

# Splits, lumps and shuffles

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This series focuses on recent taxonomic proposals – descriptions of new taxa, splits, lumps or reorganisations – that are likely to be of greatest interest to birders. This latest instalment includes: the lump of Chaco Tinamou (and perhaps Amazonian Swift as well); proposed splits in Band-rumped Swift, Rusty-breasted Antpitta, Long-billed Gnatwren, Tropical Gnatcatcher and Red-throated Ant-tanager; a stunning new species of hillstar hummingbird; and a final (?) twist to the saga of the Bogota Sunangel.

## Ciao, Chaco Tinamou

**S**potted Nothura *Nothura maculosa* is a common and widespread tinamou, with a distribution that extends from northeastern Brazil south to central Argentina. At least eight subspecies are recognised, although these do not differ greatly amongst themselves: generally, however, populations are smaller and darker in the northern part of the range, and become larger and paler farther south. An area in western Paraguay,

just to the west of the range of Spotted Nothura, has been considered the home of a closely related species, Chaco Nothura *N. chacoensis*. The status of Chaco Nothura never has been clear, however, even to the experts. After all, it originally was described as a subspecies of Spotted Nothura (Conover 1937), although Conover later (Conover 1950) elevated it to species rank, on the assumption that its range meets or “may slightly overlap” that of Spotted. Conover’s suggestion of sympatry between Chaco and Spotted nothuras

**1** Spotted Nothura *Nothura maculosa*, Anisacate, Córdoba, Argentina, June 2018 (Gerardo Serra). Paraguay’s sole endemic bird (‘Chaco Nothura’) bites the dust.



was shy on detail, but nonetheless was sufficient for most authorities to accept Chaco as a full species. Eventually, however, chinks in this notion started to appear. For example, Porzecanski (2003) found no diagnostic morphological or genetic differences between Chaco and Spotted nothuras. Most recently, Hayes *et al.* (2018) conducted an exhaustive review of the specimen evidence, finding no confirmation of sympatry, but they did confirm evidence of overlap in plumage. Tellingly, they also recorded vocalisations of nothuras from within the 'core' range of Chaco, and detected no differences from the song of Spotted. The inevitable conclusion is that Conover had it right the first time, when he considered *chacoensis* to be only a subspecies of Spotted Nothura. Lumps are rare these days, of course, but they do still happen!

## Still sorting out the swifts

Neotropical swifts have posed many challenges over the years. Plumage differences often are very subtle, so that even in the hand some species are difficult to distinguish; and, of course, the identification challenge is even greater when one is dealing with swifts on the wing. The current classification of swifts of the genus *Chaetura* is based primarily on work by Manuel Marín (Marín 1997, 2000), who made a name for himself with in-depth research of the breeding biology of some difficult-to-study swifts; but Marín's taxonomic conclusions were based entirely on an analysis of plumage and morphology. Chesser and colleagues (Chesser *et al.* 2018) revisit the relationships of these small swifts, but now with a more molecular focus. Genetic studies often provide compelling evidence of relationships, of course, but with the caveat that the outcome depends in part on having all the samples correctly identified to begin with. In the present case, one of Chesser's collaborators is Charles Collins, the dean of Neotropical swiftologists, so that lends some assurance to the study.

The best news for list-oriented birders is that Band-rumped Swift *C. spinicaudus* constitutes three full species, as the Amazonian subspecies *aethalea* is more closely related to Pale-rumped Swift *C. egregia* than to other Band-rumped; the nominate subspecies *spinicaudus* of northern South America is 'sister' to Costa Rican Swift *C. fumosa*; and subspecies *aetherodroma* of Panama and northwestern South America is yet a third clade (lineage). Armchair ticks for the well-traveled birder, then, are in store; but pay close attention going forward, as these taxa are so



Band-rumped Swift *Chaetura spinicaudus* constitutes three full species, although two (including the taxon *aetherodroma*) do not yet have English names. **2** Band-rumped

Swift *Chaetura s. spinicaudus* or *latirostris*, Manaus, Amazonas, Brazil, April 2013 (João Quental). **3** *Chaetura aetherodroma*, Playa de Oro, Esmeraldas, Ecuador, June 2009 (Nick Athanas/Tropical Birding Tours).

similar in the hand that there do not seem to be established English names for two of these newly recognised species (*aetherodroma* and *aethalea*).

Moving on, Marín (2000) suggested that Grey-rumped Swift *C. cinereiventris* "might comprise more than one species", but did not pursue this notion in any depth. Chesser *et al.* also found evidence that Grey-rumped Swift is more than one species. They refrain from making taxonomic recommendations regarding this group, perhaps in part because they did not have samples from throughout the range of the species. But it is worth noting that subspecies *phaeopygos* of Central America is particularly divergent, genetically, from the other subspecies, and is one likely candidate for a future split. The wise birder will try to twitch Grey-rumped throughout its range, while waiting for the outcome of the usual 'further studies' that now are called for.

Finally, the so-called Tumbes Swift *C. ocyptes* (not a species recognised by the South American Classification Committee [SACC], whose taxonomy is used in *Neotropical Birding*) is very similar genetically to Short-tailed Swift *C. brachyura*; and indeed, most authorities treat *ocyptes* as only a subspecies anyway. Amazonian Swift *C. viridipennis* is essentially the same, genetically, as Chapman's Swift *C. chapmani*, and is recommended for a lump, which will be a sting. Meanwhile, the mysterious Ashy-tailed Swift *C. andrei* of Venezuela (another taxon not recognised as a species by SACC) continues to be a taxonomic

puzzle. Marín (1997) concluded that *andrei* was identical to a sympatric subspecies of Vaux's Swift *C. vauxi aphanes*, whereas Chesser *et al.* conclude that *andrei* is very distinct genetically, and clearly is a separate species. Given that experts find *andrei* and *aphanes* difficult to distinguish even in the hand, the task ahead will be for intrepid birders to develop robust field identification criteria for these two. Ready for the challenge?

## Bye bye Bogota Sunangel?

The nomenclature of hummingbirds is littered with names based solely on one or a handful of old specimens, usually with only the vaguest of information about their geographic origins. Most of these oddities are believed to be rare hybrids between two known species (but see Schulenberg 2018 for a possible exception). Gary Graves has deduced the parent species behind many of these hybrids, so it was a stunning turn when Graves himself described a new species, Bogota Sunangel *Heliangelus zusii*, based on a single, ancient specimen from somewhere in the Colombian Andes (Graves 1993). The validity of this lost (and apparently extinct) species received a boost from a genetic study (Kirchman *et al.* 2010) that endorsed the recognition of Bogota Sunangel as a valid species (see Lees 2010).

**4** The mother of what was long known as 'Bogota Sunangel *Heliangelus zusii*' transpires to be a female Long-tailed Sylph *Agelaiocercus kingii* (Rio Blanco, Manizales, Colombia, October 2014; Frédéric Pelsy).

The story took a further twist when an odd hummingbird that appeared at feeders at the Rogitama reserve in Colombia's eastern Andes initially was suspected to be an example of the long-lost Bogota Sunangel. Detailed study of its plumage, however, showed differences between the two, leading to the suggestion that the Rogitama hummingbird was a cross between Tyrian Metaltail *Metallura tyrianthina* and Long-tailed Sylph *Agelaiocercus kingii* (Stiles & Cortés-Herrera 2015). The latest development comes from Pérez-Emán *et al.* (2018), who analysed DNA from the sole specimen of Bogota Sunangel and from a feather of the Rogitama hummingbird. This genetic analysis suggests that Bogota Sunangel and the Rogitama hummingbird both are hybrids, with one of the parents of both being a female Long-tailed Sylph. In view of the differences between them, however, each probably had a different male parent, which for Bogota Sunangel has not yet been identified. And with that, Bogota Sunangel is a species is no more. The story is not over, however: this investigation into the origins of Bogota Sunangel is just a side note to a larger, ongoing project to investigate diversity across all of the sylphs, and there are strong hints that this will lead to future splits. Stay tuned!

## Hello to a new hillstar

Hillstars *Oreotrochilus* are large hummingbirds of the high Andes. Five or six species usually are recognised, most of which are allopatric. Despite its small size, Ecuador teems with hillstar diversity: a form in which the male has a dull green crown but a brilliant green gorget (*stolzmanni*) occurs on the border with Peru (and either is recognised as a separate species, Green-headed Hillstar *O. stolzmanni* or as a subspecies of Andean Hillstar *O. estella*), whereas most of Ecuador is occupied by Ecuadorian Hillstar *O. chimborazo*, in which the entire head and throat of the male may be purplish-blue (subspecies *jamesonii*), or purplish-blue with a green lower throat (*chimorazo*). Even so, Francisco Sornoza-Molina was greatly surprised when he discovered yet another type of hillstar in southwestern Ecuador, in the Cordillea de Chilla-Tioloma-Fierro in El Oro and Loja. The male of this hillstar has a green crown, and its throat is much bluer (less purplish) than in any population of Ecuadorian Hillstar. Consequently Sornoza-Molina *et al.* (2018) describe it as a new species, Blue-throated Hillstar *O. cyanolaemus*. The limited genetic evidence on its relationships suggests, for starters, that all hillstars are very closely related; but also that Blue-throated may





**5** Blue-throated Hillstar *Oreotrochilus cyanolaemus* (Cerro de Arcos, Loja, Ecuador, September 2018; Antonio Figueroa/@antoniostudiofoto) is an entirely new species that is apparently endemic to a tiny area of Ecuador. Surprisingly its closest relative appears not to be **6** Ecuadorian Hillstar *O. chimborazo* (Ecuador, October 2018; Hoa V. Pham/ASAV Photography), which is widespread in the country.

be, surprisingly, ever so slightly more closely related to *stolzmanni* and to Black-breasted Hillstar *O. melanogaster* of central Peru than it is to Ecuadorian Hillstar. Blue-throated Hillstar was discovered not a moment too soon: its geographic range is small, perhaps as small as only 100 km<sup>2</sup>, in an area where many *páramos* are heavily grazed or burned. Large parts of its range also are under concessions for gold mining. Consequently Sornoza-Molina *et al.* make the grim assessment that Blue-throated Hillstar already may be Critically Endangered. Look out for an article on the amazing discovery of this hillstar in a future issue of *Neotropical Birding*.

## Anticipating additional antpittas

Rusty-breasted Antpitta *Grallaricula ferrugineipectus* is a small antpitta of the understorey of humid forests of the Andes. Its distribution extends from Venezuela to Bolivia – unless, that is, one were to recognise the southern subspecies, *leymebambae*, as a separate species, Leymebamba Antpitta. This two-species arrangement was proposed by Ridgely & Tudor (1994), and later was adopted both by Ridgely & Tudor (2009) and by del Hoyo & Collar (2016), but this split has not yet been accepted by other

authorities. That should change following the publication of a new analysis of the relationships between these antpittas. Van Doren *et al.* (2018) found that they differ in so many ways that it's a wonder they ever were lumped in the first place: genetic analysis shows that Rusty-breasted (subspecies *ferrugineipectus* and *rara*) is sister to Slate-crowned Antpitta *G. nana*, whereas Leymebamba is more closely related to other species in the genus. Rusty-breasted and Leymebamba antpittas also differ in morphology and in song. Perhaps more surprising is what is uncovered in the patterns of variation within each (newly recognised) species. For example, the population of Rusty-breasted in the Santa Marta mountains of northern Colombia currently is included in subspecies *ferrugineipectus*, but is genetically distinct from other populations of that subspecies, as is another, apparently undescribed, population in Colombia's Cauca Valley. Similarly, there are vocal differences between populations of Leymebamba Antpitta on the west side of the Andes, in Ecuador and northwestern Peru, compared to those from the east side of the Andes of Peru and Bolivia. These differences are duly noted by Van Doren and colleagues, but apparently are subject to ongoing investigation, which, they promise, "will be published elsewhere". Once again, stay tuned.



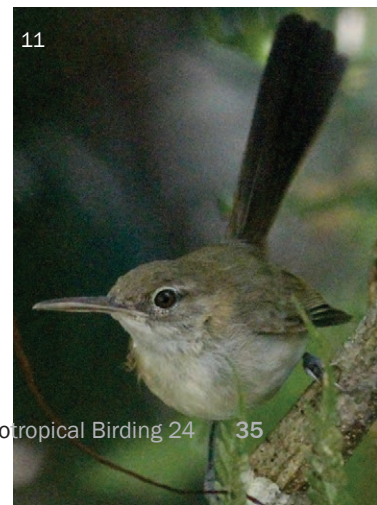
Suspicious have been confirmed that **7** Rusty-breasted Antpitta *Grallaricula ferrugineipectus* (Laguna Tabacal, La Vega, Cundinamarca, Colombia, January 2010; Nigel Voaden/ flickr.com/photos/nvoaden/) and **8** Leymebamba Antpitta *Grallaricula leymebambae* (Reserva Geobotánica Pululahua, Pichincha, Ecuador, June 2013; Nick Athanas/Tropical Birding Tours) are separate species. The former may conceivably house further cryptic taxa, given that, for example, **9** the population in Colombia's Santa Marta mountains, currently considered to be subspecies *G. f. ferrugineipectus*, is genetically distinct (Santa Marta mountains, Magdalena, Colombia, January 2012; David Brassington).

## Unknotting the gnatwrens

Long-billed Gnatwren *Ramphocaenus melanurus* is a widespread insectivore, found from southern Mexico to southern Brazil. Early in the past century, two species were recognised, west (*R. rufiventris*) and east (*R. melanurus*) of the Andes, but these were lumped long ago (Zimmer 1931), and that seemed to settle the issue. More recently, however, gnatwrens have become much more interesting again. Harvey *et al.* (2014) report that two subspecies in southwestern Amazonia, *obscurus* and *sticturus*, differ from adjacent subspecies of gnatwrens by exhibiting large white tips to the outer rectrices and by having a very different song. There also is evidence, at least for *obscurus*, of local sympatry with 'standard' Long-billed Gnatwrens, with the two types also showing some habitat segregation. Harvey *et al.* propose recognising these white-tailed Amazonian

populations as a separate species, Chattering Gnatwren *Ramphocaenus sticturus*. This notion gets a big boost from a fairly comprehensive genetic survey by Smith *et al.* (2018), who found three clades within *Ramphocaenus*: *sticturus* and *obscurus* are at the 'base' of the genetic tree, with the remaining populations sorting out as two groups, those west and east of the Andes. Note that this also is entirely consistent with recognising not only Chattering Gnatwren as a species, but also with resplitting the *rufiventris* and *melanurus* groups. The songs of these two latter groups are much more similar to each other than either is to Chattering, however, and genetic

Our understanding of **10** Long-billed Gnatwren *Ramphocaenus m. melanurus* (Macarani, Bahia, Brazil, September 2016; João Quental) has changed, with the split of some Amazonian populations as **11** Chattering Antwren *R. sticturus* (Los Amigos Biological Station, Madre de Dios, Peru, August 2018; Alex Wiebe).





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Gnatcatchers *Poliioptila* have undergone a detailed, if not comprehensive, revision. Some of the protagonists involved include: **12** Guianan Gnatcatcher *P. guianensis paranensis* (Cristalino Jungle Lodge, Mato Grosso, Brazil, July 2014; Nick Athanas/Tropical Birding Tours); **13** Tropical (Maranon) Gnatcatcher *P. plumbea maior* (Marañón valley, Peru, October 2016 (Jason Leifester)); **14** Tropical Gnatcatcher *P. plumbea bilineata* (Olmedo, Guayas, Ecuador, March 2013; Nick Athanas/Tropical Birding Tours); and **15** White-lored Gnatcatcher *P. albiloris albiventris* (Cenote de Camino a Chunchucmil, Yucatán, Mexico, November 2017; Cory Gregory/Field Guides Birding Tours).

sampling of gnatwrens across northern Colombia, where the *rufiventris* and *melanurus* groups might meet, is incomplete. So... take the split of Chattering for now, and wait patiently on the rest: odds are the final split too will arrive before the story is over.

### Plumbing the *Poliioptila*

Two separate teams, Smith *et al.* (2018) and Moura *et al.* (2018), turned their attention to the relationships of the gnatcatchers *Poliioptila*. Both studies rely on a genetic approach, and although

they differ somewhat in the genes that were analysed and the taxa (species and subspecies) that were sampled, the results of the two papers are in broad agreement. And my, oh my – it’s almost easier to list the species for which there is *not* find evidence for a split than to enumerate the many taxonomic revisions that are possible.

Let’s start with White-lored Gnatcatcher *P. albiloris*, which primarily occurs on the Pacific coast of Middle America, but has one population (*albiventris*) on the northern Yucatán Peninsula of southeastern Mexico. Perhaps not surprisingly,

Smith *et al.* find that *albiventris* is not closely related to other White-lored Gnatcatchers, but instead belongs with the group of subspecies of Tropical Gnatcatcher *P. plumbea* that occur from southeastern Mexico south to western Peru (sometimes known as the ‘White-browed’ group). (Moura *et al.* did not include any of the White-lored Gnatcatcher group in their study.)

Speaking of Tropical Gnatcatcher, the genetic relationships uncovered by both teams positively blow this ‘species’ into smithereens. Both teams find that three subspecies from South America – *plumbea* of the Guianan region and eastern Amazonia, *parvirostris* of western Amazonia, and east Brazilian *atricapilla* – are more closely related to Creamy-bellied Gnatcatcher *P. lactea* and Masked Gnatcatcher *P. dumicola* than they are to other subspecies of Tropical. Depending on the details of how these South American gnatcatchers are related to each other – details that are not yet completely clear – this signals anywhere from one to three species of ‘Tropical Gnatcatcher’ in central and eastern South America alone.

What’s left of Tropical Gnatcatcher forms three basic groups, which are related to each other, but they seem to have diverged from one another quite a while ago. One of these is the ‘White-browed’ group, mentioned above; another includes subspecies *plumbiceps* and *innotata* (and, presumably, *anteocularis*, although this subspecies was not sampled in either genetic survey), from northern and eastern Colombia to Venezuela and northern Brazil; and the final member of the trio is subspecies *maior* of the Marañón Valley in northern Peru. One could try to maintain all of these northern and western taxa in a single species, but given the levels of genetic divergence between the three, and keeping in mind that *maior* already is recognised as a separate species (Maranon Gnatcatcher) by some (e.g. Ridgely & Tudor 2009, del Hoyo & Collar 2016), one easily can see the way to recognising at least three species here as well. There seems to be no comprehensive survey of vocalisations across the range of Tropical Gnatcatcher, although it now seems to be badly in need of one, but already it is clear that songs do vary across the wide range of this species (e.g. Ridgely & Tudor 2009, Schulenberg *et al.* 2010).

Finally, these studies have implications for the Guianan Gnatcatcher *P. guianensis* complex; both teams included samples from this group, but Smith *et al.* had a better representation of taxa. Their results were that nominate *guianensis*, of the Guianas, is ‘basal’ to the overall Guianan Gnatcatcher group. But Slate-throated

Gnatcatcher *P. schistaceigula*, of Panama to western Ecuador, separates *guianensis* from other members of the group (Iquitos Gnatcatcher *P. clementsii*, and subspecies *facilis*, *paranensis* and *attenboroughi* of central Amazonian Brazil), all of which are very closely related to each other. At a minimum, this suggests splitting nominate *guianensis* from *facilis*, *paranensis* and *attenboroughi* (so far so good). One also could go all the way, and recognise each of the latter as separate species as well; but note that, in view of the low levels of genetic (and other) differences between them, another approach would be to include not only *facilis*, *paranensis* and *attenboroughi*, but also (gasp!) *clementsii* in a single species.

## How many *Habia* ant-tanagers are there?

Red-crowned Ant-tanager *Habia rubica* is a common bird, and it is widespread, occurring from Mexico south to southern Brazil. But its distribution is surprisingly patchy, and it is not found at all in many areas in the Neotropics where it might be expected. A few years ago, Lavinia *et al.* (2015) reviewed variation across its broad range, making a preliminary assessment based on genetics, songs, and colouration. As noted previously in these pages (Lees 2015), Lavinia *et al.* suggested splitting Red-crowned Ant-tanager into at least three species: *H. rubicoides* in Middle America; *H. rubra* in northern and central South America; and *H. rubica* in the Atlantic Forest of eastern Brazil. Now Ramírez-Barrera *et al.* (2018) take another look at variation in this species; their approach is exclusively genetic, but they were able to include samples from more subspecies than did Lavinia and colleagues.

The new study also identifies three main clades in Red-crowned Ant-tanager, but with a twist: their three major lineages are the population in western Mexico (subspecies *affinis* and *rosea*); all other subspecies in Middle America; and finally, all South American subspecies. That said, each of these three main clades also includes additional genetic structure. For example, Ramírez-Barrera *et al.*’s South American group includes two pretty different genetic groups, one from Amazonia and one from the periphery of the continent (northern South America and eastern Brazil and Paraguay); the Middle American clade can be subdivided into populations from eastern Mexico (Veracruz and Oaxaca), from Yucatán south to Costa Rica, and from Panama; and even subspecies *affinis* and

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There may well be between three and seven species currently shoehorned into what we call Red-crowned Ant-tanager *Habia rubica*. Lavinia et al. (2015) split **16** taxon *rubra* (male, Tunapuna-Piarco, Trinidad and Tobago, February 2018; Kamal Mahabir) from **17** taxon *rubica* (male, Morretes, Paraná, Brazil, July 2011; Frederico Swarofsky). But what about **18** taxon *vinacea* (male, Canopy Lodge, Cocle, Panama, December 2014; Nick Athanas/Tropical Birding Tours)?

*rosea* are modestly divergent. So, three species of Red-crowned Ant-tanager? But if so, which three? Or, good grief, are there up to *seven* species? This is another species that now calls out for a comprehensive survey of song and plumage across all populations. Regardless, the usual adage applies: take no species for granted, no matter how common or widespread, and make sure to twitch them *everywhere* you find 'em!

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