

# Taxonomic Round-up



## A new parakeet from the Sun Parakeet group

Luís Fábio Silveira and colleagues have described a new parakeet, the Sulfur-breasted Parakeet *Aratinga pintoii*, from the region of Monte Alegre, on the north bank of the Amazon in Pará, Brazil, where it appears to be not uncommon. Like the recently described *Pionopsitta aurantiocephala*, also from Pará (see *Cotinga* 20: 15), specimens of the new species had been first collected many years ago, but had lain overlooked as an already recognised species, in this case Sun Parakeet *A. solstitialis*, or had been considered to represent a hybrid. The new species differs from Sun Parakeet in having the mantle and wing-coverts green, the underparts pale yellow, with pale orange restricted to the belly and flanks, and the feathers on the underparts have a dark rachis. The authors also review systematics of the *solstitialis* group and reaffirm the need to recognise the other taxa, *jandaya* and *auricapillus*, at specific level under any currently operating species concept, as well as discussing the range of *solstitialis* in Brazil and Suriname.

- Silveira, L. F., Lima, F. C. T. & Höfling, E. (2005) A new species of *Aratinga* parakeet (Psittaciformes: Psittacidae) from Brazil, with taxonomic remarks on the *Aratinga solstitialis* complex. *Auk* 122: 292–305.

## *Oryzoborus* and *Sporophila* represent a monophyletic grouping

Evolutionary affinities within and among many groups of nine-primaried oscines have been the subject of several recent publications. A new study has focused on clarifying the relationship between the genus *Sporophila* and the closely related *Oryzoborus*, as well as examining the phylogenetic affinities of the 'capuchinos', a

group of 11 *Sporophila* species that share similar male plumage patterns. Using mtDNA sequences, the study indicated that: *Oryzoborus* lies within a well-supported clade containing all of the *Sporophila*, thus suggesting that the two genera should be merged; that the 'capuchinos' are a monophyletic group, and this clade comprises two sub-clades, one including two species from northern South America and the other eight species distributed south of the Amazon. It appears that the southern capuchinos radiated rapidly, within the last half-million years. Should *Oryzoborus* and *Sporophila* be merged then the latter name would have priority.

- Lijtmaer, D. A., Sharpe, N. M. M., Tubaro, P. L. & Lougheed S. C. (2004) Molecular phylogenetics and diversification of the genus *Sporophila* (Aves: Passeriformes). *Mol. Phyl. & Evol.* 33: 562–579.

## Whither lies the Broad-billed Sapayoa?

True to its name, *Sapayoa aenigma* has long defied biologists' attempts to classify it. Although Sibley & Ahlquist (1990) had suggested that the *Sapayoa* was perhaps closely related to Old World broadbills, this monotypic genus has traditionally been considered to lie somewhere within the New World flycatchers. Recent base sequencing of two nuclear genes reveals that it is, as speculated, most closely related to the only two Old World suboscine families, either the pittas or the broadbills.

- Fjeldså, J., Zuccon, D., Irestedt, M., Johansson, U. S. & Ericson, P. G. P. (2003) *Sapayoa aenigma*: a New World representative of 'Old World sub-oscines'. *Proc. Roy. Soc. Lond. B Suppl.* 270: 238–241.

## Relationships of the Red-bellied Grackle

Red-bellied Grackle *Hypopyrrhus pyrohypogaster* is a Colombian endemic that is currently classified as Endangered. Much genetic work has recently been conducted on the New World blackbirds, with the aim of producing an accurate phylogeny for the group. Until now, no DNA data were available for this grackle, but the authors of a study published in *Condor* have now demonstrated through mtDNA sequencing that the monotypic genus *Hypopyrrhus* is most closely related to Oriole Blackbird *Gymnomystax mexicanus* and Velvet-fronted Grackle *Lamprospira tanagrinus*, and although these three species form a well-supported clade, it is unclear which is sister to *Hypopyrrhus*.

- Cadena, C. D., Cuervo, A. M. & Lanyon, S. M. (2004) Phylogenetic relationships of the Red-bellied Grackle (Icteridae: *Hypopyrrhus pyrohypogaster*) inferred from mitochondrial DNA sequence data. *Condor* 106: 664–670.

## Saffron Toucanet is a *Pteroglossus*

Saffron Toucanet *Baillonius bailloni* is the sole member of its genus, and *Baillonius* has long been recognised as being somewhat close to the genus *Pteroglossus* on the basis of behaviour, morphology and, more recently, molecular work. Fresh phylogenetic analysis, using cytochrome-*b* gene fragments, strongly supports the idea that *Baillonius* is indeed part of *Pteroglossus* and that it is most closely related to Lettered Aracari *P. inscriptus*, suggesting that Saffron Toucanet is better named *Pteroglossus bailloni* and that *Baillonius* is best considered a synonym of *Pteroglossus*.

- Kimura, R. K., Pereira, S. L., Grau, E. T., Höfling, E. &

Wajntal, A. (2004) Genetic distances and phylogenetic analysis suggest that *Baillonius* Cassin, 1867 is a *Pteroglossus* Illiger, 1811 (Piciformes: Ramphastidae). *Orn. Neotrop.* 15: 527–537.

### An endemic species of nuthatch in the Bahamas

The conservation plight of the endemic subspecies of the Brown-headed Nuthatch *Sitta pusilla insularis*, which is confined to Grand Bahama and under increasing threat due to habitat destruction and modification, invasive alien predators, and storm damage, has been spotlighted in recent years. The total population is, at most, a few thousand individuals. A recent paper in the *Bahamas Journal of Science* recommends that the local population, the only West Indian nuthatch, be elevated to specific status based on its unusual morphometrics and distinctive vocalisations. If this proposal becomes widely accepted it should assist in promoting the conservation of this declining form.

- Hayes, W. K., Barry, R. X., MacKenzie, Z. & Barry, P. (2004) Grand Bahama's Brown-headed Nuthatch: a distinct and endangered species. *Bahamas J. Sci.* 12: 21–28.

### How many species of Dusky-capped Flycatcher...?

A recent mtDNA study of populations of Dusky-capped Flycatcher *Myiarchus tuberculifer* raises the possibility that, in fact, three species are involved: the first represented by all those populations between the southern USA and north-west South America, and perhaps including northern *M. t. atriceps*; the second represented by southern populations of *M. t. atriceps*; and thirdly *M. t. tuberculifer*, which occurs across much of northern South America and in eastern coastal Brazil. In addition to the need to better understand the relationships between the two populations of *M. t. atriceps*, which may require the naming of a new taxon, the authors also spotlight the apparent close association

between *M. tuberculifer* and Swainson's Flycatcher *M. swainsoni* as a priority for future research.

- Joseph, L. & Wilke, T. (2004) When DNA throws a spanner in the works: testing for monophyly in the Dusky-capped Flycatcher, *Myiarchus tuberculifer*, and its South American subspecies, *M. t. atriceps*. *Emu* 104: 197–204.

### ...and Rosy Thrush-tanager?

Based on analyses of morphology and mensural data the authors of a study pertaining to geographic variation in Rosy Thrush-tanager *Rhodinocichla rosea* recommend that the 4–6 allopatric populations of this species represent just one biological species, but potentially five phylogenetic species: namely *schistacea* (western Mexico), an unnamed population in the Acapulco region of Mexico, *eximia* (south-west Costa Rica and western Panama), *harterti* (the Venezuela/Columbia border region, and probably including *beebei*), and nominate *rosea* (central-north Venezuela). Geographic variation in this intriguing species forms two separate leapfrog patterns. The authors recommend that DNA sampling of all these taxa and the unnamed Mexican population be performed in the future.

- Peterson, A. T., Rice, N. H. & Navarro-Sigüenza, A. G. (2004) Geographic variation in the Rosy Thrush-tanager (*Rhodinocichla rosea*) complex of Mesoamerica (Aves: Passeriformes). *Biota Neotropica* 4 (2). See: [www.biota-neotropica.org.br/v4n2/pt/toc](http://www.biota-neotropica.org.br/v4n2/pt/toc)

### Relationships within the antbirds

A new mtDNA study has suggested some novel relationships amongst the antbirds, most importantly and surprisingly that the *Terenura* antwrens, Wing-banded Antbird *Myrmornis torquata*, Spot-winged Antshrike *Pygoptila stellaris* and Russet Antshrike *Thamnistes anabatinus* are sister to all other typical antbirds, whilst the remaining genera fall into two major clades. The first includes antshrikes, antvireos and *Herpsilochmus* antwrens, and the second comprises most antwren genera,

*Myrmeciza* antbirds, the 'professional' ant-following antbirds and allied species. The study also supported previous findings that suggested polyphyly of *Myrmotherula* antwrens and *Myrmeciza* antbirds.

- Irestedt, M., Fjeldså, J., Nylander, J. A. A. & Ericson, P. G. P. (2004) Phylogenetic relationships of typical antbirds (Thamnophilidae) and test of incongruence based on Bayes factors. *Evol. Biol.* 23. Published online at [www.biomed-central.com/1471-2148/4/23](http://www.biomed-central.com/1471-2148/4/23).

### A new genus of booby and a new condor from the Peruvian Pliocene

Cranial material pertaining to a new genus (*Ramphastosula*) of Sulidae has recently been described from the early Lower Pliocene of the Pisco Formation on the central-southern coast of Peru. The skulls differ in at least five features from other cranial material in the family. Similar deposits from the same area have also yielded a new fossil condor, named *Perugyps diazi*.

- Stucchi, M. & Urbina, M. (2004) *Ramphastosula* (Aves, Sulidae): a new genus from the early Pliocene of the Pisco Formation, Peru. *J. Vert. Paleontology* 24: 974–978.
- Stucchi, M. & Emslie, S. D. (2005) A new condor (Ciconiiformes, Vulturidae) from the late Miocene/early Pliocene Pisco Formation, Peru. *Condor* 107: 107–113.

### A new Pleistocene furnariid

The Uruguayan Pleistocene has yielded a new species of fossil furnariid, named *Pseudoseiuropsis cuelloi*. Very few fossil furnariids are currently known, all of them from the Pleistocene, and this the third to be described within the extinct genus *Pseudoseiuropsis*. Two other extinct species have been ascribed to the extant genera *Cincludes* and *Pseudoseisura*.

- Claramunt, S. & Rinderknecht, A. (2005) A new fossil furnariid from the Pleistocene of Uruguay, with remarks on nasal type, cranial kinetics, and relationships of the extinct genus

*Pseudoseisuropsis*. *Condor* 107: 114–127.

### Is Socorro Wren a *Troglodytes*?

Currently placed in the genus *Thryomanes*, the Socorro Wren *T. sissonii* has long presented taxonomists with something of a quandary. A fresh interpretation of the species' relationships has been obtained through mtDNA sequence analysis, wherein Socorro Wren nestled phylogenetically within the House Wren species complex, being placed as sister to the clade containing *Troglodytes aedon* and *T. musculus*. Thus, the idea that Socorro Wren is a sister taxon of *Thryomanes bewickii* appears highly dubious, and available evidence suggests that it is best considered a *Troglodytes*.

- Martínez Gómez, J. E., Barber, B. R. & Peterson, A. T. (2005) Phylogenetic position and generic placement of the Socorro

Wren (*Thryomanes sissonii*). *Auk* 122: 50–56.

### Relationships in southern cone miners

The results of the first attempt to reconstruct a molecular phylogeny for the miners (*Geositta*) using mtDNA analysis have been reported recently. All currently recognised species of *Geositta*, as well as *Geobates poecilopterus* and two outgroup taxa (*Upucerthia ruficauda* and *Aphrastura spinicauda*), were included in the work. Levels of sequence divergence amongst *Geositta* species were high, ranging from 7.4% to 16.3%, and the results clearly indicate that relationships among *Geositta* species differ considerably from those traditionally recognised. The study also provided strong support for the recognition of *Geobates* as a separate genus, but the hypothe-

sised sister relationship between *G. antarctica* and *G. cunicularia* does not appear to be valid.

*Geositta* apparently consists of two distinct clades, with *antarctica* and *cunicularia* in different groups. The results also strongly suggest that the evolutionary history of *Geositta* is much older and far more complex than had been thought.

- Cheviron, Z. A., Capparella, A. P. & Vuilleumier, F. (2005) Molecular phylogenetic relationships among the *Geositta* miners (Furnariidae) and biogeographic implications for avian speciation in Fuego-Patagonia. *Auk* 122: 158–174.