Subjectivity and space in evaluating species limits: a response to Peterson and Moyle

N. J. COLLAR

Peterson and Moyle (2008) are at a disadvantage when the detailed paper setting forth my system of assessing species status in allopatric taxa remains unpublished (largely because, as Peterson and Moyle conclude, the issue is indeed ‘quite complex and challenging’). I hope this situation will soon change.

Even so, in highlighting subjectivity as a flaw in the system I use, I think they miss a couple of fairly obvious points. (1) All taxonomy involving allopatric forms is to some degree opinion-driven. Even Helbig et al. (2002), whom Peterson and Moyle praise, begin with this acknowledgement, and a key difference between their system and mine is simply that they give greater weight to far smaller characters. They write that ‘taxa that differ only slightly (e.g. in size or darkness of plumage)… are best treated as subspecies’ and that ‘a single base substitution in a DNA sequence, or a single barb on a single feather’, even if consistently different between two populations, are insufficient ‘to base a taxonomic rank’. In other words, opinion and subjectivity have just shifted to different areas along the scale. (2) Collar (2006) indicated that the system sets limits on the subjective assessment of degree (‘strength’) of difference, and makes that assessment transparent, so that others can see the process, judge it for themselves and, if in disagreement, challenge it on the basis of the detail provided. Although assigning a numeric value to a subjective decision may not impart objectivity to the process, it does allow an explicit, quantitative measure of a necessarily qualitative assessment, and therefore brings in a degree of standardisation and repeatability. It is encouraging to see that Kirwan (2008) has found the system helpful.

Peterson and Moyle follow an intriguing but difficult line of argument on the issue of distance between populations. My scoring system will in fact make allowance for various types of spatial arrangement: so taxa in parapatric arrangements and narrow hybrid zones earn one score, and those in broader hybrid zones another. However, I find it difficult to see how allopatric populations, whatever the distance between them, can be treated in more ways than one. Taxa spatially very far apart might well be judged more reproductively isolated than closer taxa; but taxa very close together (yet not parapatric) could also be said to merit special recognition for having retained their distinctiveness. So making allowances for degree of geographic disjunction would, I think, be unworkable, and far more open to the opposition of opinions than a simple concentration on morphological and acoustic characters.

I am happy to confirm my allegiance to the Biological Species Concept (BSC). Judgements about the reproductive incompatibility of allopatric taxa have, under
Brown-banded Rail

Rallus mirificus and Mimizuku gurneyi deleted from the avifauna of Samar, Philippines

D. N. S. ALLEN and N. J. COLLAR

Collar et al. (1999) and BirdLife International (2001) gave range extensions to the island of Samar, Philippines, of Brown-banded Rail *Rallus mirificus* and Giant Scops Owl *Mimizuku gurneyi* based on single specimens of each deposited in the Philippine National Museum (PNM). Both these specimens were collected in 1959 at the Samar Institute of Technology, Catamaran (the rail in April, the owl in May), both were considerable range extensions, and both proved to be unique records for Samar. These records were accepted by BirdLife International (2000), which published a map for the owl shading in all Samar; and a draft of the rail entry in Collar et al. (1999) was made available to Taylor (1998), who mentioned and mapped the Samar record, describing it as a vagrant there.

Speculation about the validity of these records led us individually and coincidentally to reconsider the specimen evidence, with separate visits to PNM in April 2007 to examine the rail (DNSA) and the owl (NJC). In both cases we conclude that misidentifications have occurred, with separate visits to PNM in April 2007 to individually and coincidentally to reconsider the specimen. In both evidence, with separate visits to PNM in April 2007 to reconsider the specimen.

During a visit in August 1999 to PNM to look at various bird specimens DNSA noted that one of the 18 *Rallus mirificus* in the collection was rather distinct. This specimen, PNM 5972, was from Samar and had originally been labelled as *Rallus striatus* (now known as *Gallirallus striatus*). It is a male collected by G. L. Alcasid and T. Oane at the Samar Institute of Technology on 28 April 1959 (although the label appears to show 1989). However, this name has been crossed out by an unknown hand, and the name *Rallus mirificus* added in pencil. Sure that the original identification was correct, DNSA took photos of the bill of the *R. mirificus* specimens for later reference. Following the publication of the Samar record by Collar et al. (1999), DNSA contacted NJC about the specimen, but did not have a chance to look more closely at it until April 2007.

According to the captions to Plate 13 in Kennedy et al. (2000), *G. striatus* differs from *R. mirificus* in being larger (averaging 243 mm vs 218 mm in total length) and by having ‘chestnut on crown and neck only, and upperparts more heavily spotted or barred with white’, while immature *G. striatus* is similar to the adult but is ‘darker, lacking spots and chestnut on upperparts’. Kennedy et al. (2000:77) added for *R. mirificus* that ‘inconspicuous buff barring on upperparts [is] confined to wings’. Taylor (1998) also referred to a different head pattern and the less extensive barring on the underparts. The Samar specimen is of the same size as the other *R. mirificus* specimens and thus much smaller than typical *G. striatus*. However, it differs in a number of features: the bill is more parallel-sided and is expanded vertically near the tip, whereas the bills of *R. mirificus* have a broader base, taper evenly to the tip and are slightly longer; the remiges have white V-shaped spots that form narrow bars on the primaries, while specimens of *R. mirificus* have plain, unmarked primaries, with pale barring mostly restricted to the coverts; the crown and neck are brown.

REFERENCES


Forktail 24: 110–112.


N. J. Collar, BirdLife International, Wellbrook Court, Girton Road, Cambridge CB3 0NA, U.K. Email: nigel.collar@birdlife.org