

salamander tribe HEMIDACTYLIINI. Since I have been studying plethodontids for several years I have a strong interest in the nomenclature of the group and I am familiar with the relevant literature.

In their application to maintain the existing, widely used name for the group, Smith & Wake have argued for stability, and I agree with them wholeheartedly. The taxon is the subject of an extensive literature, and the proposed alternative name for the group (MYCETOGLOSSINI) is obscure. I see absolutely no advantage in using the name MYCETOGLOSSINI; the effect of such a change would simply be widespread confusion. Herpetologists, evolutionary biologists, ecologists, conservation biologists and others who are familiar with the group know it by the name HEMIDACTYLIINI and this name only.

The monophyly of the HEMIDACTYLIINI is problematic because the relationships of the genus *Hemidactylum* are uncertain (work in progress by myself and others should help to clarify this issue in the relatively near future). In any case, use of the name MYCETOGLOSSINI would not help matters and would only serve to muddy the waters further. I will certainly resist use of this name, which has appeared in the literature only once (Dubois, 1984) in contrast to the usage of the name HEMIDACTYLIINI.

(10) Support for the application has also been received from Prof Robert C. Stebbins (*University of California, Museum of Vertebrate Zoology, Berkeley, California 94720, U.S.A.*) and Drs Joseph T. Collins (*The University of Kansas, Museum of Natural History, Dyche Hall, Lawrence, Kansas 66045-2454, U.S.A.*), James Lazell (*The Conservation Agency, 6 Swinburne Street, Conanicut Island, Rhode Island 02835, U.S.A.*), Robert C. Drewes (*California Academy of Sciences, Golden Gate Park, San Francisco, California 94118-4599, U.S.A.*), Richard G. Zweifel (*American Museum of Natural History, 79th Street and Central Park West, New York, N.Y. 11024, U.S.A.*), W.R. Branch (*Port Elizabeth Museum, P.O. Box 13147, 6013 Humewood, South Africa*), David A. Good (*Louisiana State University, Museum of Natural Science, 119 Foster Hall, Baton Rouge, Louisiana 70803-3216, U.S.A.*) and Robert F. Inger (*Field Museum of Natural History, Roosevelt Road and Lake Shore Drive, Chicago, Illinois 60605, U.S.A.*).

**Comment on the proposed designation of a neotype for *Coelophysis bauri* (Cope, 1887) (Reptilia, Saurischia)**

(Case 2840; see BZN 49: 276-279; 50: 147-151, 236-239, 291-294; 51: 48-51)

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Colbert et al. (BZN 49: 276-279) asked the Commission to use its plenary powers to set aside previous type designations for the nominal species *Coelurus bauri* Cope, 1887, and to designate as neotype the complete skeleton AMNH 7224 from the Whitaker Quarry (Ghost Ranch) which is the holotype of *Rioarribasaurus colberti* Hunt & Lucas, 1991. The names *Rioarribasaurus* and *colberti* would thus be rejected as junior objective synonyms of *Coelophysis* Cope, 1889 and *bauri*, respectively.

However, the following points argue strongly against acceptance by the Commission of the application by Colbert et al.

(1) The proposal is made in spite of the existence of original material from Cope's collection in the American Museum of Natural History; it does not meet the qualifying conditions of Article 75d of the Code, nor the terms of Recommendation 75A.

(2) Colbert et al. state (para. 8) that 'Hunt & Lucas (1991) did not dispute the synonymy of *C. bauri* (as always understood) and *R. colberti* so their name should not be used as valid'. However, in accordance with the Code and in the absence of revisory work the name *C. bauri* refers only to Cope's original material. Furthermore Hunt & Lucas did dispute the synonymy by demonstrating the lectotype of *C. bauri* to be generically indeterminate and by treating *C. bauri* as a nomen dubium. They properly coined the name *Rioarribasaurus colberti* for the Whitaker Quarry coelurosaur, and designated a holotype in accordance with the Code.

(3) The provenance of Cope's material is uncertain. Lucas & Hunt (1989, 1992) showed that at least some of the specimens from near Gallina (New Mexico) must have been derived from the Petrified Forest Formation and not from the Rock Point Formation which contains the Whitaker Quarry. Colbert (1947, 1964, 1989) and Colbert et al. (1992) incorrectly claim that the Whitaker Quarry is located in the Petrified Forest Formation. On the Colorado Plateau, the Petrified Forest and Rock Point Formations are easily distinguished by the presence of bentonitic siltstone in the former. The Rock Point Formation siltstone lacks a bentonitic fraction, as does the siltstone at the Whitaker Quarry. The Whitaker Quarry can be confidently assigned to the Rock Point Formation, on stratigraphic and sedimentologic grounds. Litwin (1986) and Litwin, Traverse & Ash (1991) sampled both Formations in the vicinity of the Whitaker Quarry for palynomorphs in order to determine the age of the type locality of *R. colberti*. They placed the quarry in the Rock Point Formation, and showed that this is palynologically younger than the Petrified Forest Formation. The locality of some if not all of Cope's material and the type locality of *R. colberti* are in stratigraphic units of different ages (early-middle Norian and late Norian-Rhaetian respectively). Padian (1986) also concluded, on taphonomic evidence, that Cope's specimens were collected from a horizon and locality different from the Whitaker Quarry.

(4) The application by Colbert et al. should be rejected because Cope's *C. bauri* material, though indeterminate, may belong to a genus different from that represented by the *R. colberti* holotype and all other published specimens of *Rioarribasaurus* from the Whitaker Quarry. The pubis of one of Cope's specimens (AMNH 2724) has an obturator foramen (von Huene, 1915, fig. 61), and Padian (1986, p. 50, fig. 5.2) illustrated this character on a partial skeleton from the Petrified Forest National Park in Arizona which he referred to *C. bauri*. This character state is widely accepted as meriting generic distinction in dinosaurs, and it would appear that Cope's and Padian's specimens are more closely related to each other than either is to the holotype and the other published specimens of *R. colberti*. However, Sullivan (1993) noted a single obturator foramen on several Whitaker Quarry specimens, while Paul (1993) stated that two obturator foramina are sometimes present. This and other observations led Paul (p. 400) to treat *Rioarribasaurus* as a junior subjective synonym of *Syntarsus* Raath, 1969, and he referred all Whitaker Quarry specimens

to *Syntarsus colberti* (nov. comb.). Paul's conclusions await critical evaluation, but they do show that there is no taxonomic need to conserve the binomen *Coelophysis bauri*. Cope's material is indeterminate and *C. bauri* is properly to be considered a nomen dubium. The specimen reported by Padian (1986) is more complete than Cope's total material but is also indeterminate.

(5) Colbert et al. (BZN 50: 278, para. 9) state that the name *C. bauri* 'is solidly entrenched in the literature'. I maintain that it is not, and that perceptions to the contrary are largely based on the incorrect application and usage of this name for nearly 50 years by Colbert (1947, 1964, 1989), Colbert & Baird (1958), Padian (1986) and Rowe & Gauthier (1990), and also by Schwartz & Gillette (in press). Colbert et al. seek the effective suppression of the name *Rioarribasaurus* which is already being used for the Whitaker Quarry theropod, for example by Olshevsky (1991, 1992), Olsen et al. (1992) and Cuny & Galton (1993); as already mentioned Paul (1993) also considered *Coelophysis bauri* to be a nomen dubium.

(6) A number of comments have been published in the *Bulletin* which support the application by Colbert et al. Unfortunately these comments do not contribute information of value about the taxonomic status of *Coelophysis bauri* and/or serve only to perpetuate the errors mentioned in the previous paragraph. In any event the taxonomic dispute in this case should not be subject to a 'yea' or 'nay' popularity contest.

#### Additional references

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