

Splits, lumps and shuffles

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This series focuses on recent taxonomic proposals—be they entirely new species, splits, lumps or reorganisations—that are likely to be of greatest interest to birders. This latest instalment summarises papers relating to an Amazon parrot, a woodcreeper, a tapaculo (shock surprise!), a warbler and the usual medley of antbirds and ovenbirds. Get your lists out!

Splitting Amazons

Wenner *et al.* (2012) recently published a study investigating genetic variation in the five subspecies of Mealy Parrot *Amazona farinosa*. Their multilocus DNA analyses revealed two reciprocally monophyletic groups (i.e. in which all members of a lineage share a more recent common ancestor with each other than with any other lineage on a phylogenetic tree): one comprising all three South American subspecies *farinosa*, *chapmani*, and *inornata* and the other the two Central American subspecies *guatemalae* and *virenticeps*, with an estimated divergence time of 1.75–2.70 million years ago. The authors suggest that the two groups (formerly regarded as separate species) should be re-split, and be subject to independent conservation management. They also recommend the recognition of two separate management units within the South American clade. The Central American group does not have favourable conservation status and is under threat from habitat loss and trafficking, so perhaps species status will speed up conservation efforts?

Driving a wedge between *Glyphorhynchus* taxa

The Wedge-billed Woodcreeper *Glyphorhynchus spirurus* is one of the commonest inhabitants of Neotropical forests, occupying a wide distribution from Central America, east to the Andes, throughout Amazonia, and south along the Atlantic coast of Brazil. The most recent review of its taxonomy recognised thirteen subspecies (Marantz *et al.* 2003), but this number has been in a fairly constant state of flux. A German and Brazilian team (Fernandes *et al.* 2012) reconstructed the phylogeography of the Wedge-bill in the Amazon basin, sampling 134 individuals from 63 sites, distributed in eight Amazonian areas

of endemism. As we have become accustomed to expect from investigation of polyphyletic Amazonian species, they found allopatric and well-supported lineages within *G. spirurus* with high levels of genetic differentiation (0.9–6.3%) across opposite banks of major Amazonian rivers. They found that only half (of 16) lineages were formally recognised taxonomically, which indicates that there are likely to be multiple cryptic taxa and therefore an urgent need for a profound taxonomic revision. Their cytochrome b and expanded mtDNA phylogeny supported the reciprocal monophyly of the following named subspecies (which fit the definition of species under various evolutionary and lineage-based species concepts): 1) Guiana (*G. [s.] spirurus*); 2) Imeri (*G. [s.] ruficularis*); 3) Rondônia 4 (*G. [s.] inornatus*); 4) Inambari (*G. [s.] albigularis*); 5) Pará (*G. [s.] paraensis*); and Atlantic Forest (*G. [s.] cuneatus*); this in addition to 10 additional reciprocally monophyletic mtDNA lineages of *G. spirurus* which could be accorded phylogenetic species status, but are for the time being unnamed. However, the authors note that when a multilocus species tree is considered, an overall low statistical support for the mtDNA clades is obtained (perhaps a better reflection of biological species) which would recognise only three species among the Cis-Andean taxa as follows: 1) *G. spirurus* of the Guiana, Inambari, Imeri, and Napo areas of endemism; 2) *G. inornatus* of Rondônia and Pará; and an undescribed taxon from Rondônia. We await a more detailed morphological and vocal study...

A new cinclodes from south-east Brazil

The Long-tailed Cinclodes *Cinclodes pabsti* is a relict that is endemic to the Serra Geral in the extreme south of Brazil (in the states of Rio



Clockwise from top

Mealy Parrot *Amazona farinosa*, Paragominas, PA, Brazil, August 2010 (A. C. Lees)

Wedge-billed Woodcreeper *Glyphorhynchus spirurus*, Alta Floresta, MT, Brazil, May 2004 (A. C. Lees)

Wedge-billed Woodcreeper *Glyphorhynchus spirurus*, Los Amigos, Peru, November 2007 (Joe Tobias)



Clockwise from top left

Cipo Cinclodes *Cinclodes espinhacensis*, Lapinha da Serra, MG, Brazil, October 2012 (Flavio Guglielmino)

Long-tailed Cinclodes *Cinclodes pabsti*, Bom Jardim da Serra, SC, Brazil, November 2011 (Julio C. Silveira)

Tawny-throated Leaf Tosser *Sclerurus mexicanus*, Paragominas, PA, Brazil, May 2011 (A. C. Lees)

(Inset) Tawny-throated Leaf Tosser *Sclerurus mexicanus*, Padilla, Bolivia, March 2005 (Joe Tobias)

Grande do Sul and Santa Catarina). Thus, the recent discovery of a population of phenotypically similar birds at high elevation in the Parque Nacional Serra do Cipó, Minas Gerais more than 1000 km to the north instantly raised taxonomic eyebrows. Freitas *et al.* (2012) took up the challenge to reveal the taxonomic position and evolutionary history of this disjunct population. A thorough analysis of morphological, vocal and genetic characters supported the designation of a new taxon that they named Cipo Cinclodes *Cinclodes espinhacensis*. Field birders will want to know that the species is readily distinguishable from *C. pabsti* by its darker back, chest and flanks, lighter build, shorter legs, coupled with lower frequency of vocalisations, and longer duration of calls. DNA sequence data suggest that the taxon diverged from its sister around 220,000 years ago, during the late Pleistocene. The Espinhaço Range is dominated by *campos rupestres* above 900 m, quartzite rocky outcrops which play host a large number of endemic plants and animals, some of which have biogeographical affinities to taxa in other mountains and cold environments in South America. Given the new species' restricted range, the authors suggest it meets IUCN Red List criteria that would lead to it being classified as Endangered.

Rufous-capped Spinetail taxonomy revisited

Brazilian populations of Rufous-capped Spinetail *Synallaxis ruficapilla* have generated more than their fair share of taxonomic headaches. The species was first split by Pinto (1950), who noticed plumage differences between Pernambuco specimens and those from populations further south; he named the former *S. r. infuscata*, a taxon later elevated to specific status as the now endangered Pinto's Spinetail. Subsequently, Pacheco and Gonzaga (1995) described a new species Bahia Spinetail *S. whitneyi* from Boa Nova, Bahia. The latter was asserted to be intermediate in colour between *S. infuscata* and *S. ruficapilla* and with different vocalisations. *S. whitneyi* was subsequently synonymized by Whitney and Pacheco (2001), only for Stopiglia and Raposo (2006) to then defend the legitimacy of *S. whitneyi* once again. Given this taxonomic confusion (partly of their own making), Stopiglia *et al.* (2013) set out to re-evaluate the *ruficapilla* group using a comprehensive morphological and vocal analysis. They found that *S. ruficapilla* exhibited complex

geographic variation in morphology, showing that only *S. ruficapilla* and *S. infuscata* can be considered valid species and that *S. whitneyi* is indeed a synonym of *S. ruficapilla*. As an afterthought the authors also draw attention to ongoing work on a taxonomic conundrum provided by a 'Rufous-capped' type spinetail that actually occurs widely in Southern Amazonia—the so called 'Mato Grosso Spinetail', *Synallaxis aff. cabanisi* which they point out is closer in affinities to McConnell's Spinetail *S. macconnelli* with which it shares ten tail feathers. It's not exactly a secret that this taxon will be the subject of a future publication...

A phylogenetic overhaul of the Leaflossers

The Leaflossers, genus *Sclerurus* are a widely distributed group of six species of morphologically conservative, understorey leaflitter specialists. With populations dissected by the major biogeographical barriers of the Neotropics, this combination of features makes *Sclerurus* a prime candidate for harbouring cryptic species, and thus an obvious choice for a genetic study. d'Horta *et al.* (2012) took up the torch and reconstructed leaflosser evolutionary history (including all species and 20 of 26 recognised subspecies) using one autosomal nuclear locus and three protein-coding mitochondrial gene sequences. They found all species to be monophyletic except Tawny-throated Leaflosser *Sclerurus mexicanus*, which was paraphyletic in relation to Short-billed *Sclerurus ruficularis* and for the sister pair Rufous-breasted *Sclerurus scansor* / Grey-throated Leaflosser *Sclerurus albigularis*, which were found not to be reciprocally monophyletic in the nuclear tree. All species were characterised by deep phylogeographical structure, broadly congruent with currently recognised subspecies and areas of endemism. The authors recommend splitting the polytypic Tawny-throated Leaflosser into five species: (1) *Sclerurus mexicanus* of Central America and incorporating *S. m. pullus*; (2) *Sclerurus obscurior* of the Chocó lowlands of Ecuador and Colombia; (3) *Sclerurus andinus* of the humid Andean slopes of west Ecuador, Colombia and west Venezuela; (4) *Sclerurus macconnelli* of the Amazonian lowlands and Atlantic forest including *bahiae* (for now!) and finally (5) *Sclerurus peruvianus* of the east Andean foothills from Bolivia to east Colombia.

Rhopias, a new home for Star-throated Antwren

That *Myrmotherula* is polyphyletic is old news; after *Epinecrophylla* for the 'stipple-throated group' (Isler *et al.* 2006) came *Isleria* (Bravo *et al.* 2012a), dealt with in the last *Splits, lumps, shuffles* (Lees 2012). The next quantitative attack on one of the most speciose bird genera comes in the form of an investigation of the taxonomic placement of Star-throated Antwren *M. gularis*, a Brazilian Atlantic forest endemic. Belmonte-Lopes *et al.* (2012) integrated a molecular phylogeny with morphometric information and ancestral reconstruction of syringeal character states to explore the taxon's phylogenetic affinities. They showed that *M. gularis* is not closely related to any member of the *Myrmotherula* group, but its relationships within the *Thamnophilidae* remain uncertain because of the lack of phylogenetic resolution at the base of the tribe. The syrinx of *M. gularis* shares a derived character state with several large antshrike genera (e.g. *Taraba*, *Hypodaleus* and *Mackenziaena*) and given this phylogenetic and morphological distinctiveness they reinstated the old generic name *Rhopias* for *gularis*.

Long-tailed Antbird is carved up into four species

The Long-tailed Antbird *Drymophila caudata* is unique among antbirds in its lengthy but fragmented latitudinal range that extends from coastal mountains in Venezuela through the Andes to northern Bolivia over a wide of habitats and elevations. As a general rule, Andean birds with linear and fragmented distributions exhibit marked geographic variation in plumage patterns but Long-tailed Antbirds break this pattern, as plumage differences among populations of *D. caudata* are subtle and confounded by individual variation. Although eight subspecies have been described, half have later been synonymized. Perennial antbird splitters, Isler *et al.* (2012) took up the challenge to elucidate the group's taxonomy using a multifaceted approach that started by examining mtDNA between regions and then defining study groups within them to take into account previously described plumage differences. These lineages were then subject to the Islers 'own-brand' of established taxonomic 'yardsticks' for thamnophilids and they finished by taking into consideration the ecology of the regions in which they occur. They found substantial diversification

that they deemed sufficient for the recognition of four species: three found only in the north and one widespread along the main body of the Andes extending from north-western Colombia south to Bolivia. The authors propose the following names for new species within the complex (note they drop the use of 'Long-tailed' almost across the board: 1) Klages's Antbird *Drymophila klagesi* from east and north Venezuela, Serranía de Perijá, and the north-east Andes in Norte de Santander, Colombia (including the subspecies *klagesi*, *aristeguietana*); 2) Santa Marta Antbird *Drymophila hellmayri* from the Sierra Nevada de Santa Marta, Colombia; 3) Long-tailed Antbird *Drymophila caudata* in the east Andes from Santander (west of the Chicamocha Canyon) to Caquetá and Huila, Colombia, and 4) Streak-headed Antbird *Drymophila striaticeps* of the west and central Andes of Colombia south through Ecuador (both slopes) and Peru (eastern slope) to north-west Bolivia in La Paz (including the subspecies *striaticeps*, *occidentalis*, *peruviana*, and *boliviana*. Next up, Striated Antbird *D. striata*...?

A new genus for the Atlantic Forest 'Terenura' antwrens

The *Terenura* are a rather heterogenous group of six canopy antwrens that can be broadly divided into two phenotypic groups. The 'streaked-headed' group that consists of Streak-capped Antwren *T. maculata* and the threatened Orange-bellied Antwren *T. sicki* are restricted to the Atlantic Forest, while the 'standard' *Terenura* comprise the remaining four species found through much of Amazonia and mid-elevations in the Andes and southern Central American mountains. Bravo *et al.* (2012b) visited this candidate taxonomic reshuffle with a molecular and ecomorphological analysis, and were able to demonstrate that the genus *Terenura* is polyphyletic because all the 'standard' *Terenuras* are phylogenetically distant from the type species of the genus, *Terenura maculata*. There had been some fairly loud whispers from field ornithologists to this extent for some time, but more exciting a revelation was the fact that these four ex-*Terenuras* were not particularly closely related to any other antbirds and are sister to all other members of the family. The authors describe the genus *Euchrepomis* for *callinota*, *humeralis*, *spodioptila*, and *sharpei*, the name reflecting the unique bright yellow or orange-rufous lesser secondary coverts of males of the group. Given the phylogenetic distinctness of

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Clockwise from top left

Long-tailed Antbird *Drymophila caudata klagesi*, Las Melenas, Paria Peninsula, Venezuela, May 2007 (Joe Tobias)

Long-tailed Antbird *Drymophila caudata*, Abra Patricia, Peru, January 2008 (Joe Tobias)

Rufous-rumped Antwren *Terenura callinota* male, Abra Patricia, Amazonas, Peru, January 2008 (Joe Tobias)

Streak-capped Antwren *Terenura maculata*, PARNA Itatiaia, RJ, Brazil, March 2012 (Marco Cruz)

Ash-winged Antwren *Terenura spodioptila* male, Manaus, Amazonas, Brazil, April 2009 (Joe Tobias)



Clockwise from top

Orange-bellied Antwren *Terenura sicki* male, RPPN Frei Caneca, Jaqueira, Pernambuco, Brazil, November 2012 (A. C. Lees)

Orange-bellied Antwren *Terenura sicki* female, RPPN Frei Caneca, Jaqueira, PB, Brazil, November 2012 (A. C. Lees)

Kinglet *Calyptura Calyptura cristata*, RJ, Brazil, collected by P. L. Sclater (A. C. Lees, copyright BMNH Tring)

Mouse-coloured Tapaculo *Scytalopus speluncae*, São Francisco de Paula, RS, Brazil April 2012 (A. C. Lees)



Euchrepomis they also erected its own subfamily, the Euchrepomidae: a game-changer for scramble.

Kinglet *Calyptura* is a tyrant-flycatcher

Kinglet *Calyptura* *Calyptura cristata* remains one of the greatest prizes in Neotropical Ornithology, a tiny avian mystery that has stubbornly resisted both its rediscovery (assuming it is still extant) and classification. Since Sclater (1888) the *Calyptura* has been placed in the Cotingidae (based solely on its pycnaspidean tarsus), but associated with genera (e.g. the *Iodopleura* purpletufts) that are now known not to be cotingas either... Enter Ohlson *et al.* (2012) who have used molecular toolkits to try and put the mystery of its phylogenetic position to bed. They used sequence data from four nuclear markers extracted from a 180-year-old museum study skin of *Calyptura*, and compared these against a raft of potential sister taxa amidst the tyrant flycatchers, cotingas, manakins and allies. Incredibly (well, is there anything that isn't incredible about this bird?) their analyses placed *Calyptura* next to the *Platyrrinchus* spadebills and Cinnamon Tyrant-manakin *Neopipo cinnamomea* and along a deep branch in the clade containing the Rhynchocyclidae (tody tyrants and flatbills) and Tyrannidae (the remaining tyrant flycatchers). This DNA extraction was on its own something of a record breaker: extracting DNA from 30 year old study skins is difficult enough, but as access to ancient DNA lab technology improves then we can no doubt look forward to more surprises.

Brazilian tapaculo argument rumbles on

Regular readers may be aware of a long-running debate on the type locality and identity of the holotype of the southeast Brazilian endemic Mouse-coloured Tapaculo *Scytalopus speluncae*. The last development we covered was Maurício *et al.* (2010) recommendation to substitute a new type locality, the Serra dos Órgãos, for *S. speluncae* (based predominantly on an analysis of photographs of the holotype). This appeared in conjunction with the description of a new species, *Scytalopus petrophilus*, which included as a paratype a specimen from the original *speluncae* type locality (Whitney *et al.* 2010). Enter Raposo *et al.* (2012) who come out with a series of arguments that these treatments were in error. They argue

that the specimens of the original collector—Ménétriés—came from a well-known limestone cave in the region of São João del Rei (Minas Gerais) on 7 June 1824. They further reason that *S. speluncae* is the name applicable to the paler grey species with buff-fringed blackish feathers on the flanks, thighs, vent and upper tail coverts and that *S. petrophilus* must be a junior synonym of *S. speluncae*. They further dismiss the argument of Maurício *et al.* as based on an unrepresentative translation and consequently their morphological analysis as incomplete, contradictory or misleading. Still, it seems unlikely that this will be the last word on the matter...

Ergaticus warbler taxonomy

The warbler genus *Ergaticus* is restricted to Central American montane forests and displays low morphological variability. It is currently composed of two species: the Red Warbler *E. ruber*, of Chiapas in south-east Mexico to west Guatemala and the Pink-headed Warbler *E. versicolor* of central and west Mexico. Past molecular analyses have indicated that they form a cohesive monophyletic group, closely related to the Red-faced Warbler *Cardellina rubrifrons*. Barrera-Guzmán *et al.* (2012) investigated the phylogenetic relationships within *Ergaticus* and found that levels of mtDNA genetic differentiation and structure in the *Ergaticus* complex pointed to the presence of four main divergent lineages congruent with five montane regions of Middle America. Not unsurprisingly the existing species-level split was well-supported, but their results also indicated that species limits needed to be re-evaluated for *E. ruber* as the three divergent Mexican mtDNA lineages found may represent distinct evolutionary entities. They were unable to assign the recognized subspecies *E. r. rowleyi* and *E. r. ruber* two of the clades and assert that additional analyses of phenotypic traits would be required to address this question. However, they consider that *E. r. melanauris* may represent a separate species (based on both genetic and phenotypic divergence), as had been previously suggested by Navarro-Sigüenza and Peterson (2004).

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