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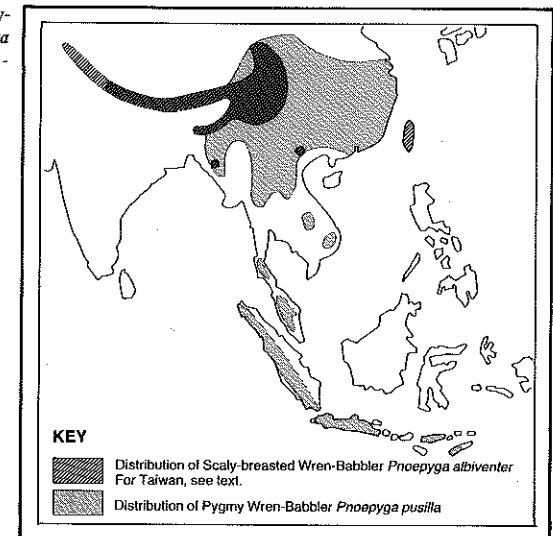
Identification, vocalisations and taxonomy of *Pnoepyga* wren-babblers

SIMON HARRAP

Apart from an isolated, subspecifically distinct population on Taiwan, the Scaly-breasted Wren-Babbler *Pnoepyga albiventer* has a distribution that lies almost entirely within that of the much wider-spread but extremely similar Pygmy Wren-Babbler *P. pusilla*. The literature proves confusing on their separation in the field. Altitude is no clear guide, and in fact only a bird that is heavily spotted on head and mantle can be confirmed as *albiventer*. Song is the best character, with *albiventer* giving a fast, wren-like warble and *pusilla* a high, persistent 'sec . . . saw'.

The Pygmy Wren-Babbler *Pnoepyga pusilla* is widespread in the Oriental region, ranging from western Nepal to Timor. Its closest relative, the Scaly-breasted Wren-Babbler *P. albiventer*, has a much more restricted distribution, encompassing the Himalayas from Dhaulagiri eastwards, the hills south of the Brahmaputra, Mount Victoria and the hills of north-east Burma, south-west China (south and south-east Xizang Autonomous Region, Sichuan and north-west Yunnan) and northernmost Viet Nam; throughout all but the westernmost portion of its range, the Scaly-breasted Wren-Babbler is sympatric with the Pygmy Wren-Babbler (see Figure 1). (The wren-babbler on Taiwan has been variously assigned to both species and is discussed in greater detail below.) Pygmy and Scaly-breasted

Figure 1. Distribution of Scaly-breasted Wren-Babbler *Pnoepyga albiventer* and Pygmy Wren-Babbler *P. pusilla*.



Wren-Babblers are very similar in appearance and King *et al.* (1975) is the only readily available reference that offers any plumage criteria for their separation in the field. Their songs are, however, widely given as distinctive.

THE PROBLEM OF IDENTIFICATION

On 24 May 1985 in the Langtang Valley, central Nepal, between Chongong (Lama Lodge) and Syabru (Shabru), 28°10'N 85°24'E, at an altitude of c.2,000m, Neil Simpson and I had excellent views of a singing wren-babbler *Pnoepyga*. I made the following notes:

'Song, lasting about 1½s, "seece-u see-u zer-zi-ze-ze". Upperparts plain, with only the faintest of marks on the coverts. Underparts pale brown-white, evenly scaled throughout. No pale throat, except when it pointed its bill skywards to sing – then a very small unmarked whitish chin was visible.'

No less than six others were singing in the same area. The question was, which species had we seen? The characters advanced in the literature for the separation of the two species are outlined under the four headings that follow.

Size and jizz

Pygmy is 9cm long and Scaly-breasted 10cm (Ali and Ripley 1983; see below for details of wing lengths). Average weights give a better picture of the difference in size: 20.9g (n = 10) for Scaly-breasted compared with 12g (n = 8) for Pygmy (Ali and Ripley 1983).

Plumage

The species are extremely similar, even showing the same white and buff phases of underpart coloration, and many authors consider them inseparable. However King *et al.* (1975) state that Scaly-breasted 'usually has fairly numerous *rusty-buff spots* on mantle (and often on head); throat *paler* than breast (black scales more prominent on breast but nearly lacking on throat); buff phase often has *whitish* throat'. Pygmy has 'throat usually not paler than breast. Pale spotting on upperparts (when present) usually limited to the wings and lower back'. Baker (1922) even suggests that Pygmy has 'the median and greater coverts and innermost secondaries . . . more plentifully and more regularly spotted' than Scaly-breasted.

Voice

The call of both species is a 'zick' or 'tsik', perhaps given mainly when agitated. This is probably what Ludlow and Kinnear (1937, discussing Scaly-breasted) likened 'to nothing so realistic as an ill-mannered person loudly sucking his teeth! . . . repeated at regular intervals every four or five seconds for the space of a couple of minutes, and . . . frequently very

difficult to locate'. Smythies (1986) noted the call of Pygmy as being sharper and thinner than that of Scaly-breasted, and to be uttered more frequently. However, Ali and Ripley (1983) maintain that the two are indistinguishable and it would seem that any difference must be slight, though they go on to say that Pygmy Wren-Babbler 'utters a sharp single "tsik" every half-second or so, alternatively higher and lower with a semitone difference; this note is given more frequently and over longer periods than in the case of *albiventer*'. However, this description may refer to Pygmy's *song*, rather than its *call*; see below. A shrill, piercing whistle given in extreme alarm has also been noted for Scaly-breasted by Ludlow and Kinnear (1937), and Ali and Ripley (1983) give a sharp, explosive, scolding 'chirik chiruk' as the alarm-call of Pygmy.

Pygmy's song is described by Smythies (1986) as 'a loud, shrill whistle, followed after an interval of about one second by a lower note . . . the whistle having a penetrating quality . . . The bird calls on the move, at intervals of 10–20 seconds for several minutes'. King *et al.* (1975) give a 'loud, shrill, penetrating 2- or 3-note whistle, each successive note separated by a long interval and lower in pitch', and Fleming *et al.* (1979) 'a loud, slowly squeezed out "see . . . saw", a second long with two second intervals, repeated up to thirty times'.

Regarding Scaly-breasted, Smythies (1986) refers to Heinrich's description (in Stresemann and Heinrich 1940): 'The song is short and trilling like the first part of the song of *Brachypteryx cruralis*' [= *B. montana* White-browed Shortwing]. Baker (1922) likened it to the song of Northern Wren *Troglodytes troglodytes*, Fleming *et al.* (1979) describe a 'fine strong warble: "tzee-tze-zit-tzu-stsu-tzit", rising and ending abruptly', and Ludlow and Kinnear (1944) state that the song of Scaly-breasted is 'a pretty trill of seven or eight notes, quite indescribable, but quite distinct from the double-noted whistle of *P. p. pusilla*'.

It seems, then, that the two species have completely different and distinctive songs. However, Ali and Ripley (1983) also give the following description of Scaly-breasted's call: a 'loud, squeaky long-drawn double-noted "seek . . . sik" like an uncoiled "patla" (Indian swing bed) swinging back and forth (SA) . . . These notes are markedly ventriloquial, the "seek" seeming to come from an entirely different direction to the "sik" that follows a half-second later.' There seems to be little doubt that this is a description of the song of Pygmy Wren-Babbler (a very accurate description, in fact), mistakenly attributed (as a call) to Scaly-breasted Wren-Babbler.

Altitudinal distribution

Both species are altitudinal migrants in at least parts of their ranges, descending in winter to as low as 275m in the Himalayas (Inskipp and Inskipp 1985), though apparently resident further south and east. They are separated altitudinally to some extent during the breeding season. In the Himalayas, Scaly-breasted breeds at 2,400–4,000m and Pygmy at 1,500–3,000m (Ali and Ripley 1983, Inskipp and Inskipp 1985); in

south-east Xizang Scaly-breasted breeds at 2,000–2,200m (Cheng *et al.* 1983). In Assam Scaly-breasted breeds at c.1,000–1,800m and Pygmy from c.1,000m upwards (Ali and Ripley 1983). On Mount Victoria in south-west Burma Pygmy breeds from 1,400–2,600m and Scaly-breasted at 2,200–2,800m (Stresemann and Heinrich 1940), while King *et al.* (1975) state that in Burma and northernmost Viet Nam only Pygmy should be found from 1,067 to 1,676m. Thus, altitudinal overlap is considerable in the Himalayas (2,400–3,000m) and on Mount Victoria (2,200–2,600m), and apparently complete in Assam.

Based on the survey of the literature summarised above, the identity of the Langtang wren-babbler was still uncertain. Plumage (unspotted head and mantle and lack of pale throat) and altitude seem to indicate Pygmy (though the caveat 'usually' attached to the text in King *et al.* hinted at caution), whilst the song pointed strongly towards Scaly-breasted. In order to resolve the problem, about 50 skins of each species were examined at the British Museum (Natural History), field-notes were sought from various observers, and an appeal made for tape-recordings of both species in the *Bulletin* of the Oriental Bird Club. The following conclusions were reached.

PHYSICAL CHARACTERS

The size difference between the two species is obvious in skins, and Scaly-breasted appears larger and more robust in the field, with a more thickset bill; its posture is less upright and less 'perky' than Pygmy (C. R. Robson *in litt.*). The difference in bill size is supported by measurements (Ali and Ripley 1983 give bill from skull as 13–15mm for Scaly-breasted, 12–14mm for Pygmy). However, even marked differences in overall size are notoriously difficult to assess objectively in the field.

An unmarked pale throat is not a specific character of Scaly-breasted. About 25% of Pygmy Wren-Babblers examined (especially buff-phase individuals) showed unmarked throats or were so indistinctly marked that they would have appeared so in the field. Conversely, one white-phase Scaly-breasted had a scaled throat.

Plain upperparts are not diagnostic of Pygmy. The upperparts of Scaly-breasted are rather variable: some have many distinct buff spots on the head and mantle, some a few distinct spots, some a few faint, scattered spots, and spotting may occasionally be absent. (In this context, it is important to note that juveniles of both species lack spots on the upperparts. However, they are very distinct from adults, generally lacking scales on the underparts, and may show a more or less streaked breast on a variable dark brown to whitish ground: Mayr 1944, Abdulali 1982, Ali and Ripley 1983.) Only a wren-babbler that is *heavily spotted* with buff on the head and mantle can be identified confidently as Scaly-breasted.

Pygmy tends to be less boldly marked on the underparts than

Scaly-breasted. On white-phase birds, the white feathers have thin dark fringes resulting in a scalloped effect. On Scaly-breasted, in addition to the dark fringes shown by Pygmy, bold dark feather-centres are also present, especially on the breast. The overall effect is darker than Pygmy but the complexity of the pattern means that it is doubtfully distinguishable in the field.

VOICE

In the following discussion it must be remembered that the identification of birds seen and recorded from areas of sympatry between the two species has not been confirmed by examination in the hand.

Calls

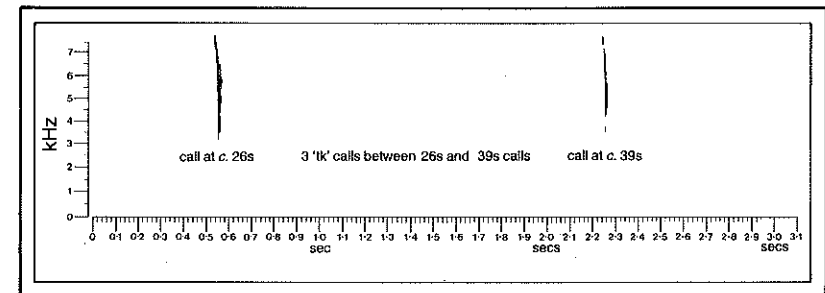
Tape-recordings and field observations indicate that both species give a very similar, if not identical, explosive sharp 'tsik' or 'tschik' (at least sometimes in alarm): see Figure 2. In addition, Pygmy gives a harsh, low-pitched 'chreew-chreew-chreew-chreew' (recordings from Malaya and Java).

Songs

Recordings from the Kathmandu Valley, Nepal, and Darjiling (north-east India) of Scaly-breasted Wren-Babbler reveal a fast, warbling song which is, as Baker (1922) indicated, reminiscent of a Northern Wren (see Figure 3). There does not seem to be geographical variation.

Recordings also indicate that the song of Pygmy Wren-Babbler is a distinctive, stereotyped high-pitched whistle. Though there is some variation, it is easily recognisable. The basic theme is 'see . . . saw' or perhaps better 'zee . . . zwee', repeated at fairly regular intervals; occasionally, just one of the notes may be given. The major variation on this theme is to insert a third note between the 'see' and the 'saw', to produce a

Figure 2. Call ('tsik' or 'tk') of Pygmy Wren-Babbler, West Java, 17 November 1984, recorded by A. B. van den Berg.



series of three notes, descending in pitch (somewhat reminiscent of the nursery rhyme 'Three Blind Mice'): see Figure 4.

The song has been found to vary as follows (I have no information from Flores or Timor, which may be of significance, since Vaurie [1954] considered the population on Timor to be the only one worthy of recognition as a separate subspecies):

area	no. of notes	source
Nepal	2	(Fleming <i>et al.</i> 1979)
	3	(J. Scharringa <i>in litt.</i>)
Darjiling	2	(tapes: S. C. Madge, B. King)
north-west Thailand	3	(pers. obs.)
Malaya	2, rarely 3	(pers. obs., tape: F. G. Rozendaal)
Java*	2 or 3	(tapes: B. van Balen, A. B. van den Berg)
Sumatra	3	(J. Scharringa <i>in litt.</i> , Robinson <i>et al.</i> 1924)

*In the Yang Highlands, East Java, the notes do not differ in pitch (B. van Balen *in litt.*).

In addition a fast, high-pitched cadence, 'tsi-zi-zi-zi-zi-zi-zi-zi-zi-zi-zi' is occasionally given by Pygmy (tape, Java), somewhat reminiscent of the song of a Willow Warbler *Phylloscopus trochilus*. (A high-pitched ascending trill, vaguely reminiscent of Black-and-yellow Broadbill *Eurylaimus ochromalus*, may also be attributable to Pygmy Wren-Babbler; tape, Malaya.)

The Taiwan wren-babbler

Ingram (1909), when describing *P. formosana*, considered it to be a subspecies allied to *P. albiventer*. Hartert and Steinbacher (1932-1938) listed it as *P. albiventer formosana* and Vaurie (1959) also apparently aligned it with *albiventer*. However, at some point in time there was a general shift towards treating it as a race of *pusilla*; the date and reasons for this have not been traced but Kinnear (in Ludlow and Kinnear 1937), Wynne (1956), Deignan (1964) and many subsequent authors have followed this treatment. What are the affinities of *formosana*?

The song of *formosana* is a fast strong warble, rather shorter but otherwise very similar to that of Scaly-breasted Wren-Babbler (tapes: Severinghaus and Scharringa): see Figure 5. All the populations of Pygmy Wren-Babbler for which information has been obtained possess a highly stereotyped song, despite a widespread distribution, encompassing several islands.

Two specimens of *formosana* were examined in the British Museum

(Natural History) and have the crown, mantle, and scapulars spotted with buff. Their throat is white, with small dark feather-centres and fine dark feather-fringes forming a finely scaled pattern. The feathers of the breast and belly are heavily marked with extensive dark centres and fine dark tips (the throat appears slightly paler in contrast, though still clearly scaled). Thus, in plumage pattern, *formosana* is closer to Scaly-breasted, only the scaled throat

Figure 3. Song of Scaly-breasted Wren-Babbler, Darjiling, 15 May 1989, recorded by J. Scharringa.

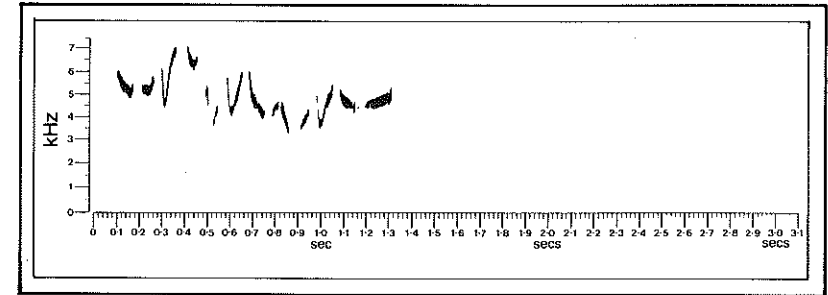


Figure 4. Song of Pygmy Wren-Babbler, north-west Thailand, 1 November 1984, recorded by A. B. van den Berg.

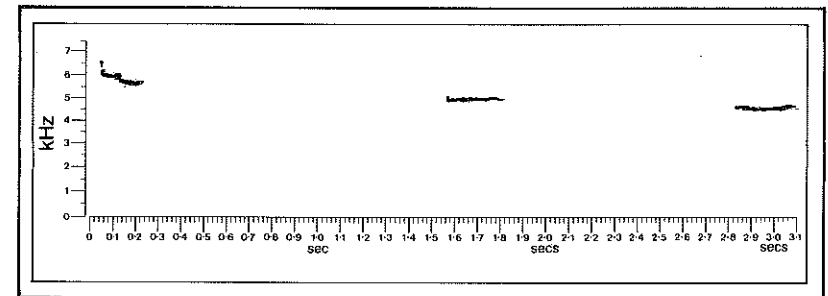
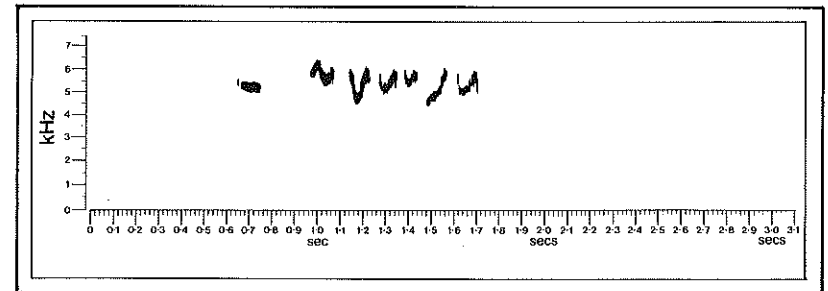


Figure 5. Song of Taiwan (= Scaly-breasted) Wren-Babbler, Taiwan, recorded by S. R. Severinghaus.



being anomalous (and even this may be found in some Scaly-breasted: see above).

The wings of the two British Museum specimens of *formosana* examined (not the type) measure 54 mm and 55 mm, whilst Hachisuka and Udagawa (1951) give a range of 48.5–53 mm and the type description gives c. 56 mm (Ingram 1909). In comparison, Scaly-breasted Wren-Babblers measure 57–65 mm (Stresemann and Heinrich 1940, Abdulali 1982, Ali and Ripley 1983, Cheng *et al.* 1987), and – discounting that on Mt Victoria (see below) – mainland populations of Pygmy 44–53 mm (subspecies *pusilla*, *annamensis*; Robinson and Kloss 1919, Baker 1922, La Touche 1925, Delacour and Jabouille 1930, Abdulali 1982, Ali and Ripley 1983, Cheng *et al.* 1987). Island populations of mainland species are often somewhat larger, so it is interesting to note that Pygmy Wren-Babblers on Sumatra measure 51–54 mm (subspecies *lepida*: Robinson *et al.* 1924), on Java 49–55 mm (subspecies *rufa*: Stresemann 1930, Kuroda 1933), on Flores 52–56 mm (subspecies *everetti*: Rothschild 1897, Rensch 1931), and on Timor 52–55 mm (subspecies *timorensis*: Mayr 1944), while the population isolated on the ecological ‘island’ of Mt Victoria in south-west Burma is the largest known mainland population at 48–55 mm (subspecies *pusilla*: Stresemann and Heinrich 1940). Despite the fact that all these measurements may not be strictly comparable (due to differences in measuring technique etc.), *formosana* is clearly smaller than Scaly-breasted Wren-Babblers from mainland Asia, and, whilst perhaps larger than Pygmy Wren-Babbler from the mainland, is certainly no larger than island populations of that species.

The nearest Scaly-breasted Wren-Babblers to Taiwan are c. 1,600 km distant, in north-west Viet Nam in the Fansipan mountains (specimens from around Cha Pa, Hoang Lien Son province, an area which supports several ‘Himalayan outpost’ species: Delacour and Greenway 1940). By contrast, Pygmy Wren-Babbler is widespread in southern China (see Figure 1), including mainland areas near to Taiwan. However, despite its distribution, the similarity of the plumage and, most importantly, the song of *formosana* to that of *albiventer* strongly suggests that, if it is not a monotypic species endemic to Taiwan, *formosana* should be treated as a subspecies of *albiventer*. A similarly disjunct distribution is shown by a number of other species, including Ruddy Kingfisher *Halcyon coromanda*, Plain Martin *Riparia paludicola*, White-browed Bush-Robin *Tarsiger indicus*, Vivid Niltava *Cyornis vivida*, Ferruginous Flycatcher *Muscicapra ferruginea* and Vinaceous Rosefinch *Carpodacus vinaceus*.

CONCLUSIONS

The wren-babbler I observed and heard singing in the Langtang Valley must have been Scaly-breasted which is thus, in central Nepal at least, found (presumably on territory) as low as 2,000 m in summer. The altitudinal

overlap of this species and Pygmy Wren-Babbler in the Himalayas is clarified as from 2,000 to 3,000 m.

The plumage criteria invoked by King *et al.* (1975) for distinguishing Scaly-breasted from Pygmy Wren-Babbler are unreliable. Whilst a wren-babbler *Pnoepyga* that is heavily spotted on the head and mantle can be confidently identified as Scaly-breasted, no other plumage feature can be considered consistently distinctive.

The songs of Pygmy and Scaly-breasted Wren-Babblers are distinctive, enabling a confident identification to be made; the calls are doubtfully distinguishable.

Extreme caution must be exercised when identifying these two wren-babblers in the field, and many past sight-records, unless supported by details of song, may be found unacceptable.

Despite the differences in size, the similarity of both plumage and vocalisations indicate that *formosana* is probably best treated as a race of *albiventer*.

Bas van Balen, Arnoud B. van den Berg, Steve Madge, Clive F. Mann, Frank Rozendaal, Jelle Scharringa and Sheldon R. Severinghaus very kindly responded to my appeal for tape-recordings of wren-babblers. The Library of Natural Sounds, Cornell Laboratory of Ornithology, supplied copies of recordings in their collection. My thanks to Ben King for his comments on the identification of the Langtang wren-babbler, and to Peter Colston, who arranged access to skins at the British Museum (Natural History). Rod Martins and Nigel Redman made valuable comments on the first draft of this note and Craig Robson commented on wren-babbler identification as well as tracing the Vietnamese record of *P. albiventer*. Tim Inskipp made many valuable comments in the final stages of preparation. Joan Hall-Craggs and William Seale very kindly prepared the sonagrams.

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Recent records of birds from Viet Nam

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NGUYEN CU and TRUONG VAN LA

From April to July 1988 a survey of forest birds at a selection of sites in Viet Nam, including proposed protected areas, was undertaken. Surveys were focused on threatened pheasants. The surveys provided information on the condition of Vietnamese forests and the status of forest birds. Information was gathered on Vietnamese Pheasant *Lophura hatinhensis* and Crested Argus *Rheinartia ocellata* and other little-known forest birds such as Red-collared Woodpecker *Picus rabieri*, Short-tailed Scimitar-Babbler *Jabouilleia danjoui*, Grey-faced Tit-Babbler *Macronous kelleyi* and White-winged Magpie *Urocissa whiteheadi*.

From late April to mid-July 1988 we took part in a survey of forest-dependent birds at a selection of sites in Viet Nam, including proposed protected areas. This survey, which was endorsed by the International Council for Bird Preservation, paid particular attention to threatened pheasants. The localities that we visited included Viet Nam's first national park, Cuc Phuong, and two newly proposed protected areas, Kon Cha Rang and Tam Dao. A wealth of information on the condition of Vietnamese forests and the status of forest birds was obtained. In particular, valuable information was gathered on Vietnamese Pheasant *Lophura hatinhensis* and Crested Argus *Rheinartia ocellata* (two globally threatened pheasants) and a number of little-known birds, some endemic to Viet Nam and Indochina, including Red-collared Woodpecker *Picus rabieri*, Short-tailed Scimitar-Babbler *Jabouilleia danjoui*, Grey-faced Tit-Babbler *Macronous kelleyi*, White-cheeked Laughingthrush *Garrulax vassali*, White-winged Magpie *Urocissa whiteheadi* and Ratchet-tailed Treepie *Temnurus temnurus*. The surveys concluded that Viet Nam holds the largest known population of Crested Argus in the world and that other species such as Bar-bellied Pitta *Pitta ellioti* (endemic to Indochina) are sufficiently common that they may be deleted from the ICBP World Checklist of Threatened Birds (Collar and Andrew 1988). A considerable number of new distributional records were made and information on these constitutes the main body of this paper.

REGIONS IN VIET NAM

Various authors have divided Viet Nam into ornithological regions. King *et al.* (1975) split the country into five regions following Delacour and Jabouille (1931). These regions, based on a combination of zoogeographical and political boundaries, have been modified by Vo Quy (1983). The regions put forward by Vo Quy are intended to follow stricter zoogeographical boundaries. For the purposes of this paper, when discussing new distributional information, we have first referred to the regions put forward