NIGHTJARS IN flux

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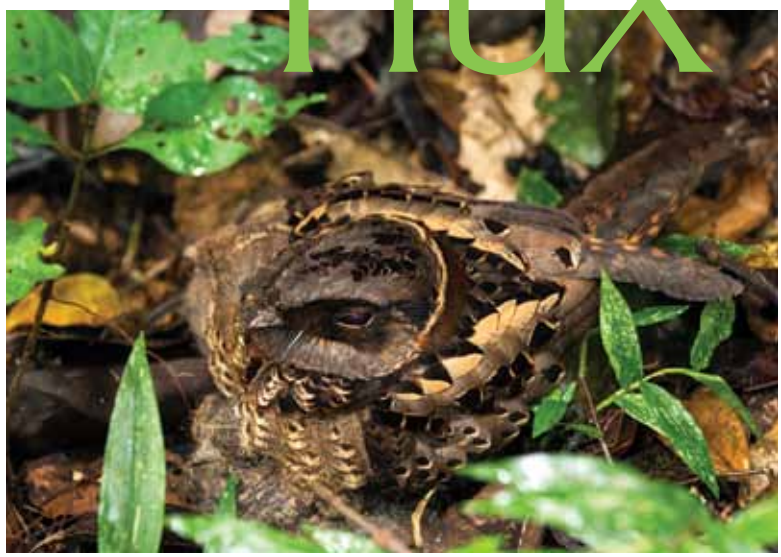

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above *Madagascar's Collared Nightjar, formerly placed in* Caprimulgus, *appears to be an ancient lineage and should be placed in its own genus,* Gactornis.

above, left *Genetic studies show that the extravagant wing plumes of the Pennant-winged Nightjar are a derived feature, and that the genus* Macrodipteryx *should be placed within* Caprimulgus.

If they are not calling, nightjars can be one of the trickiest groups of birds to identify. How often have you been out at night, spot-lighting, and just about convinced yourself you are looking at a Rufous-cheeked Nightjar, only to have it start calling '*good-lord-deliver-us*'? The problem is that nightjars' appearance is driven by the need for excellent camouflage during the day, so if they roost in the same habitat, they tend to look the same.

This similarity runs deeper than just superficial appearances. Because the majority of nightjars forage in a similar fashion, their structure is also similar, leading to considerable debate over how best to classify them to genera and higher taxonomic groupings. Traditionally five families have been recognised in the order Caprimulgiformes: the widespread nightjars and nighthawks (Caprimulgidae), New World potoos (Nyctibidae), South-East Asian and Australasian frogmouths (Podargidae), Australasian owlet-nightjars (Aegolthelidae), and the New World Oilbird (Steatornithidae). But the application of molecular approaches has resulted in a few surprises.

In 2006, George Barrowclough and his colleagues from the American Museum of Natural History confirmed that despite their appearance, owlet-nightjars are sister to the swifts and hummingbirds, and not closely related to the other caprimulgiforms (*Molecular Phylogenetics and Evolution* 41: 238–248). And within the nightjars, the traditional division placing the nightjars and nighthawks in separate subfamilies was not supported. One of the South-East Asian and Australasian eared-nightjars (*Eurostopodus macrotis*) emerged as the basal form, supporting Sibley and Ahlquist's results from DNA-DNA hybridisation.

More recently, Kin-Lan Han and colleagues from the Smithsonian Institution extended this analysis, including many more species of nightjars and nighthawks (*Molecular Phylogenetics and Evolution* 55: 443–453). They confirmed that the eared-nightjars are indeed the basal group within the Caprimulgidae and suggest that they be placed in their own subfamily or even a separate family. Among the remaining species, Madagascar's Collared Nightjar, currently placed in *Caprimulgus*, is distinct from all other species and should be placed in its own genus, *Gactornis*. By comparison, the more common Madagascar Nightjar *Caprimulgus madagascariensis* is closely related to the many African *Caprimulgus* species.

Han's results show that *Caprimulgus* requires extensive revision. The primary radiation of nightjars follows geographic boundaries, with one group confined to the Old World and three groups to the New World, and *Caprimulgus* species currently are assigned to three of these four groups. The *Chordeiles* and *Podager* nighthawks form one group, but the two other nighthawk genera, *Lurocalis* and *Nyctiprogne*, are placed in another of the New World nightjar groups.

The Old World group of nightjars comprises only two genera: *Caprimulgus* and *Macrodipteryx*. The latter genus is based on the extravagant wing plumes of the male Pennant-winged Nightjar, and its West African counterpart, the Standard-winged Nightjar. Although Han's study shows that these two species are each other's closest relatives, they are embedded within the Old World *Caprimulgus* species, and as such should be placed within *Caprimulgus*. So Africa is set to lose an endemic nightjar genus, but this is offset by the recognition of the importance of Madagascar's Collared Nightjar.

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