

Proposed conservation of reversed precedence in a woodcreeper (Dendrocolaptinae) taxon

Authors: Kirwan, Guy M., and Elliott, Andy

Source: Bulletin of the British Ornithologists' Club, 144(2) : 159-161

Published By: British Ornithologists' Club

URL: <https://doi.org/10.25226/bboc.v144i2.2024.a8>

The BioOne Digital Library (<https://bioone.org/>) provides worldwide distribution for more than 580 journals and eBooks from BioOne's community of over 150 nonprofit societies, research institutions, and university presses in the biological, ecological, and environmental sciences. The BioOne Digital Library encompasses the flagship aggregation BioOne Complete (<https://bioone.org/subscribe>), the BioOne Complete Archive (<https://bioone.org/archive>), and the BioOne eBooks program offerings ESA eBook Collection (<https://bioone.org/esa-ebooks>) and CSIRO Publishing BioSelect Collection (<https://bioone.org/csiro-ebooks>).

Your use of this PDF, the BioOne Digital Library, and all posted and associated content indicates your acceptance of BioOne's Terms of Use, available at www.bioone.org/terms-of-use.

Usage of BioOne Digital Library content is strictly limited to personal, educational, and non-commercial use. Commercial inquiries or rights and permissions requests should be directed to the individual publisher as copyright holder.

BioOne is an innovative nonprofit that sees sustainable scholarly publishing as an inherently collaborative enterprise connecting authors, nonprofit publishers, academic institutions, research libraries, and research funders in the common goal of maximizing access to critical research.

Proposed conservation of reversed precedence in a woodcreeper (Dendrocolaptinae) taxon

by Guy M. Kirwan  & Andy Elliott

Received 14 December 2023; revised 25 March 2024; published 3 June 2024

<http://zoobank.org/urn:lsid:zoobank.org:pub:A62D751C-1A61-4A9A-B982-159688D50FD3>

SUMMARY.—*Xiphorhynchus striatigularis* (Richmond, 1900), described based on a single specimen from north-east Mexico, is now universally regarded as a synonym of the Ivory-billed Woodcreeper subspecies *X. flavigaster saltuarius* Wetmore, 1942. Clearly, the name *striatigularis* is senior to *saltuarius*, but its holotype is a highly aberrant individual and would be morphologically far from ideal to serve as the ‘type’ for the taxon currently listed as *saltuarius*. Also, the hypothesis that *striatigularis* might be the product of a hybrid pairing cannot yet be rejected, and would, if eventually proven true, render the name unavailable under the ICZN Code (Art. 23.8). Therefore, we believe that the currently favoured reversal of precedence should be conserved. As the conditions of Art. 23.9.1 are clearly not met, we are preparing an application to the ICZN, under Art. 23.9.3, requesting that reversal of precedence be imposed; in the meantime, current usage should be maintained.

Until 1995, the woodcreeper taxon *Xiphorhynchus striatigularis* (Richmond, 1900) regularly appeared in global and regional checklists of birds. The holotype, a female, was collected in 1894 by F. B. Armstrong at Altamira, in extreme southern Tamaulipas (east-central Mexico), and was sent to the US National Museum, Washington, DC, in a batch of material that also included more than 20 specimens of Ivory-billed Woodcreeper *Xiphorhynchus flavigaster* Swainson, 1827, from the same place. In his original description, C. W. Richmond noted of his purported new species (originally named *Dendroornis striatigularis*) ‘...in general similar to *D. [= X.] flavigaster*, but differs in having the throat and malar patch streaked instead of uniform buff...’ (Richmond 1900: 316).

Winker (1995) noted that the relevant region of Mexico has now been rather well explored ornithologically, but this taxon is still known exclusively from the holotype. He posited that it was probably one of the following: a very rare species, probably now extinct; a hybrid; or an aberrant individual of some other known species. To clarify the identity of this mysterious form, he carried out a detailed morphometric study, and concluded that the *striatigularis* holotype was most likely an aberrant individual of *X. flavigaster*, although the possibility of a hybrid origin could not be completely discarded. Another individual collected by Armstrong on the following day in the same area had subsequently been described as *X. flavigaster saltuarius* Wetmore, 1942, and Winker (1995) proposed that *striatigularis* be considered ‘a synonym of *saltuarius*’.

If *striatigularis* Richmond, 1900, and *saltuarius* Wetmore, 1942, are considered synonyms, as they are by all of the current major global checklists (Dickinson & Christidis 2014, del Hoyo & Collar 2016, Clements *et al.* 2023, Gill *et al.* 2023), it is obvious that the former has priority. However, Winker’s wording can be taken to imply the opposite, and that is certainly the version that has entered the literature. Nevertheless, there are good reasons to uphold this reversal of precedence. Of significant practical importance is the fact that, if the two are indeed synonymous, the holotype of *striatigularis* is an extremely unusual individual,

notably different from (apparently) all of the 46 female specimens of *X. flavigaster* from a range of US museums compared by Winker (1995), and Hellmayr too (in Cory & Hellmayr 1925) emphasised its singularity¹, so it would be a most unsuitable candidate for its primary purpose as a 'type' for the taxon currently listed as *saltuarius*, given that the '...type of a nominal taxon provides the objective standard of reference for the application of the name it bears' (ICZN 1999: Art. 61.1). At the same time, the taxon under discussion has consistently been known as *saltuarius* since 1942, and the name *striatigularis* has never been applied to these 'normal' birds; a (gratuitous) change of name now would certainly not serve stability of nomenclature. And a third major objection arises from Winker's conclusions: the possibility of a hybrid origin cannot be fully discounted. Although hybridisation was believed to be extremely rare in suboscine passerines in general (Graves 1992) and was previously unknown between species of Dendrocolaptinae (Marantz *et al.* 2003, Kirwan & Collar in prep.), more recent molecular studies focused on Amazonian headwater regions have detected intrageneric hybridisation zones among *Hypocnemis*, *Willisornis* and *Rhegmatorhina* antbirds (Thamnophilidae), *Dendrocincla*, *Xiphorhynchus* and *Glyphorhynchus* woodcreepers (Furnariidae) and *Pipra* and *Lepidothrix* manakins (Pipridae) (Weir *et al.* 2015, Sampaio *et al.* 2020, Del-Rio *et al.* 2021). Several hybrid combinations have been recognised in the last-named family based on both historical specimens and recent genetic research (Hellmayr 1929, Gyldenstolpe 1951, Parkes 1961, Stotz 1993, Haffer 1997, Kirwan & Green 2011, Sampaio *et al.* 2020), although it should be noted that Pipridae belongs to a cohort (Tyrannida) long separated from antbirds, woodcreepers, etc. (Furnariida), with a quite different breeding system (Fjeldså *et al.* 2020: 72–73). That most of this research post-dates Winker's paper does potentially suggest that the hybrid 'spectrum' is not so easily shaken off. If the holotype of *striatigularis* were subsequently shown to be of hybrid origin, that name could not be used, under Art. 23.8 (ICZN 1999), so the correct name would of necessity revert to *saltuarius*.

In view of the above, we consider that the imposition of strict priority in this case would be detrimental, and propose that reversal of precedence be maintained. As the conditions of Art. 23.9.1 are clearly not met, we are preparing an application to the ICZN, under Art. 23.9.3, requesting that reversal of precedence be formally imposed². The purpose of the application will simply be to maintain current usage while incorporating the formal backing required by the Code. While the case is being adjudicated by the ICZN Commission, current usage must be maintained (Art. 23.9.3).

Acknowledgements

We are very grateful to Norbert Bahr and Vitor Piacentini for their astute comments and helpful refereeing of the manuscript.

References:

Clements, J. F., Rasmussen, P. C., Schulenberg, T. S., Iliff, M. J., Fredericks, T. A., Gerbracht, J. A., Lepage, D., Spencer, A., Billerman, S. M., Sullivan, B. L. & Wood, C. L. 2023. The eBird/Clements checklist of birds of the world: v2023. <https://www.birds.cornell.edu/clementschecklist/download/> (accessed 10 December 2023).

¹ It is unclear how many specimens of *X. flavigaster* Hellmayr saw, but he specifically mentioned examining the holotype of *striatigularis* (Cory & Hellmayr 1925: 304), and his museum work is still widely accepted as being notably extensive, intensive and rigorous. Winker (1995) reported only the number of female specimens of *X. flavigaster* used in his mensural comparisons with *striatigularis*; he does not state how many additional male or unsexed specimens of *flavigaster* he also saw, still without encountering a specimen closely recalling Richmond's holotype.

² The processing of ICZN applications can be protracted, and the present paper aims to avoid the risk of 'accidental' use of strict priority in the interim.

- Cory, C. B. & Hellmayr, C. E. 1925. Catalogue of birds of the Americas and related islands, pt. 4. *Field Mus. Nat. Hist., Zool. Ser.* 13(4): 1–390.
- Del-Rio, G., Rego, M. A., Whitney, B. M., Schunck, F., Silveira, L. F., Faircloth, B. C. & Brumfield, R. T. 2021. Displaced clines in an avian hybrid zone (Thamnophilidae: *Rhegmatorhina*) within an Amazonian interfluve. *Evolution* 76: 455–475.
- Dickinson, E. C. & Christidis, L. (eds.) 2014. *The Howard and Moore complete checklist of the birds of the world*, vol. 2. Fourth edn. Aves Press, Eastbourne.
- Fjeldså, J., Christidis, L. & Ericson, P. G. P. (eds.) 2020. *The largest avian radiation: the evolution of perching birds, or the order Passeriformes*. Lynx Edicions, Barcelona.
- Gill, F., Donsker, D. & Rasmussen, P. (eds.) 2023. IOC world bird list (v13.2). doi: 10.14344/IOC.ML.13.2 (accessed 10 December 2023).
- Graves, G. R. 1992. Diagnosis of a hybrid antbird (*Phlegopsis nigromaculata* × *Phlegopsis erythroptera*) and the rarity of hybridization among suboscines. *Proc. Biol. Soc. Wash.* 105: 834–840.
- Gyldenstolpe, N. 1951. The ornithology of the Rio Purús region in western Brazil. *Ark. f. Zool.* 2: 1–320.
- Haffer, J. 1997. Contact zones between birds of southern Amazonia. Pp. 281–305 in Remsen, J. V. (ed.) *Studies in Neotropical ornithology honoring Ted Parker*. Orn. Monogr. 48.
- Hellmayr, C. E. 1929. Catalogue of birds of the Americas and related islands, pt. 6. *Field Mus. Nat. Hist., Zool. Ser.* 13(6): 1–258.
- del Hoyo, J. & Collar, N. J. 2016. *HBW and BirdLife International illustrated checklist of the birds of the world*, vol. 2. Lynx Edicions, Barcelona.
- International Commission for Zoological Nomenclature (ICZN). 1999. *International code of zoological nomenclature*. Fourth edn. International Trust for Zoological Nomenclature, London.
- Kirwan, G. M. & Collar, N. J. in prep. What is *Xiphocolaptes fortis*, Heine, 1860 (Aves: Dendrocolaptinae)? *Zootaxa*.
- Kirwan, G. M. & Green, G. 2011. *Cotingas and manakins*. Christopher Helm, London.
- Marantz, C. A., Aleixo, A., Bevier, L. R. & Patten, M. A. 2003. Family Dendrocolaptidae (woodcreepers). Pp. 358–447 in del Hoyo, J., Elliott, A. & Christie, D. A. (eds.) *Handbook of the birds of the world*, vol. 8. Lynx Edicions, Barcelona.
- Parkes, K. C. 1961. Intergeneric hybrids in the family Pipridae. *Condor* 63: 345–350.
- Richmond, C. W. 1900. Description of a new bird of the genus *Dendrornis*. *Proc. US Natl. Mus.* 22: 317–318.
- Sampaio, L., Ferraz, D. O., Costa, A. C. M., Aleixo, A., Cerqueira, P. V., Araripe, J. & Rêgo, P. S. 2020. Analyses of plumage coloration and genetic variation confirm the hybridization of *Pipra fasciicauda* and *Pipra aureola* in the Brazilian Amazon basin. *J. Orn.* 161: 503–508.
- Stotz, D. F. 1993. A hybrid manakin (*Pipra*) from Roraima, Brazil, and a phylogenetic perspective on hybridization in the Pipridae. *Wilson Bull.* 105: 348–351.
- Swainson, W. 1827. Synopsis of the birds discovered in Mexico by W. Bullock, F.L.S. and H.S., and Mr. Wm. Bullock, jun. *Philos. Mag.* (2)1: 433–442.
- Wetmore, A. 1942. New forms of birds from Mexico and Colombia. *Auk* 59: 265–268.
- Weir, J. T., Faccio, M. S., Pulido-Santacruz, P., Barrera-Guzman, A. O. & Aleixo, A. 2015. Hybridization in headwater regions, and the role of rivers as drivers of speciation in Amazonian birds. *Evolution* 69: 1823–1834.
- Winker, K. 1995. *Xiphorhynchus striatigularis* (Dendrocolaptidae): *nomen monstrositatum*. *Auk* 112: 1066–1070.

Addresses: Guy M. Kirwan, Scientific Associate, Bird Group, Natural History Museum, Akeman Street, Tring, Herts. HP23 6AP, UK; Research Associate, Field Museum of Natural History, 1400 South Lakeshore Drive, Chicago, IL 60605, USA; and Setor de Ornitologia, Dpto. de Vertebrados, Museu Nacional da Universidade Federal do Rio de Janeiro, Quinta da Boa Vista S/N, São Cristóvão, Rio de Janeiro, RJ 20940-040, Brazil, e-mail: guy.kirwan@nhm.ac.uk. Andy Elliott, P.O. Box 16, 43714 El Pla de Manlleu, Catalunya, Spain, e-mail: andycpfc@gmail.com