## **COMMENTARY**

## Consistency in the Scientific Name of the Zebra Finch

N. S. CLAYTON1 AND T. R. BIRKHEAD2

The Zebra Finch is an Australian estrildine used widely in behavioral research. At the present time it is referred to by two different scientific names, Taeniopygia guttata and Poephila guttata. In general, the former name appears to be used in Britain (e.g. Slater et al. 1988), while the latter name is used by North Americans and Australians (e.g. Burley 1986, Zann 1984). We have found it frustrating that the scientific name of our study species should vary according to where we publish our results. Moreover, some journals even vary the Zebra Finch's generic name according to the nationality of the author! This situation is both unsatisfactory and potentially confusing. We present here a brief account describing how this has arisen, and recommend that from now on Taeniopygia be used, in line with the most detailed taxonomic study to date (Christidis 1987).

The generic name first used for the Zebra Finch was Taeniopygia by Riechenbach (1862): Taeniopygia guttata Vieillot 1817. Two races of the Zebra Finch occur: the nominate race from the Lesser Sunda Islands, T. g. guttata, and the mainland Australian race, T. g. castanotis (Gould). The generic name remained unchanged until the 1940s (Mayr 1944) when Delacour (1943) renamed the Zebra Finch Poephila because of its close similarities to the other members of this genus. Delacour's division of the estrildine genera was based primarily on the gape markings of nestlings, adult plumage patterns, and behaviors, such as nest construction. Features which he considered to be of secondary importance included bill and leg color, and tail and wing formulae. Delacour recognized three tribes: (1) the Estrildae (waxbills, mainly African species), (2) Amadinae (mannikins from Africa and Asia) and (3) the Erythrurae (the Australasian grassfinches), which were further divided into three genera—Zonoaeginthus, Erythrura, and Poephila. On the basis of plumage characters, Poephila was split into two subgenera: (1) Neochima, which included the Zebra Finch Poephila guttata and the Double Bar Finch P. bichenovi, and (2) Poephila, which included P. cincta, P. acuticauda, P. personata, and P. gouldiae.

Morris (1958) reexamined estrildine relationships on the basis of behavioral characteristics. He suggested that the Zebra Finch (and Double Bar Finch) be moved to the *Poephila* subgenus (however, he re-

moved the Gouldian Finch (P. gouldiae) from Poephila and assigned it to a separate subgenus, Gouldaeornis).

Immelmann et al. (1977) disagreed with Delacour's (1943) decision to place the Zebra Finch in the same genus as other *Poephila*. They regarded the Zebra Finch as distinct from the other *Poephila* spp. because of its elongated upper tail coverts and marked sexual dimorphism in plumage coloration. Subsequent work has also shown that Zebra Finches, unlike other *Poephila*, show sexual differences in their distance calls (Zann 1984).

Most recently the phylogeny and evolution of the estrildine finches, particularly the Australasian species, have been examined by protein electrophoresis and chromosomal banding analyses (Christidis 1987). This study shows that the Zebra Finch and the Double Bar Finch should be grouped together and separately from the other *Poephila* spp. Christidis (1987) suggests that these two species should form the genus *Taeniopygia*, based on the Zebra Finch's earliest name (Reichenbach 1862).

On the basis of Christidis' (1987) work, there now seems to be little justification for the use of two generic names for the Zebra Finch. We urge all biologists and journal editors to follow Christidis' findings and to use *Taeniopygia* from now on.

## LITERATURE CITED

BURLEY, N. 1986. Sex-ratio manipulation in colorbanded Zebra Finches. Evolution 40: 1191–1206.

CHRISTIDIS, L. 1987. Phylogeny and systematics of estrildine finches and their relationships to other seed-eating passerines. Emu 87: 119-123.

DELACOUR, J. 1943. A revision of the subfamily Estrildinae of the family Ploceidae. Zoologica 28: 69-86.

IMMELMANN, K., J. STEINBACHER, & H. E. WOLTERS. 1977. Vögel in Kafig und Voliere: II. Prachtfinken. Aachen, Verlag Hans Limberg.

MAYR, E. 1944. Timor and the colonization of Australia by birds. Emu 44: 113-130.

MORRIS, D. 1958. The comparative ethology of grass-finches (Erythrurae) and mannikins (Amadinae). Proc. Zool. Soc. London 131: 389–439.

SLATER, P. J. B., L. A. EALES, & N. S. CLAYTON. 1988. Song learning in Zebra Finches (*Taeniopygia guttata*) progress and prospects. Adv. Stud. Behav. 18: 1–34.

ZANN, R. 1984. Structural variation in the Zebra Finch distance call. Z. Tierpyschol. 66: 328–345.

Received 14 April 1989, accepted 2 May 1989.

<sup>&</sup>lt;sup>1</sup> Lehrstuhl für Verhaltensphysiologie, Fakultat für Biologie, Universitat Bielefeld, 4800 Bielefeld 1, West Germany.

<sup>&</sup>lt;sup>2</sup> Department of Animal and Plant Sciences, University of Sheffield, Sheffield, S10 2TN UK.