10 individuals, while 75% were represented by only 3 or fewer specimens. The near anecdotal approach in these studies is related to the scarcity of appropriate specimens in most museum collections and the difficulty of obtaining large numbers of individuals for natal pterylosis studies for all but some colonially nesting species (Clark 1967). Even so, the matter of intraspecific variation must receive more attention than it has to date before detailed interspecific comparisons can be made and their taxonomic implications evaluated.

Acknowledgements

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Behaviour and vocalizations of an undescribed Canastero *Asthenes* sp. from Brazil

by Mark Pearman

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The genus *Asthenes*, comprising some 21 species are largely terrestrially adapted members of the *Furnariidae*. They are found in a wide range of open and semi-open habitats from Andean and Patagonian steppe to marsh, chaco and pampa.

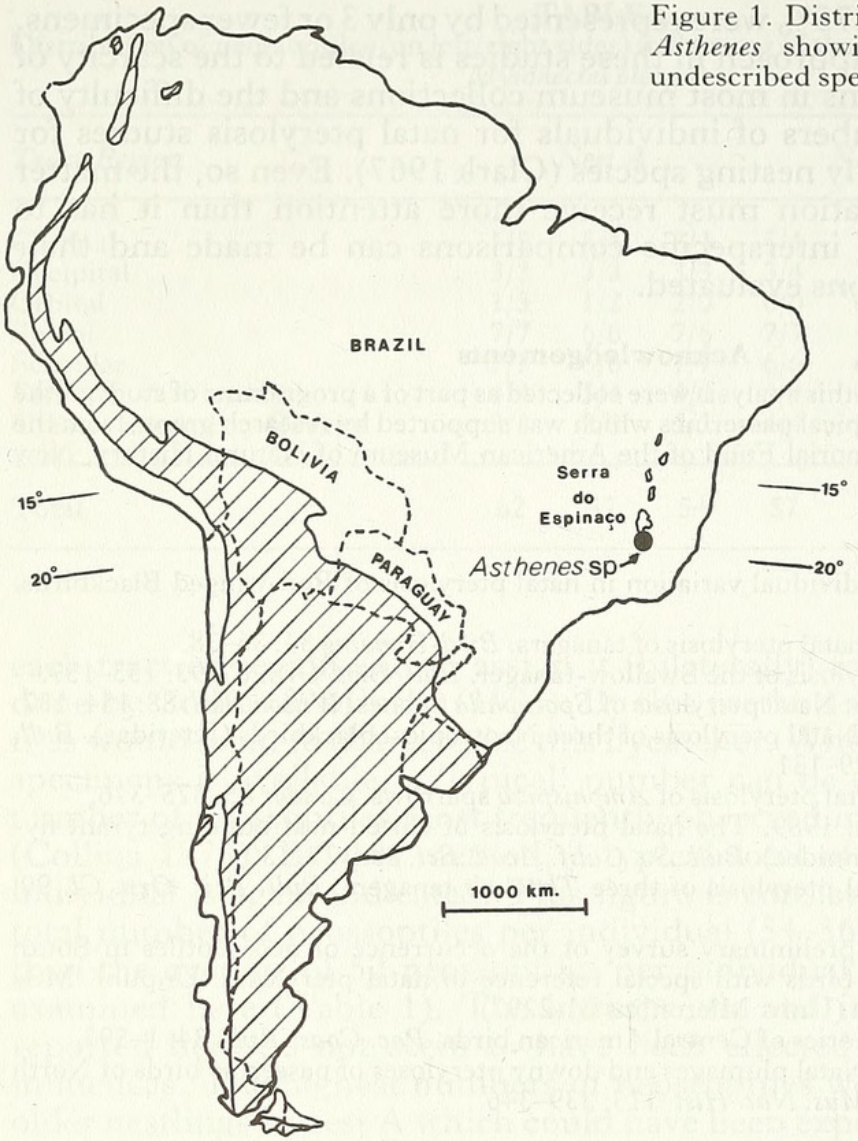

Figure 1. Distribution map of the genus *Asthenes* showing the location of the undescribed species.

On 13 August 1988, J. Hurrell and M.P. observed a *Furnariid* in Minas Gerais, Brazil which was immediately identified as an *Asthenes*. M.P. had had previous experience of the genus. Unbeknown to them, 2 other British observers S. Cook and B. Forrester had independently seen birds of the species a few weeks previously in the same area.

A. Brandt and B. Forrester have recently informed me that J. Vielliard had collected specimens in 1987, but a description is not pending until the last named has carried out further fieldwork. After carrying out extensive fieldwork personally in 1988 and 1989, and due to the long time lapse since the original discovery, lack of any information on the species in the literature and no definite forthcoming description, I feel there is a need to publish the present findings.

All the new *Asthenes* sp. were observed in a 10 km^2 area at Alto Boa Vista (19°17′S, 43°34′W), Serra do Cipó (in the Serra do Espinaço), Minas Gerais, Brazil between 1290 m and 1500 m altitude (Fig. 1). The area lies close to Pargue Nacional Serra do Cipó, but the species was not observed within the Park boundaries. The collecting of specimens was not possible.

Distribution of the genus *Asthenes*

The 21 species of *Asthenes* as currently recognized are further divided into 51 subspecies. Seventeen of the species can be described as exclusively Andean or sub-Andean and will not be dealt with further. Among the new *Asthenes* sp.'s nearest neighbours are those found in the Sierras de Cordoba, in central Argentina (c. 1950 km WSW), namely *A. sclateri sclateri,* the nominate race of Cordoba Canastero; *A. modesta cordobae,* an isolated race of Cordilleran Canastero; and *A. steinbachi neiffi,* a race of Chestnut Canastero. Both Patagonian Canastero *A. patagonica* and Austral Canastero *A. anthoides* can be found to the south and west of these isolates. *A. patagonica* is endemic to the central Argentine Patagonian scrub; *A. anthoides* is restricted to wet grasslands in the Andean foothills of southern Chile and Argentina and also occurs on Tierra del Fuego. The congeners closest in range to the new *Asthenes* sp. are Lesser Canastero *A. pyrrholeuca,* Short-billed Canastero *A. baeri* and Hudson's Canastero *A. hudsoni. A. pyrrholeuca* occupies extensive Patagonian scrub throughout southern Chile and Argentina, with movements to northeast Argentina and Uruguay, together with resident populations in northwest Argentine, south Bolivian and west Paraguayan chaco. *A. baeri* occurs throughout north and central Argentina, Uruguay, Rio Grande do Sul, Brazil and southern Paraguay. *A. hudsoni* is dependent on marshes and reedbeds in northeast Argentina, Uruguay and Rio Grande do Sul, Brazil. The new *Asthenes* sp. is separated from its geographically closest relative, *A. baeri,* by at least 1450 km to the southwest.

Field work

On 13 August 1988, one of the new *Asthenes* sp. was located and sound recordings made of its song and contact call. It was observed intermittently for a total of 3 hours and was seen down to a minimum of 3 m. A pair holding territory was studied on 14 August 1988 and detailed notes were taken in the field. Further study work of the genus was carried out at the British Museum (Natural History) a month later.

On a second visit to Serra do Cipó, J. Hurrell and M.P. found a maximum of 7 birds on 28 July 1989, using tape play back lure. All suitable habitat was covered over the 10 km^2 area, and additional information on plumage, vocalizations and behaviour collected. Sonagrams were made from the undescribed *Asthenes* sp. tapes, together with 6 of its congeners, at the British Library of Wildlife Sounds (National Sound Archive), London. Subspecies of species geographically closest to the Serra do Espinaço were chosen for comparison material.

The new *Asthenes* sp. is dependent on isolated groups of rocky crags in an area of undulating grassland. These hillocks, covered in boulders and brittle rock slabs were well weathered, providing numerous crevices. They supported a varied flora compared to the barren and open surrounding grassland. Vegetation identified included flowering shrubs: *Compositae, Vernomia* sp. and others, *Agave* sp., *Yucca* sp. and various cacti. Additionally, lichen was present on the rocks. The birds preferred the steepest slopes with the most vegetation and crevices (Plates 1, 2).

Description of the new *Asthenes* sp.

Forecrown and crown warm brown, sometimes with a hint of rufous, slightly warmer than rest of upperparts. Supercilium narrow, off white, from bill to behind eye, curving downwards around rear edge of ear coverts. Eyestripe brown, indistinct across lores, stronger behind eye, highlighting supercilium. Ear coverts grey brown, very finely streaked black (only visible at close range). Nape, mantle and rump brown with grey tones. Remiges chocolate brown with warm brown inner webs, tertials often with distinct pale grey fringes. Alula sometimes whitish. Rectrices graduated with rounded tips, central tail feathers dark brown, the rest rich chestnut rufous.

Chin and upper throat variable; in most individuals white, with fine, but sharply defined black streaks creating a triangular patch in centre. One singing male had a wholly black centre to chin and upper throat. One bird in fresh plumage, perhaps a first year, had streaking restricted to upper chin. Sides of throat, breast, belly and vent uniform cold grey.

Iris black. Bill relatively long for the genus, about three-quarters length of the head; upper mandible grey, tipped black, lower mandible black with grey basal third. Tarsi and feet dull flesh or grey.

Plumage comparison with other Asthenes *spp.*

The major plumage characteristics used in field identification of *Asthenes* spp. are the tail pattern, each showing specific amounts of rufous/cinnamon; the chin/throat pattern which is sometimes streaked, light to heavy, often with a chin spot, in colour pale orange to brick red; the presence or lack of streaking on the mantle; and the shape of the tail feathers, rounded or pointed.

Seven species share the combined features of pointed tail feathers and well streaked upperparts: *wyatti, anthoides, punensis, maculicauda, urubambensis, sclateri* and *hudsoni*. Of the 14 remaining species, 4 have streaked throats. The small in size *patagonica* is superficially similar to the new *Asthenes* sp., with streaked throat and ear coverts and a warmer brown crown, but it shows only the basal two-thirds of the outermost tail feathers rufous. *A. humilis* can show a rufous throat patch or streaking or both, but shows cinnamon on the outer tail feathers only. *A. humicola* shows dull rufous, at maximum, on the basal two-thirds of the outermost tail feathers. *A. steinbachi* usually shows dull rufous flanks and vent, the outer 2 tail feathers and outer web of the next tail feather rufous, limited chin and throat flecking and little or no supercilium.

Vocalizations

Singing birds of the new *Asthenes* sp. were typically territorial and used the highest and most exposed rock or bush from which to deliver their songs. Of 5 song study species, the structure of the new *Asthenes* sp. was similar only to nominate *A. dorbignyi*.

A. modesta modesta, A. wyatti graminicola, A. humilis robusta and *A. baeri baeri* typically deliver either glissando or vibrato songs (Fig. 2A,B),

a rapid series of sharp liquid notes, rising or varying in pitch, in bursts of 1.5–4 seconds, in the 1.5–7.5 KHz range. *A. b. baeri* typically delivers audibly separate notes which develop into a descending vibrato in the 2.7–7.5 KHz range, incorporating 50–66 notes and lasting 4 seconds.

The new *Asthenes* sp. typically sings 11 descending notes in 3.1 seconds. The first 8 notes are loud and sharp with piercing quality in the 4.3–5 KHz range. They are followed by 3 contrasting low pitch notes at 0.2 KHz, together with harmonies peaking at 4.3 KHz (Fig. 2C).

A. d. dorbignyi shows a more complex song repertoire, but the main component is structurally similar to the new *Asthenes* sp. There is some geographical variation. The usual song is a series of 14 notes descending in 3.4 seconds in the 3.8–4.8 KHz range, typically showing strong harmonies on the ultimate 4 notes, peaking at 7 KHz (Fig. 2D). Other *A. d. dorbignyi* song phrases, usually given before the main song, include a series of high pitch, low pitch notes, a short burst of rapid trill, rising in pitch and running into the song or, in a study tape from La Paz, Bolivia, a phrase of 16 harsh, scolding notes in the 4.2–5.6 KHz range with harmonies on every note in the 3.6–6.5 KHz range (Fig. 2E). La Paz individuals also gave the typical song phrase.

From sonagraphic comparison of nominate *dorbignyi* in Cochabamba and La Paz with the new *Asthenes* sp. at Serra do Cipó, several interesting facts emerge. The highest altitude birds (*dorbignyi* at La Paz—3200 m) sang fastest, at 16 notes per second; at Cochabamba (2950 m), *dorbignyi* delivered 14 notes per second; whereas the new *Asthenes* sp. at Serra do Cipó (1500 m) sang only 11 notes in 3.1 seconds.

Although geographical song variation in *dorbignyi* appears to invalidate comparisons, the significant difference in songs between that species and the new *Asthenes* sp. is the pitch. Whereas *dorbignyi* at La Paz and Cochabamba showed a pitch variation of 1.4 KHz and 1 kHz respectively, the new *Asthenes* sp. showed a pitch variation of 4.8 KHz.

Taped calls of 4 study species (*A. d. dorbignyi, A. wyatti graminicola, A. humilis robusta* and *A. pyrrholeuca flavigularis*) showed the contact call of the new *Asthenes* sp. was not similar in structure or sound. The contact call of nominate *dorbignyi* is a rising piercing "*shreep*" note in the 3.2–6.2 KHz range at 2.7 second intervals (Fig. 3F). *A. wyatti graminicola* calls a series of "*tick*" and "*took*" notes in the 3.1–6.9 KHz range (Fig. 3G). *A. humilis robusta* calls in bursts of churring notes, lasting typically c. 20 m. seconds, given in pairs or triplets in the 3.5–5.5 KHz range (Fig. 3H). *A. pyrrholeuca flavigularis* has a rising "*swiip*" contact note at 0.6–0.8 second intervals in the 2.4–7.1 KHz range (Fig. 3I).

The contact call of the new *Asthenes* sp. can be described as a high-pitched "*jlit*", with a metallic quality, and repeated at 2 second intervals (Fig. 3J). An enlarged sonagram shows that the 3 components vary from 4663–6163 Hz in 130.2 m. seconds (Fig. 3K). To the human ear however, it sounds like a 2 syllable note.

Contact calls in the genus *Asthenes* appear to be constant, without geographical variation. Sonagraphic comparison with 4 *Asthenes* spp. contact calls appear to indicate that the new *Asthenes* sp. has a very distinct call.

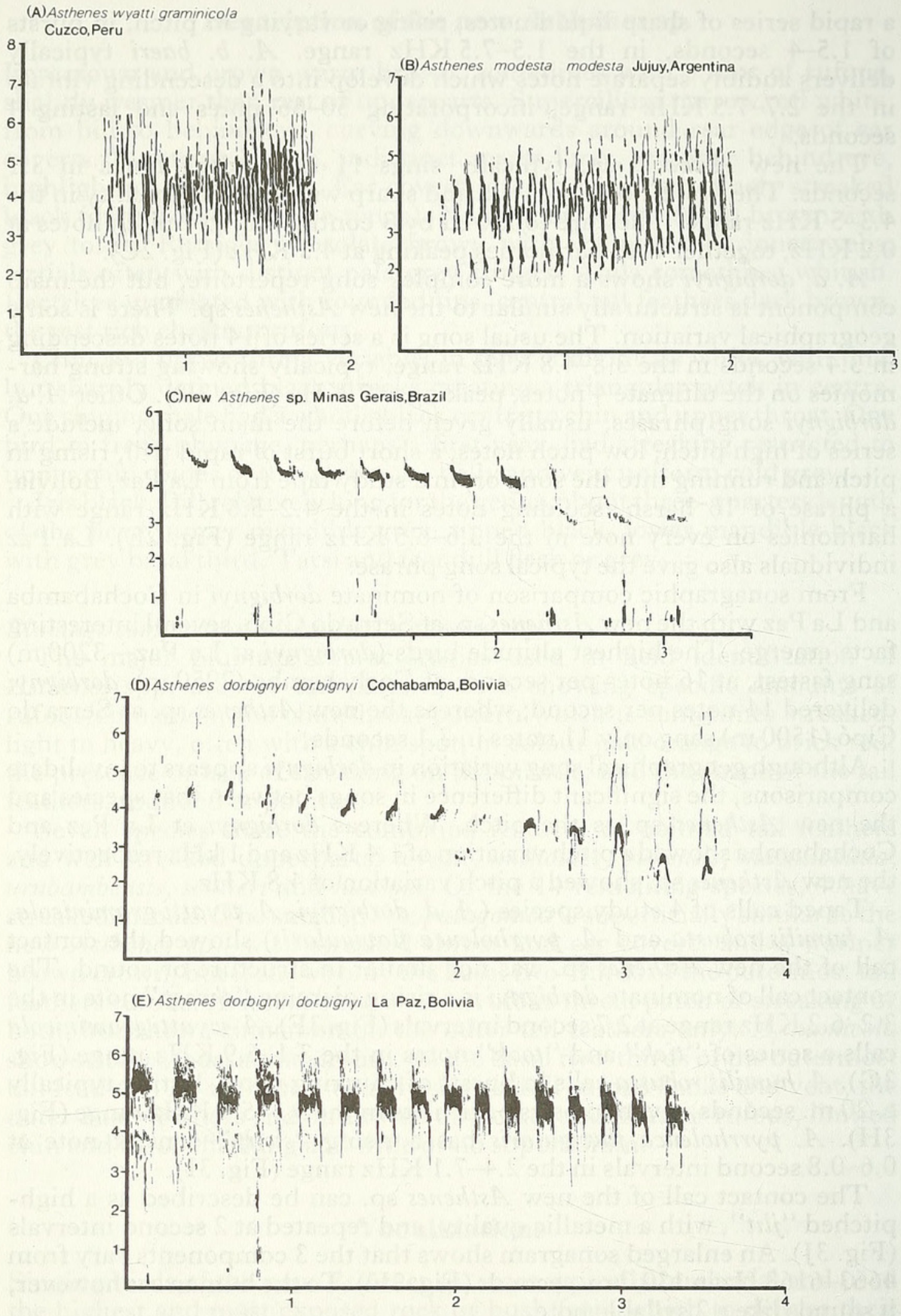

Figure 2. Sonagrams (in the 300 Hz bandwidth) of songs (A–E) of the new *Asthenes* sp. and other species in the genus *Asthenes*. Compare especially the new *Asthenes* sp. (C) with that of *A. d. dorbignyi* (D).
Vertical scale = Frequency (KHz). Horizontal scale = Time (seconds). Tapes (A,B,D,E) by N. Krabbe, (C) by M. Pearman. Sonagrams by R. Ranft, reproduced by M.P.

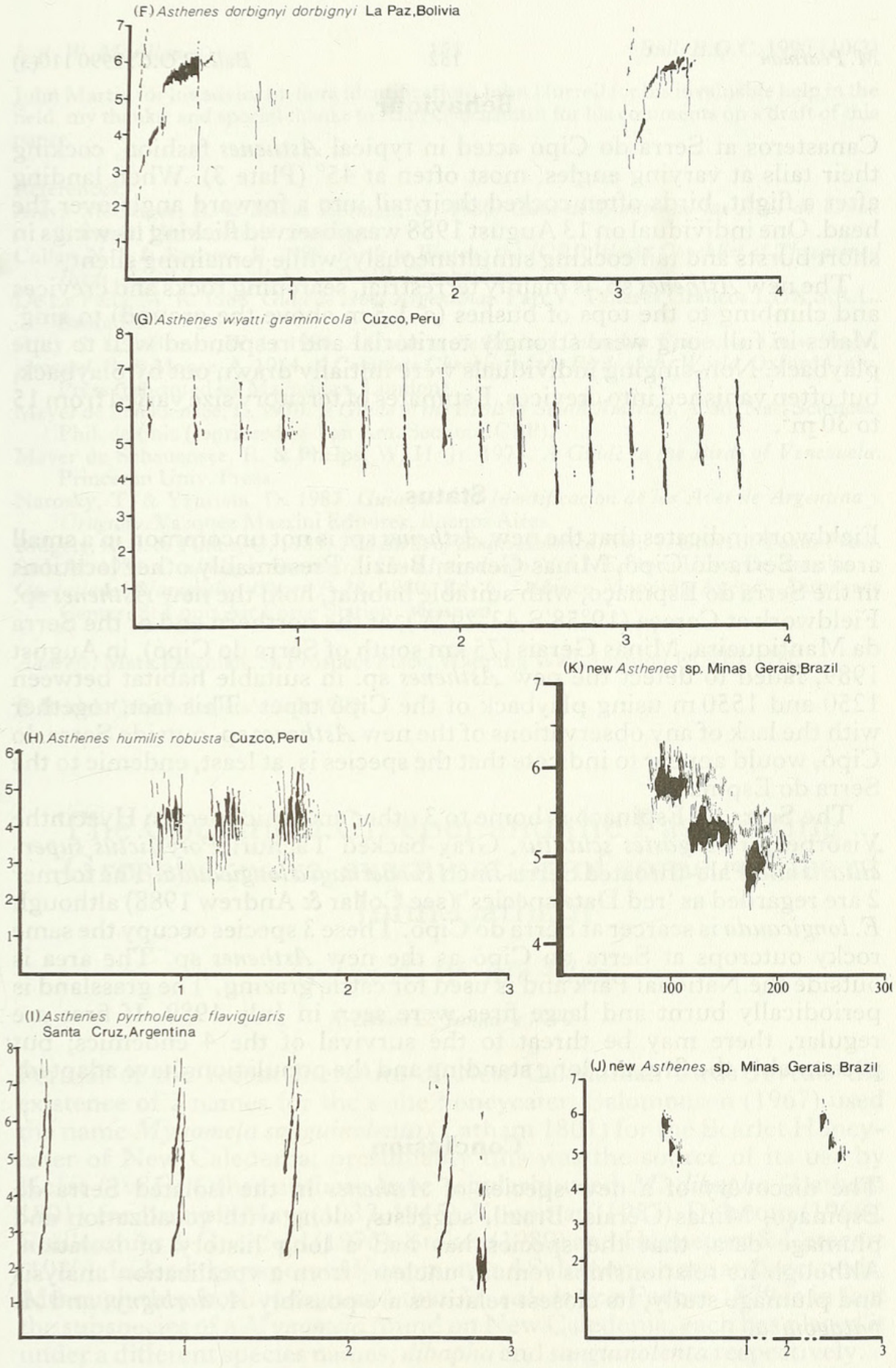

Figure 3. Sonagrams (in the 300 Hz bandwidth) of contact calls (F–K) of the new *Asthenes* sp. and other species in the genus *Asthenes*. The single call note at the end, in the 1.2–4.4 KHz range, on sonagram (I), is from a Long-tailed Meadowlark *Sturnella loyca*. Compare contact call of the new *Asthenes* sp. (J,K) with those of 4 other species in the genus *Asthenes* (F,G,H,I).

Vertical scale = Frequency (KHz). Horizontal scale on (F,G,H,I,J) = Time (seconds), and on (K) = Time (m.seconds). Tapes (F,G,H,I) by N. Krabbe, (J,K) by M. Pearman. Sonagrams by R. Ranft, reproduced by M.P.

Behaviour

Canasteros at Serra do Cipó acted in typical *Asthenes* fashion, cocking their tails at varying angles, most often at 45° (Plate 3). When landing after a flight, birds often cocked their tail into a forward angle over the head. One individual on 13 August 1988 was observed flicking its wings in short bursts and tail cocking simultaneously, while remaining silent.

The new *Asthenes* sp. is mainly terrestrial, searching rocks and crevices and climbing to the tops of bushes (c. 1.5 m above the ground) to sing. Males in full song were strongly territorial and responded well to tape playback. Non-singing individuals were initially drawn out by playback, but often vanished into crevices. Estimates of territory size varied from 15 to 30 m^2.

Status

Fieldwork indicates that the new *Asthenes* sp. is not uncommon in a small area at Serra do Cipó, Minas Gerais, Brazil. Presumably other locations in the Serra do Espinaço, with suitable habitat, hold the new *Asthenes* sp. Fieldwork at Caraça (19°58′S,43°29′W), at the northern end of the Serra da Mantiqueira, Minas Gerais (75 km south of Serra do Cipó), in August 1989, failed to detect the new *Asthenes* sp. in suitable habitat between 1250 and 1550 m using playback of the Cipó tapes. This fact, together with the lack of any observations of the new *Asthenes* sp. outside Serra do Cipó, would appear to indicate that the species is, at least, endemic to the Serra do Espinaço.

The Serra do Espinaço is home to 3 other endemic species: Hyacinthe Visorbearer *Augastes scutatus,* Gray-backed Tachuri *Polystictus superciliaris* and Pale-throated Serra-finch *Embernagra longicauda*. The former 2 are regarded as 'red Data species' (see Collar & Andrew 1988) although *E. longicauda* is scarcer at Serra do Cipó. These 3 species occupy the same rocky outcrops at Serra do Cipó as the new *Asthenes* sp. The area is outside the National Park and is used for cattle grazing. The grassland is periodically burnt and large fires were seen in July 1989. If fires are regular, there may be threat to the survival of the 4 endemics; but presumably the fires are long standing and the populations have adapted.

Conclusion

The discovery of a new species of *Asthenes* in the isolated Serra do Espinaço, Minas Gerais, Brazil, suggests, along with vocalization and plumage data, that the species has had a long history of isolation. Although its relationships remain unclear, from a vocalization analysis and plumage study, its closest relatives are possibly *A. dorbignyi* and *A. patagonica*.

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The Cochineal Creeper and the Fascinating Grosbeak: a re-examination of some names of John Latham

by Ian A. W. McAllan

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Perusal of the recent literature of New Caledonian birds reveals the existence of 2 names for the same honeyeater. Salomonsen (1967) used the name *Myzomela sanguinolenta* (Latham 1801) for the Scarlet Honeyeater of New Caledonia; presumably this was the source of its use by Keast (1985). Other authors have regularly used *M. dibapha* (Latham 1801), for example Mayr (1932, 1945), Koopman (1957), Delacour (1966), Vuilleumier & Gochfeld (1976), Stokes (1980) and Hannecart & Letocart (1980). Indeed the papers of Koopman and Salomonsen are at direct odds. Although they both recognized that *M. caledonica* Forbes 1879 is in fact the subspecies of a *Myzomela* found on New Caledonia, each has placed it under a different species names, *dibapha* and *sanguinolenta* respectively.

Wallacean birds in the *sanguinolenta*/*dibapha* grouping have either been placed in *dibapha* (e.g. Mathews 1930), *sanguinolenta* (e.g. Watling 1983, White & Bruce 1986), separated as a single allospecies *M. boiei* (S. Müller 1843) (e.g. Wolters 1982) or split into 3 allospecific groupings