

## The Waterfall Swift *Hydrochous gigas*

by Ben King

Received 23 April 1986

*Hydrochous gigas* is known in most literature as the Giant Swiftlet *Collocalia gigas*. Somadikarta (1968) described its nesting in colonies behind and near waterfalls, and Becking (1971) described its nest and eggs. Medway (1966) suggested that nest type and the ability (or inability) to echolocate could help to elucidate the taxonomic relationships in the genus *Collocalia* – thus the genus could be split into the glossy non-echolocators and the non-glossy echolocators. Medway & Wells (1969) later demonstrated that *Collocalia gigas*, while non-glossy, was unable to echolocate, thus indicating that the genus *Collocalia* had a third subdivision: non-glossy non-echolocators. Brooke (1970) introduced the subgeneric name *Hydrochous* and applied subgeneric names to these groupings: (1) *Collocalia*, glossy non-echolocators; (2) *Hydrochous*, non-glossy non-echolocator; and (3) *Aerodramus*, non-glossy echo-locators. Brooke (1972) later raised these 3 subgenera to generic rank. Thus *Collocalia* was restricted to *esculenta*, *marginata* and *trogodytes*, while *Hydrochous* became a monotypic genus with only *gigas*, and *Aerodramus* included the remainder and majority of the forms in the genus. *Hydrochous* was split from *Collocalia* because of its larger size, lack of gloss in plumage, more emarginate outer rectrices in juveniles than adults, and its unusual nest and nest site – under or near waterfalls. Medway & Pye (1977) concurred, chiefly basing their split of *Aerodramus* from both *Collocalia* and *Hydrochous* on the ability of the *Aerodramus* swiftlets to echolocate, while splitting *Hydrochous* from *Collocalia* on morphological grounds.

*Hydrochous gigas* appears to be rare and local in its distribution and has seldom been observed. The sole well-known colony is at the Cibeureum waterfall in Gunung Gede-Pangrango National Park in West Java. The birds roost under and adjacent to the upper part of the waterfall, normally leaving hurriedly at dawn and returning after sunset. However, on 3 August 1985, a flock of 60-80 *gigas* flew over and past the waterfall for a full 2 hours after dawn, and then mounted higher, but were still readily visible for another 3 hours. This offered a superb opportunity to observe their flight characteristics and tape their calls. Their flight is direct, with rapid, deep, steady, smooth beats; they glide with wings only slightly below the level of the back. For the first 2 hours of observation, they kept their tails tightly closed, only rarely offering a glimpse of the tail fork. The fork was visible more often when the birds were flying higher.

This manner of flight differs dramatically from that of the *Collocalia* and *Aerodramus* swiftlets by its smooth directness, without any of the jerkiness associated with swiftlets' side to side movements, and *Hydrochous* glides with its wings more near the horizontal (not so down-turned). In its size, its flight silhouette and in its manner of flight, *Hydrochous* appears to be inseparable from the House Swift *Apus affinis*. Some observation of House Swifts in flight showed them to have a strong tendency toward a fully spread tail versus the closed tail of *Hydrochous*, but this could have been due to flight conditions. The calls heard and taped from *Hydrochous* are a loud twittering, heard frequently throughout the observation period and readily audible above the



roar of the waterfall. These calls were very similar to those of the House Swift and quite unlike the calls of the much less vocal *Collocalia* and *Aerodramus* swiftlets, whose calls are not so loud.

These observations confirm the utility of removing *gigas* from the genus *Collocalia* (Brooke 1972, Medway & Pye 1977). Further, while the flight differences could be an effect of larger body size, they do suggest that the generic affinities of *Hydrochous* may be open to re-interpretation and that it may not be a swiftlet at all – indeed, whatever *gigas*'s true affinities, it in fact looks like a swift, rather than a swiftlet, in the field.

Thus I recommend that *Hydrochous gigas* be called the Waterfall Swift, which alludes to its roosting and nesting site. Whether *gigas* is more closely related to the swiftlets or to one of the swift groups, I believe it more useful for its English name to reflect its appearance in life rather than its evolutionary history.

*Acknowledgements:* I wish to thank Richard K. Brooke, Dr Charles T. Collins, Lord Cranbrook and Dr David Wells for their helpful suggestions towards this paper, and Paul Andrew and David Bishop for their assistance in the field. The Sound Laboratory of the Laboratory of Ornithology at Cornell University provided tape recording equipment and a repository for the tapes.

#### References:

- Becking, J. H. 1971. The breeding of *Collocalia gigas*. *Ibis* 113 (2): 330–334.  
 Brooke, R. K. 1970. Taxonomic and evolutionary notes on the subfamilies, tribes, genera and subgenera of the swifts (Aves: Apodidae). *Durban Mus. Novit.* IX (2): 13–24.  
 Brooke, R. K. 1972. Generic limits in old world Apodidae and Hirundinidae. *Bull. Brit. Orn. Cl.* 92 (2): 53–57.  
 Medway, Lord. 1966. Field characters as a guide to the specific relations of swiftlets. *Proc. Linn. Soc. London* 177 (2): 151–172.  
 Medway, Lord & Wells, D. R. 1969. Dark orientation by the Giant Swiftlet *Collocalia gigas*. *Ibis* 111 (4): 609–611.  
 Medway, Lord & Pye, J. D. 1977. Echolocation and the systematics of swiftlets. In B. Stonehouse and C. Perrins (eds) *Evolutionary Ecology*. MacMillan.  
 Somadikarta, S. 1968. The Giant Swiftlet, *Collocalia gigas*, Hartert & Butler. *Auk* 85 (4): 549–559.

*Address:* Ben King, c/o Dept of Ornithology, AMNH, Central Park West at 79th Street, New York, NY 10024, USA.

© British Ornithologists' Club 1987

## A new tyrannulet (*Phylloscartes*) from northeastern Brazil

by Dante Martins Teixeira

Received 17 May 1986

In the last 7 years, the Ornithological Section of Museu Nacional has made several expeditions to the residual Atlantic forests of Alagoas, Pernambuco and Paraíba, in extreme northeastern Brazil. As mentioned by Teixeira & Gonzaga (1983a, 1983b, 1985), these researches led to the discovery of undescribed taxa and also birds never previously reported north of the São Francisco River (Teixeira *et al.* 1986), probably part of an unexplored highland endemic avifauna, only the coastal lowlands having previously been investigated ornithologically. In 1983, 1984 and 1985, the field work performed in the highland forests (550 m) of "Serra Branca", county of Murici (c. 9°15'S,



King, Ben F. 1987. "THE WATERFALL SWIFT HYDROCHOUS-GIGAS." *Bulletin of the British Ornithologists' Club* 107, 36–37.

**View This Item Online:** <https://www.biodiversitylibrary.org/item/123885>

**Permalink:** <https://www.biodiversitylibrary.org/partpdf/77082>

**Holding Institution**

Smithsonian Libraries and Archives

**Sponsored by**

Biodiversity Heritage Library

**Copyright & Reuse**

Copyright Status: In Copyright. Digitized with the permission of the rights holder.

Rights Holder: British Ornithologists' Club

License: <http://creativecommons.org/licenses/by-nc-sa/3.0/>

Rights: <https://www.biodiversitylibrary.org/permissions/>

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at <https://www.biodiversitylibrary.org>.