OPINION 2331 (Case 3472)

Cetiosaurus Owen, 1841 (Dinosauria, Sauropoda): usage conserved by designation of Cetiosaurus oxoniensis Phillips, 1871 as the type species

Abstract. The Commission has conserved the usage of the generic name *Cetiosaurus* Owen, 1841 by designating *Cetiosaurus oxoniensis* Phillips, 1871 as the type species of *Cetiosaurus* in place of *Cetiosaurus medius* Owen, 1842.

Keywords. Nomenclature; taxonomy; Dinosauria; Sauropoda; CETIOSAURIDAE; *Cetiosaurus*; *Cetiosaurus* oxoniensis; England; Europe; Middle Jurassic.

Ruling

- (1) Under the plenary power, the Commission has set aside all previous fixations of type species for the nominal genus *Cetiosaurus* Owen, 1841 and designated *Cetiosaurus oxoniensis* Phillips, 1871 as the type species.
- (2) The name *Cetiosaurus* Owen, 1841 (gender: masculine), type species *Cetiosaurus oxoniensis* Phillips, 1871, as ruled in (1) above, is hereby placed on the Official List of Generic Names in Zoology.
- (3) The name *oxoniensis* Phillips, 1871, as published in the binomen *Cetiosaurus oxoniensis*, specific name of the type species of *Cetiosaurus* Owen, 1841, as ruled in (1) above, is hereby placed on the Official List of Specific Names in Zoology

History of Case 3472

An application to maintain stability in the taxonomy of sauropod dinosaurs by designating *Cetiosaurus oxoniensis* as the type species of the historically significant genus *Cetiosaurus* was received from Paul Upchurch (*University College London, London WC1E 6BT, U.K.*), John Martin (*6 The Nook, Great Glen, Leicester, U.K.*) and Michael P. Taylor (*School of Earth & Environmental Sciences, University of Portsmouth, Portsmouth, U.K.*) on 23 June 2008. After correspondence the case was published in BZN **66**: 51–55 (March 2009). The title, abstract and keywords of the case were published on the Commission's website. Two comments in support were published in BZN **66**: 187–188.

Decision of the Commission

On 1 March 2010 the members of the Commission were invited to vote on the proposals published in BZN 66: 53. At the close of the voting period on 1 June 2010 the votes were as follows:

Affirmative votes – 16: Alonso-Zarazaga, Bouchet, Brothers, Fautin, Halliday, Krell, Lamas, Lim, Ng, Papp, Patterson, Rosenberg, Štys, Winston, Yanega and Zhou.

Negative votes – 8: Bogutskaya, Kojima, Grygier, Harvey, Kottelat, Kullander, Pape and van Tol.

Ballerio and Minelli abstained. Pyle and Zhang were on leave of absence.

Voting AGAINST, Bogutskaya said that in her opinion the major problem with this case was that the authors had considered C. medius to be the type species of Cetiosaurus incorrectly, since Owen (1842) had not used any word equivalent to the word 'type': hence the reference to Article 69.1.1 was incorrect. Also, it was not clear to her whether Steel (1970) or any other author had used wording that could be accepted as a type species designation for C. medius. Also, voting AGAINST, Grygier said that the work in which C. brevis had been validly designated as the type species of Cetiosaurus was not stated clearly, and in para. 3, after the mention of the lack of an explicit type designation by Owen (1842a), there was only the bald statement that 'C. medius is thus the type species'. He added that this abrupt transition had left him with the impression that an intervening sentence concerning the details of a post-Owen subsequent designation had been inadvertently omitted, but an inquiry to the Secretariat indicated something different. Unpublished correspondence with the authors of the Case showed that, by means of a very 'flexible' interpretation of the phrase 'or an equivalent term' [for 'type' or 'type species'] in Article 69.1.1, the present authors actually had accepted Owen (1842b) as having designated C. medius as the type species. [Grygier also said that this would be a 'subsequent' designation because the genus had been originally proposed without any originally included species, and Owen (1842a) was the first to assign any (four) nominal species to it.] Aside from the fact that this explanation was not expressly presented in the published Case, he could not agree with this line of reasoning. There was no such 'equivalent term' in the explanation from Owen (1842a) quoted in para. 3, and the authors did not present enough information to know whether any subsequent author, such as Steel (1970), succeeded in making a valid type designation. It was only clear that Upchurch & Martin (2003) did not do so. If someone after Owen (1842b) had indeed designated *C. medius* as the type species, then the proposals of the present Case would erase this act just as effectively as if Owen had done so, and a FOR vote would be called for. However, if nobody had yet validly made a subsequent type designation, then the present authors were free to designate C. oxoniensis as type species without involving the Commission. He voted AGAINST, pending a clarification of the actual type-species situation heretofore. Also voting AGAINST, Harvey said that the applicants had not convincingly established that there is a taxonomic problem associated with retaining Cetiosaurus medius as the type species of Cetiosaurus. If the species was recognisable, which could not be established from the application, the designation of C. oxoniensis as type species would be purely for convenience. The Commissioners were provided with no details of whether any type material of Owen's various species is still extant and, if so, whether it can be recognised at the species level. If his interpretation of para. 5 were correct, he added, C. medius is not one of the recognisable species of the genus, but a concrete statement to this effect was necessary. Until conclusive evidence is produced that there is a substantial nomenclatural problem, he saw no need to vote FOR this application. Voting AGAINST, Kojima said that it was not clearly explained which problems would result from Cetiosaurus medius being treated as the type species of the genus Cetiosaurus, based on the application of the provisions of the Code. Also voting

AGAINST, Kottelat said that based on the data provided in the application, C. medius is not type species by subsequent designation by Owen (1842b), because the word 'type, type species or ... an equivalent term' was not used in that publication and the reference to Article 69.1.1 in the application was incorrect. A term is 'a word or group of words having a particular meaning'; the quoted sentence is not a 'term', so there is no type designation, he said. It appeared to him that that some authors had designated, or considered, that the type species of Cetiosaurus was C. brevis, and that there had also been a designation of C. medius as type species by Steel (1970). He had not checked these details, but it seemed this should have been mentioned or discussed. Also, he was missing information on the current identity of the supposed type species C. medius (or C. brevis) and of the implications of retaining C. medius (or C. brevis) as the type. Voting AGAINST, Kullander also maintained that the reference to Article 69.1.1 to suggest that C. medius was the type species of Cetiosaurus was not correct. C. medius was not made type species by that text. Consequently, Cetiosaurus had no type species. There was no particular reason to make oxoniensis the type species of Cetiosaurus and there was no reason why those fossils should not be managed under the normal rules of nomenclature. ABSTAIN-ING, Minelli said that information provided in the application was incomplete: in which genus was 'medius' likely to fall, if 'oxoniensis' were fixed as the type species of 'Cetiosaurus'? Would the acceptance of 'medius' as the type species of Cetiosaurus really affect the current circumscription of Cetiosaurus and CETIOSAURIDAE?.

Original references

The following is the original reference to the name placed on Official Lists and Indexes by the ruling given in the present Opinion:

Cetiosaurus Owen, 1841, Proceedings of the Geological Society of London, 3: 457. oxoniensis, Cetiosaurus, Phillips, 1871, Geology of Oxford and the valley of the Thames, Clarendon Press, Oxford, p. 291.