, Vietnam, BMNH 1919.12.20.301, (Topotype), 20 April 1918, male, Lang Bian, Vietnam; USNM 278466 (Paratype), 16 April 1918, male, Langbian Peaks, Vietnam; USNM 278467 (Paratype), 24 April 1918, male, Langbian Peaks, Vietnam; USNM 360916 (Topotype), December 1939, unsexed, Langbian Peaks, Vietnam; USNM 360917 (Topotype), December 1939, male, Langbian Peaks, Vietnam; USNM 359130 (Topotype), June 1939, unsexed, Langbian Peaks, Vietnam.

RUSTY-CAPPED FULVETTA *Alcippe (brunnea) dubia*

Two specimens collected from Mt Ngoc Linh, when compared with 19 specimens comprising five specimens of *A. d. intermedia* and 14 specimens of *A. d. genestier*, the subspecies with the closest geographical ranges (Deignan 1964), were sufficiently distinct to be named:

Alcippe dubia cui, subsp. nov.

Holotype. BMNH registration number 1997.7.8, adult male (one enlarged testis) collected at c. 2,200 m asl, Mt Ngoc Linh, 16 May 1996 by NC and prepared as a standard museum skin by JCE (Fig. 10).

Paratype. BMNH registration number 1997.7.9, adult female collected with the male on the same date by NC and prepared as a standard museum skin by JCE.

Diagnosis. The upperparts, including crown, nape and ear-coverts are a slightly darker shade of olive-brown than *A. d. genestieri*. *A. d. genestieri* from Yunnan and *A. d. intermedia* are slightly lighter brown on the mantle with less olive than birds from north-west Vietnam. The crown colour of *A. d. intermedia* is slightly more ginger than *A. d. genestieri* from Yunnan and contrasts with the darker crown of *A. d. cui*. The underparts of *A. d. cui* are entirely rich buff with warm chestnut flanks and are a little paler in the centre of the throat and belly. In *A. d. genestieri* and *A. d. intermedia* the underparts are generally white or off-white and the breast and belly are pale buff admixed with white, whilst the flanks are rich buff. The sides of the neck in *A. d. cui* are not stippled and in this respect it approaches *A. d. genestieri* (Fig. 10). Reference was recently made to the diagnostic features of this subspecies in Robson (2000).



Figure 10. Ventral view of the holotype of *Alcippe (brunnea) dubia cui* (centre) together with (from left to right) *A. d. genestieri* BMNH 1930.7.16.208 and BMNH 1930.7.16.206, and *A. d. intermedia* BMNH 86.10.1.6282 and BMNH 1948.80.1686 (photograph by J. C. Eames).

Measurements (mm) and bare-part colouration. Holotype. Maxilla broken; tarsus 24; tail 60; wing 60; iris dark brown; bill black horn; legs yellow horn. **Paratype.** Maxilla broken; tarsus 23; tail 62; wing 60; iris dark brown; bill black horn; legs yellow horn.

Ecology and behaviour. A semi-terrestrial *Alcippe*. From the behaviour of the holotype and paratype they clearly represented a pair on territory. As judged by the condition of his gonads, the male was in breeding condition.

Habitat. Undergrowth in montane evergreen forest above c. 2,200 m asl.

Distribution. Known only from Mt Ngoc Linh, Kon Tum Province, Kon Tum Province.

Etymology. I name this taxon in honour of my colleague Nguyen Cu, who collected both the holotype and paratype. Nguyen Cu is co-author of *Chim Viet Nam* (Nguyen Cu *et al.* 2000).

Specimens examined. *A. d. genestieri*: BMNH 1930.7.16.206, 4 December 1929, male, Fan Si Pan, Vietnam; BMNH 1930.7.16.208, 23 November 1929, male, Sa Pa, Vietnam; BMNH 1924.12.21.140, 3 May 1924, male, Ngoi Tio, Vietnam; BMNH 1930.7.16.207, 24 November 1929, female, Sa Pa, Vietnam; BMNH 1924.12.21.169, 3 May 1924, female, Ngoi Tio, Vietnam; BMNH 1922.12.7.190, 13 December 1921, unsexed, Lichiang Range, Yunnan, China; BMNH 1923.11.11.207, September 1922, male, Lichiang Range, Yunnan, China; BMNH 1921.7.15.256, undated, unsexed, Lichiang Range, Yunnan, China; BMNH 1921.7.15.259, June 1918, male, Lichiang Range, Yunnan, China; BMNH 1933.11.13.374, June-July 1931, male, near Likiang, Yunnan, China; USNM 296578, 18 August 1923, male, Li Kiang Plain, Yunnan, China; USNM 276581, November 1923, male, mountains near Yangtza, Mekong Valley, Yunnan, China; USNM 276582, November 1923, male, mountains of Hofuping, Mekong Valley, Yunnan, China; USNM 276583, November 1923, male, mountains of Tseh Chung, Mekong Valley, China. *A. b. intermedia*: BMNH 86.10.1.6282, 19 February 1877, male, Mooleyit, Burma; BMNH 1948.80.1686, 18 April 1934, male, Mogali, Katha District, Burma; BMNH 1948.80.1685, 12 April 1940, female, Nattaung, Karenni District, Burma; BMNH 1948.80.1689, 18 April 1934, female, Mogali, Katha District, Burma; BMNH 1908.8.2.32, 18 April 1908, female, Bhamo, Burma (?).

Note: *Contra* Deignan (1964), I follow Inskipp *et al.* (1996) in elevating *Alcippe dubia* to specific rank, comprising the subspecies *A. d. mandelli*, *A. d. intermedia*, *A. d. genestier*, now with the addition of *A. d. cui*.

RUFIOUS-BACKED SIBIA *Heterophasia annectans*

Two specimens collected from Cong Troi, when compared with 32 specimens including two topotypes of *H. a. annectans*, four topotypes of *H. a. mixta*, one topotype and two paratypes of *H. a. saturata*, and the holotype of *H. a. eximia*, belonging to the four recognized subspecies (Riley 1940, Deignan 1948, 1964), were sufficiently distinct to be named:

***Heterophasia annectans roundi*, subsp. nov.**

Holotype. BMNH registration number 1998.71.17, adult female collected at *c.* 1,500 m asl, Cong Troi (15° 14'N, 107° 41'E), 15 April 1998. Collected and prepared as a standard museum skin by LTT (Figs. 11 and 12).

Paratype. An additional female specimen was collected at Cong Troi on 14 April 1998 and is held at the BirdLife office in Hanoi, registration number 2001.8.11. The paratype was collected by LTT and prepared as a standard museum specimen by JCE.

Diagnosis. Colouration of the mantle and back of *H. a. roundi* is chestnut-orange, similar to nominate *H. a. annectans* (and a specimen assigned to *H. a. mixta* from north-west Vietnam) but paler than the chestnut-brown mantle and back of *H. a. saturata* and the four specimens of topotypic *H. a. mixta* examined (but see below under specimens examined). The back and upper tail coverts in *H. a. eximia* are black, as are the back and uppertail coverts of birds from Mooleyit in Burma assigned to *H. a. (davisoni) saturata*. The greater coverts of *H. a. roundi*, *H. a. mixta* and *H. a. saturata* are tipped chestnut-brown rather than orange-brown of *H. a. annectans*. The single specimen examined from north-west Vietnam was intermediate in this respect. The nape and upper mantle are black in *H. a. annectans*, *H. a. saturata* and *H. a. mixta*, as it is in *H. a. roundi* but the black does not extend so far down the mantle in *H. a. roundi*. Any differences in the extent of white streaking on the hind-crown are difficult to discern between these four subspecies. In *H. a. eximia* the white streaks on the hind neck are reduced but not "obsolete and hardly noticeable" as noted by Riley (1940). The underparts of *H. a. roundi* are white with the flanks tinged buff. In *H. a. mixta* the flanks, lower belly and vent are rich buff. In *H. a. saturata* the white underparts are washed grey and the vent and lower flanks show less buff than topotypical *H. a. mixta* but more than *H. a. roundi*. The nominate form shows the most buff on the lower belly and vent (Figs. 11 and 12). *H. a. eximia* shows a few white barbs to the feathers of the supra-loral region and a few white feathers on the upper eye-lid (Riley 1940). The entire head is black in *H. a. annectans*, *H. a. mixta*, *H. a. saturata* and *H. a. roundi*.

Note: BMNH 1930.7.16.390 from Sa Pa, north-west Vietnam shows an upperpart colouration intermediate between topotypical *H. a. mixta* and the nominate form. Delacour (1951) noted that, although the population of *H. annectans* from the north of Indochina is assigned to the typical race from the Himalayas, specimens from Laos tend towards *H. a. mixta* (Ripley 1953). Furthermore, all USNM specimens assigned to *H. a. annectans* below would be better considered, I believe, as *H. a. mixta*. *H. a. davisoni*, which shows a greater extent of black on the mantle and reduced white on the nape, is probably a valid taxon worthy of re-instatement.

Measurements (mm) and bare-part colouration. Holotype. Maxilla 19; tarsus 29; tail 88; wing 78; iris dark brown; bill black horn, yellow basal half to lower mandible; legs yellow.

Paratype. Maxilla 19.5; tarsus 24; tail 88; wing 77; iris dark brown; bill upper mandible and distal half of lower mandible black, grading to yellow basal half; legs yellow.

Ecology and behaviour. Usually solitary or in pairs associating with mixed feeding parties. Confined to the canopy and middle storey.

Habitat. Lower montane evergreen forest.

Distribution. Known only from Cong Troi, Dak Glei District, Kon Tum Province, Vietnam.

Etymology. I name this taxon in honour of Philip D. Round, co-author of *Birds of Thailand* (q.v. Lekagul and Round 1991) and for his dedication in trying to conserve Gurney's *Pitta pitta gurneyi*.

Specimens examined. *H. a. annectans*: BMNH 86.10.1.743, undated, unsexed, Sikkim, India; BMNH 1948.80.1897, 26 February 1934, male, Mogak, Myintada, Taung, Burma; BMNH 1939.12.8.182, 4 February 1939, male, Htingnan, Upper Burma; BMNH 86.10.1.745 (Topotype), undated, unsexed, Darjeeling, India; BMNH 86.10.1.748, undated, unsexed, Darjeeling, India; BMNH 86.10.1.749 (Topotype), undated, unsexed, Darjeeling, India; USNM 330539, 22 April 1931, female, Doi Nang Ka, Thailand; USNM 335686, 15 July 1935, male, Doi Suthep, Thailand; USNM 335687, 15 July 1935, male, Doi Suthep, Thailand; USNM 311503, 15 December 1928, male, Doi Suthep, Thailand; USNM 335688, 13 July 1935, male, Doi Suthep, Thailand; USNM 336017, 18 February 1936, male, Doi Suthep, Thailand; USNM 334568, 12 August 1934, male, Doi Hua Mot, Thailand; USNM 330539, 26 April 1931, male, Doi Nang Ka, Thailand; USNM 330538, 10 November 1930, male, Doi Nang Ka, Thailand; USNM 330540, 10 November 1930, male, Doi Nang Ka, Thailand; USNM 330541, 12 November 1930, male, Doi Nang Ka, Thailand; *H. a. mixta*: BMNH 1930.7.16.390, 16 November 1929, female, Sa Pa, Vietnam; USNM 535015 (Topotype), 10 November 1965, female, Doi Pho Hom Pok, Thailand; USNM 535016 (Topotype), 15 November 1965, male, Doi Pha Hom Pok, Thailand; TISTR 53-1450 (Topotype), 24 November 1965, female, Doi Pha Hom Pok, Chang Mai, Thailand; TISTR 53-2622 (Topotype), 26 November 1965, female, Doi Pa Hom Pok, Chang Mai, Thailand; TISTR 53-2623, 6 February 1971, female, Dong Tak Ten, Chom Tong, Chang Mai, Thailand; TISTR 53-167, 18 January 1967, female, Doi Pui, Chang Mai, Thailand; TISTR 53-168, 23 January 1967, female, Doi Pui, Chang Mai, Thailand; NSMT K3481, 1 January 1959, female, Phu Kha, Pua District, Nan Province, Thailand. *H. a. saturata*: BMNH 1948.80.1899 (Topotype), 30 August 1940, male, Nattaung, Karenni District, Burma; BMNH 1948.80.1900, 05 November 1938, male, Yamthin District, Burma; BMNH 1900.12.20.382, 16 April 1900, unsexed, Southern Shan States, Burma; BMNH 1903.12.24.386, undated, unsexed, Southern Shan States, Burma; *H. a. saturata (davisoni)*: BMNH 86.10.1.761, 31 January 1877 (Paratype), male, Mooleyit, Burma; BMNH 86.10.1.760 (Paratype), 31 January 1877, male, Mooleyit, Burma. *H. a. eximia*: (holotype) USNM 359014, July 1939, female, Forests of Cam Ly, Vietnam.



Figure 11. Ventral view of the holotype of *Heterophasia annectans roundi* (centre) together with (from left to right) *H. a. annectans* BMNH 86.10.1.748 (Topotype), BMNH 86.10.1.743, *H. a. mixta* BMNH 1930.7.16.390, *H. a. saturata* BMNH 1948.80.1899 (Topotype) (photograph by J. C. Eames).



Figure 12. Dorsal view of the holotype of *Heterophasia annectans roundi* (centre) together with (from left to right) *H. a. annectans* BMNH 86.10.1.748 (Topotype), BMNH 86.10.1.743, *H. a. mixta* BMNH 1930.7.16.390, *H. a. saturata* BMNH 1948.80.1899 (Topotype) (photograph by J. C. Eames).

BLACK-HEADED SIBIA *Heterophasia melanoleuca*

Two specimens collected from Mt Ngoc Linh when compared with 16 specimens, comprising two topotypes of *H. m. robinsoni*, and four topotypes each of *H. m. engelbachi* and *H. m. tonkinensis*, the three subspecies with the closest geographical ranges (Deignan 1964, Delacour 1930, Rothschild 1921), were sufficiently distinct to be named:

Heterophasia melanoleuca kingi, subsp. nov.

Holotype. BMNH registration number 1997.7.11, adult male (one enlarged testis) collected at c. 2,200 m asl, Mt Ngoc Linh, 18 May 1996 by NC and prepared as a standard museum skin by NC (Fig. 13).

Paratype. An additional male specimen was collected on Mt Ngoc Linh, 28 March 1998, and is held at the BirdLife office in Hanoi, registration number 2001.8.12. The paratype was collected and prepared as a standard museum skin by LTT.

Diagnosis. *H. m. kingii* is generally intermediate between *H. m. tonkinensis* and *H. m. engelbachi* but shares some features with *H. m. robinsoni*. The grey wash on the breast in *H. m. kingi* is very similar to *H. m. engelbachi* and is almost undetectable in series, and less extensive than is shown by *H. m. tonkinensis*, in which it extends onto the sides of the breast and flanks, and *H. m. robinsoni* where it is confined to the



Figure 13. Profile view of the holotype of *Heterophasia melanoleuca kingi* (third from left) together with *H. m. robinsoni* BMNH 1939.12.11.45 (Topotype), *H. m. engelbachi* BMNH 1932.5.14.155 (Topotype) and *H.m.tonkinensis* BMNH 1930.7.16.395 (Topotype) (photograph by J. C. Eames).

breast. The breast and belly *H. m. kingi* are white, washed slightly vinous as in *H. m. engelbachi*. The breast and belly appear whiter in *H. m. robinsoni*. In *H. m. kingi* the mantle is grey but with a faint purplish-brown (or drab mid-brown) wash on back and scapulars similar to but far less extensive than in *H. m. engelbachi*. Mantle and back colouration are therefore intermediate between the purplish-brown backed *H. m. engelbachi* on the one hand and the grey backed forms of *H. m. tonkinensis* and *H. m. robinsoni*, which are indistinguishable in series. The mantle in *H. m. kingi* is browner than in *H. m. tonkinensis* but greyer and less brown than *H. m. engelbachi*. The ear-coverts are uniformly black as in *H. m. engelbachi* and *H. m. tonkinensis*. *H. m. robinsoni* has grey-brown ear-coverts strongly streaked white. *H. m. kingi* additionally has a broken white eye-ring as in *H. m. engelbachi* and *H. m. robinsoni*, a feature absent in *H. m. tonkinensis* (Fig. 13). Reference was recently made to the diagnostic features of this subspecies in Robson (2000).

Measurements(mm) and bare-part colouration. Holotype. Maxilla 22; tarsus 30; tail 109; wing 95; iris dark brown; bill black; legs dark horn. **Paratype.** Maxilla 23; tarsus 30; tail 111 mm; wing 96; iris dark brown; bill black; legs dark horn but recorded as pale black.

Ecology and behaviour. Usually in pairs, rarely in mixed feeding parties. Once seen associating with Black-crowned Barwing (Eames *et al.* 1999b). Usually found in the canopy and middle storey, especially feeding on boles on the trunk and larger branches. Quite vocal, its melancholy call is a characteristic forest sound.

Habitat. Found in montane evergreen forest above *c.* 2,000 m asl.

Distribution. Known only from Mt Ngoc Linh, Kon Tum Province, Vietnam.

Etymology. I name this taxon in honour of Ben F. King, senior author of *Birds of South-east Asia*, which was the first comprehensive bird field guide to the region (*q.v.* King *et al.* 1975).

Specimens examined. *H. m. robinsoni*: BMNH 1927.6.5.1069, 12 March 1927, female, Di Linh, Vietnam; BMNH 1939.12.11.45 (Topotype), 10 March 1939, female, Lang Bian, Vietnam; BMNH 1927.6.5.1065, 1 March 1927, female, Di Linh, Vietnam; BMNH 1928.6.26.1453, 8 August 1927, male, Entrenaus (?), Annam, Vietnam; BMNH 1927.6.5.1040, 11 March 1927, male, Di Linh, Vietnam; BMNH 1928.6.26.1454 (Topotype), 4 August 1927, male, Da Lat, Vietnam. *H. m. engelbachi*: BMNH 1932.5.14.153 (Topotype), 8 December 1931, male, Phou Kong Ntoul, Laos; BMNH 1932.5.14.158, 17 December 1931, male, Thaheng, Laos; BMNH 1932.5.14.155 (Topotype), 28 November 19/31, male, Phu Tonghoul (Phou Kong Ntoul), Laos; BMNH 1932.5.14.156 (Topotype), 12 December 1931, female, Phou Kong Ntoul, Laos; BMNH 1932.5.14.157, 3 December 1931, female, Pho Set, Laos; BMNH 1932.5.14.154 (Topotype); 10 December 1931, female, Phuo Kong Ntoul, Laos. *H. m. tonkinensis*: BMNH 1930.7.16.394 (Topotype), 24 November 1929, unsexed, O Quy Ho, Vietnam; BMNH 1930.7.16.395 (Topotype), 16 November 1929, unsexed, O Quy Ho, Vietnam; BMNH 1930.7.16.392 (Topotype), 7 November 1929, female, O Quy Ho, Vietnam; BMNH 1930.7.16.393 (Topotype), 27 November 1929, male, O Quy Ho, Vietnam.

STRIPE-THROATED YUHINA *Yuhina gularis*

Two specimens collected from Mt Ngoc Linh, when compared with 21 specimens, including four topotypes of *Y. g. gularis*, and five specimens of *Y. g. omeiensis*, the two subspecies with the closest geographical ranges in Indochina (Deignan 1964, Kinnear 1925), were sufficiently distinct to be named:

***Yuhina gularis uthaii*, subsp. nov.**

Holotype. BMNH registration number 1998.71.18 adult male collected at c. 2,200 m asl, Mt Ngoc Linh, 7 April 1998 by LTT and prepared as a standard museum skin by JCE (Fig. 14).

Paratype. An additional male specimen was collected on Mt Ngoc Linh on 6 April 1998 and is held at BirdLife, Hanoi, registration number 2001.8.13. The paratype was collected by LTT and prepared as a standard museum skin by JCE.

Diagnosis. This form was examined with a series of 21 specimens assigned to *Y. g. gularis* and *Y. g. omeiensis*. These included birds representing the four forms synonymised by Deignan (1964) under *Y. g. gularis*. Specimens were examined from the topotype locality (Nepal) as well as birds from western Yunnan previously described as *Y. yangiensis*, birds from western Yunnan and Burma, previously described as *Y. g. griseotincta*, and birds described as *Y. g. sordidor* in north-west Vietnam, including from Ngoi Tio, the type locality. No significant differences could be seen between these forms and I support Deignan's diagnosis. *Y. g. uthaii* is easily distinguishable from all these forms in having very broad dark brown throat streaking instead of having narrow throat streaking which the other taxa all show; additionally, the ground colour of the throat feathers being whiter and less pink or buff than in *Y. g. gularis*. The breast of *Y. g. uthaii* is pinkish buff, as in *Y. gularis* from Nepal, and both these forms lack the orange-pink breast of the birds from north-west Vietnam. There are no differences between these forms in the lower belly and vent colouration. There appear to be no significant differences in upperpart colouration but *Y. g. uthaii* and birds from Nepal show a slightly more olive tinge to the upperparts than birds from north-west Vietnam (Fig. 14). The distinctive throat pattern of this new subspecies was recently illustrated in comparison with *Y. g. gularis* (Robson 2000).

Measurements (mm) and bare-part colouration. Holotype. Maxilla 15; tarsus 22; tail 55; wing 72; iris dark brown; bill dark horn upper mandible, flesh horn lower mandible; legs orange flesh. **Paratype.** Maxilla broken; tarsus 21; tail 58; wing 73; iris dark brown; bill dark horn upper mandible, flesh horn lower mandible; legs orange.

Ecology and behaviour. Usually found in small, noisy single species flocks moving rapidly through the canopy. The call is quite nasal and far carrying.

Habitat. Montane evergreen forest above c. 2,000 m asl.

Distribution. Known only from Mt Ngoc Linh, Kon Tum Province, Vietnam.

Etymology. I name this taxon in honour of Uthai Treesucon a leading conservationist and field ornithologist in Thailand.

Specimens examined. *Y. g. gularis*: BMNH 86.10.1.6574, undated, unsexed, Sikkim, India; BMNH 82.3.1.15, 1877, unsexed, Sikkim, India; BMNH 86.10.1.6575, undated, unsexed, Sikkim, India; BMNH 1950.10.43 (Topotype), 18 August 1950, female, Thangja, Nepal; BMNH 97.12.10.1331, May 1873, unsexed, Sikkim, India. *Y. g. (sordidor) gularis*: BMNH 1924.12.21.160 (Topotype), 19 June 1924, female, Ngoi Tio, Vietnam; BMNH 1924.12.21.164 (Topotype), 19 June 1924, male, Ngoi Toi, Vietnam; BMNH 1924.12.21.162 (Topotype), 20 June 1924, male, Ngoi Tio, Vietnam; BMNH 1930.7.16.345, 3 December 1929, male, Fan Si Pan, Vietnam; BMNH 1930.7.16.347, 14 December 1929, female, Fan Si Pan, Vietnam; BMNH 1933.11.13.771, October 1931, female, near Tengyueh, west Yunnan, China; BMNH 1921.7.15.340, undated, male, Tengyueh, west Yunnan, China; BMNH 1905.9.10.367, 1904, unsexed, Mt Victoria, Chin Hills, Burma; BMNH 1905.5.9.10.354, 20 March 1904, unsexed, Mt Victoria, Chin Hills, Burma; AMNH 1905.9.10.355, 1904, unsexed, Mt Victoria, Chin Hills, Burma; BMNH 1932.12.10.85, 14 March 1931, female, Adung Valley, north-east Burma. *Y. g. omeiensis*: BMNH 1923.11.11.258, September 1922, male, Lichiang Range, Yunnan, China; BMNH 1922.12.7.258, 20 November 1921, unsexed, Lichiang Range, Yunnan, China; BMNH 1923.11.11.257, August 1922, female, Lichiang Range, Yunnan, China; BMNH 1922.12.7.259, 20 November 1921, male, Lichiang Range, Yunnan, China; BMNH 1922.12.7.264, 21 December 1921, male, Lichiang Range, Yunnan, China.

BLACK-THROATED PARROTBILL *Paradoxornis nipalensis*

Three specimens collected from Mt Ngoc Linh, when compared with nine specimens, including one topotype of *P. n. beauleiui*, from amongst the three subspecies with the closest geographical ranges in Indochina (Bingham 1903, Deignan 1964, Ripley 1953), were sufficiently distinct to be named:

***Paradoxornis nipalensis kamoli*, subsp. nov.**

Holotype. BMNH registration number 1998.71.19, adult female collected at *c.* 2,200 m asl, Mt Ngoc Linh, 3 April 1998. Collected and prepared as a standard museum skin by JCE (Fig. 15).

Paratypes. Two additional specimens were also collected at *c.* 2,200 m asl on Mt Ngoc Linh, 3 April 1998. These comprise a male, which is deposited at the BirdLife office in Hanoi, registration number 2001.8.14, and a female BMNH, registration number 1998.71.20. Both specimens were collected and prepared as standard museum skins by JCE.

Diagnosis. *P. n. kamoli* is closest to *P. n. beauleiui* but shows some similarities to *P. n. feae* and *P. n. (verreauxi) craddocki*. *P. n. kamoli* has narrower black lateral crown stripes than *P. n. beauleiui*, where the black lateral crown stripes are broad, becoming very broad behind the eye. In *P. n. kamoli* the lores are white, extending in front of and over the eye as a very narrow white supercillium. In *P. n. beauleiui* the lores are dark and the broader white supercillium extends noticeably to behind the eye. The crown and upper mantle in *P. n. kamoli* and *P. n. feae* are ginger-orange but in *P. n.*



Figure 14. Ventral view of the holotype of *Yuhina gularis uthaii* (centre) together with (from left to right) *Y. (sordidor) gularis* BMNH 1924.12.21.160 and BMNH 1924.12.21.164, and *Y. g. omeiensis* BMNH 1922.12.7.258 and BMNH 1922.12.7.259 (photograph by J. C. Eames).



Figure 15. Profile view of the holotype of *Paradoxornis nipalensis kamoli* (centre) together with (from left to right) *P. n. feae* BMNH 1948.80.1978 and *P. n. (verreauxi) craddocki* BMNH 1930.7.16.299 (photograph by J. C. Eames).

beaulieui the crown and upper mantle are less bright and contrast less with the lower mantle. *P. n. kamoli* differs from *P. n. (verreauxi) craddocki* in having a much more extensive black throat and a circular black ear-covert patch, whereas the ear-coverts in *P. n. craddocki* are orange. *P. n. feae* differs from *P. n. kamoli* in having broad black lateral crown stripes, ear-coverts black suffused grey and the absence of white on the face, except for a broad white malar stripe and on the breast where it is replaced by grey (Fig. 15). The distinctive head pattern of this new subspecies was recently illustrated in comparison with *P. n. beaulieui* and *P. n. feae* (Robson 2000).

Measurements (mm) and bare-part colouration. Holotype. Maxilla 9; tarsus 17; tail 53; wing 49; iris dark brown; bill upper mandible horn, lower mandible flesh horn; legs purple flesh. **Paratypes.** Specimen number 2001.8.14: Maxilla 9.5; tarsus 21; tail 47.5; wing 47; iris dark brown; bill upper mandible grey horn, lower mandible flesh horn; legs flesh horn. Specimen number BMNH 1998.71.20: Maxilla 7.5; tarsus 18; tail 52; wing 48; iris dark brown; bill upper mandible grey horn, lower mandible pink horn; legs flesh horn.

Ecology and behaviour. Usually forages in noisy, small single species flocks that move rapidly through the forest undergrowth.

Habitat. Found in the bamboo understory and shrub layer of montane evergreen forest above c. 2,000 m asl.

Distribution. Known only from Mt Ngoc Linh, Kon Tum Province, Vietnam.

Etymology. I name this taxon in honour of Kamol Komolphalin, a leading conservationist and Thailand's foremost bird artist and co-illustrator of a *Field guide to the birds of Thailand* (q.v. Lekagul & Round 1991).

Specimens examined. *P. n. (verreauxi) craddocki*: BMNH 1924.12.21.202, 6 May 1924, female, Ngai Tio, Vietnam; BMNH 1.12.21.203, 20 June 1924, male, Ngai Tio, Vietnam; BMNH 1930.7.16.299, 24 November 1929, male, Fan Si Pan, Vietnam; BMNH 1930.7.16.298, 19 November 1929, female, O Quy Ho, Vietnam. *P. n. beaulieui*: Paris Museum 360 (Topotype) 26 December 1938, male, Phu Kobo, Xieng Khonang, Laos. *P. n. feae*: BMNH 1948.80.1978, 15 April 1940, male, Nattaung, Kerreni District, Burma; BMNH 1905.8.16.194, May 1901, unsexed, Kauri Kachin District, Burma; BMNH 1948.80.1977, 12 April 1939, female, Nattaung, Burma; BMNH 1948.80.1976, 17 April 1940, male, Nattaung, Burma.

Acknowledgements

I would firstly like to thank my co-workers and colleagues Nguyen Cu and Le Trong Trai, with whom I worked on Mt Ngoc Ling and Mt Kon Ka Kinh and who collected and prepared many of the specimens described in this paper.

In Hanoi, I thank Nguyen Huy Phon, Vice Director of FIPI, Dr Nguyen Huu Dong, Director of the Forest Resources and Environment Centre of FIPI for permitting the secondment of Le Trong Trai to the BirdLife Vietnam Programme. Thanks to Professor Dr Vu Quang Con, Director of the Institute of Ecology and Biological Resources, for permitting the secondment of Nguyen Cu to the BirdLife Vietnam Programme. In Kon Tum I thank Tran Quang Vinh, Vice-Chairman

of the Kon Tum People's Committee; Truong Khac Toi, Vice-Director, Cao Chi Cong, Nguyen Quang Sinh, and Nguyen Xuan Thu of Kon Tum Department of Agriculture and Rural Development.

At The Natural History Museum, Tring, I would like to thank Dr Robert Prís-Jones who granted access to the collection and who personally encouraged my work over several summer visits. I would also like to thank Mr M. P. Adams for re-measuring the type material, for providing detailed written comments and for assisting in obtaining a specimen loan from the Museum national d'Histoire naturelle in Paris. I would also like to thank Frank D Steinheimer for his support and interest.

At the American Museum of Natural History I would like to thank Paul R. Sweet, Collection Manager at the Department of Ornithology, who facilitated visits to the museum in 1999 and 2001 and for granting access to the bird collections, especially material collected in Vietnam. At the National Museum of Natural History, Smithsonian Institution, I would like to thank James Dean, Collections Manager at the Department of Ornithology, for facilitating access to the collection during July 2001, and Pamela C Rasmussen for encouraging me in my work.

At the Thailand Institute of Scientific and Technological Research I would like to thank Nivesh Nadee, Mrs Lakkana Pakkarnseree and Mrs Pornthip Angkapreechases for assisting me during my visit to the bird collection. I would also like to thank Jarujin Nabhitabhata, Director of the Natural Science Research Division of the National Science Museum, Patumthani, Thailand for permitting access to the collection made by Dr Boonsong Lekagul. Thanks also to Wichian Kongtong of the National Research Council.

In the United Kingdom I would particularly like to thank Edward C. Dickinson, of the Trust for Oriental Ornithology, who peer-reviewed this paper providing many comments that led to considerable improvement of the manuscript. Thanks also to Craig R. Robson who provided written comments and who assisted with the diagnosis of *Paradoxornis nipalensis beauleui*. I thank Dr Pasquet at the Museum national d'Histoire naturelle in Paris for kindly loaning a specimen of *P. n. beauleui* to The Natural History Museum. Dr Alexander Monastyrskii of the Russian-Vietnam Tropical Centre translated passages of Russian text from Stepanyan (1995) into English.

At BirdLife International I would like to thank Richard Grimmett for encouraging and supporting my work. I would also like to thank Nguyen Duc Tu from the BirdLife Vietnam Programme and Ha Quy Quynh from IEBR for producing the map. A final word of thanks goes our local camp staff, and many of the villagers whose hospitality and company made our fieldwork so enjoyable.

Fieldwork in 1996 and 1998 comprised components of the joint BirdLife International and FIPI (Ministry of Agriculture and Rural Development) Projects entitled "Conservation of Biodiversity in the Annamese Lowlands and Da Lat Plateau, Vietnam." Contract B7-5041/93/11 in 1996, and "Expanding the Protected Areas Network in Vietnam for the 21st Century." Contract VNM/B7-6201/IB/96/005 during 1998. Both projects were funded by the Commission of European Communities (DGI), and BirdLife International additionally funded the latter project.

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Notes on the extinct Kosrae Starling *Aplonis corvina* Kittlitz, 1833

by Julian P. Hume

Received 4 January 2001

The Starlings of the genus *Aplonis*, comprising 24 known species, are virtually confined to the islands of the south-western Pacific, occurring on the mainland only on the Malay peninsular in the west, southern Vietnam in the north, and the tip of northern Australia in the south (Feare & Craig 1998). Six species of the genus are widespread, 8 species inhabit groups of islands, and the rest are endemic to single islands or island pairs; apart from 3 species, all are almost entirely lowland birds. Three of the endemic species are now extinct: Norfolk and Lord Howe Starlings *A. fusca* (2 ssp, Norfolk Island and Lord Howe Island), Mysterious Starling *A. marvornata* (Mauke, Cook Islands) and Kosrae Starling *A. corvina* (*Kosrae, Caroline Islands), with other endemic species being rare and restricted (Greenway 1957, King 1981, Fuller 1987, Feare & Craig 1998). One of the most spectacular species was the Kosrae, Kosrae Island or Kosrae Mountain Starling *A. corvina*, which has not been seen since the 1830s and is known only from 5 specimens. The little that is known about the ecology of this species is based entirely on the work of Kittlitz (1832, 1835, 1858), the only biologist to have seen the bird in life and the collector of all the known specimens.

The Kosrae Starling has been described as a large, red-eyed, glossy black bird with a long curved bill and long tail, and illustrated accordingly (Kittlitz 1832, 1835, Greenway 1957, Day 1981, Fuller 1987). However, during a visit I made to the Russian

*Kosrae Island was formerly known as Kusaie Island, and originally termed Uulan in error (Finsch 1881)



Eames, Jonathan C. 2002. "Eleven new sub-species of babbler (Passeriformes: Timaliinae) from Kon Tum Province, Vietnam." *Bulletin of the British Ornithologists' Club* 122, 109–141.

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