

**OPINION 2316 (Case 3463)**

***Testudo gigantea* Schweigger, 1812 (currently *Geochelone* (*Aldabrachelys*) *gigantea*; Reptilia, Testudines): usage of the specific name conserved by maintenance of a designated neotype, and suppression of *Testudo dussumieri* Gray, 1831 (currently *Dipsochelys dussumieri*)**

**Abstract.** The Commission has conserved the specific name *Testudo gigantea* Schweigger, 1812 (family TESTUDINIDAE) in its customary usage for the giant land tortoise found on Aldabra Atoll in the western Indian Ocean, by affirmation of the neotype designation of 2006 and suppression of *T. dussumieri* Gray, 1831.

**Keywords.** Nomenclature; taxonomy; Testudines; TESTUDINIDAE; *Aldabrachelys*; *Testudo*; *Geochelone*; *Chelonoidis*; *Dipsochelys*; *Testudo carbonaria*; *Testudo elephantina*; *Testudo denticulata*; *Testudo dussumieri*; *Testudo gigantea*; land tortoises; Aldabra Atoll.

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**Ruling**

- (1) Under the plenary power, the Commission has ruled that:
  - (a) all previous type fixations for the nominal species *Testudo gigantea* Schweigger, 1812 are hereby set aside and neotype USNM 269962 in the National Museum of Natural History, Smithsonian Institution, is hereby retained as designated and described by Frazier (2006), as name-bearing type;
  - (b) the name *dussumieri* Gray, 1831, as published in the binomen *Testudo dussumieri*, is hereby suppressed for the purposes of the Principle of Priority but not for those of the Principle of Homonymy.
- (2) The name *Aldabrachelys* Loveridge & Williams, 1957, type species by original designation *Testudo gigantea* Schweigger, 1812, is hereby placed on the Official List of Generic Names in Zoology.
- (3) The name *gigantea*, Schweigger, 1812, as published in the binomen *Testudo gigantea* and as defined by the neotype designated in (1)(a) above, the specific name of the type species of *Aldabrachelys* Loveridge & Williams, 1957, is hereby placed on the Official List of Specific Names in Zoology.
- (4) The name *dussumieri* Gray, 1831, as published in the binomen *Testudo dussumieri* and as suppressed in (1)(b) above, is hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology.

**History of Case 3463**

An application to conserve the specific name *Testudo gigantea* Schweigger, 1812 (family TESTUDINIDAE) in its customary usage for the giant land tortoise found on Aldabra Atoll in the western Indian Ocean, by affirmation of the neotype designation of 2006 and suppression of *T. dussumieri* Gray, 1831, was received from J. Frazier

(Conservation and Research Center, National Zoological Park, Smithsonian Institution, Front Royal, VA, U.S.A.) on 17 April 2008. After correspondence the case was published in BZN 66: 34–50 (2009). The title, abstract and keywords of the case were published on the Commission's website. Comments were published in BZN 66: 80–87, 169–186, 274–290, 352–357; 67: 71–90, 170–178, 246–254, 319–331; 68: 72–77, 140–143, 294–300. With 83 published comments, this represents the most extensive correspondence received by the Commission on a Case to date.

### Decision of the Commission

On 1 September 2012 the members of the Commission were invited to vote on the proposals published in BZN 66: 43–44. At the close of the voting period on 1 December 2012 the votes were as follows:

Affirmative votes – 19: Ballerio, Bogutskaya, Bouchet, Brothers, Fautin, Grygier, Halliday, Krell, Kottelat, Kullander, Lamas, Minelli, Ng, Pape, Rosenberg, Winston, Yanega, Zhang and Zhou.

Negative votes – 4: Alonso-Zarazaga, Kojima, Štys and van Tol.

Harvey split his vote – FOR proposals 1(a), 2, 3; and AGAINST proposals 1(b), 4.

Patterson abstained. Pyle was on leave of absence. No vote was received from Lim.

Voting FOR, Bouchet observed that he voted in favour of the conservation of the name *Testudo gigantea* because it was a well-known name for an iconic animal. However, (1) he regretted and rejected the negative personal comments on the work of Roger Bour, which had been aired at various times in the discussion of this Case. If Bouchet did not follow Bour's proposals, this was not because he was sceptical about the historical and nomenclatural facts as presented by him, but because he believed stability was best met by conserving the name *gigantea*; (2) he regretted that the occasion was lost to robustly link nomenclature and 21<sup>st</sup> century systematics by selecting a neotype that had associated molecular markers. The Commission was not to be blamed for it, but he regretted that the biological and conservation communities had shown that they could spend four years vehemently discussing the Case without ever referring to the modern functions of a name-bearing type. Also voting FOR, Brothers said that the very extensive correspondence on this Case made it clear that a decision by the Commission was essential and it was also obvious that whatever decision was made would not please everyone. He said he was convinced that approving the application was the most effective way to stabilise the situation; a vote against would merely perpetuate the current confusion. All of the arguments about the validity/identity/status of holotype/lectotype/provenance merely reinforced the scope of disagreement and the need for a decision that would fix the application of the names unambiguously. Only a vote in favour would accomplish this. Brothers said it was to be hoped that the opponents of the application would honour the Code (which they defended so vigorously), which provides for the use of the plenary power by the Commission, should the application be approved by the required majority of votes. Also voting FOR, Grygier commented that Bour should be commended on his efforts to demonstrate the true story and address its nomenclatural implications. However, particularly with regard to legislation in force pertaining to the conservation of the Aldabra tortoise, the need for stability in nomenclature seemed to outweigh the desirability of maintaining strict priority. Grygier felt that Frazier's was

not the most elegant possible solution, but it was the simplest and would leave no room for further controversy. Inasmuch as some specialists seemed sceptical about the validity of certain of Bour's actions, a negative vote on Frazier's proposals would continue to leave more than one option open for the valid names of the genus and species. Such an outcome would also be awkward in light of Article 81.2.4 of the Code, which instructs the Commission to specify the name(s) to be used if use of the plenary power is refused. To ensure stability in such a case, a fully thought-out alternative plan should have been formally proposed. The briefly outlined alternative proposals made by Cheke (BZN 66: 175, BZN 68: 296) and Dubois et al. (BZN 67: 88) would have been inadequate to settle the matter even if they had been submitted to the Commission for a vote. One possible route might have been to use the plenary power to suppress all previous type designations for *T. gigantea* and designate the purported holotype in Paris as its neotype. In combination with Frazier's proposal to suppress *dussumieri*, this would leave *Dipsochelys elephantina* as the only potentially valid name for the Aldabra tortoise (*Aldabrachelys* having become a synonym of *Chelonoidis* as a result of the neotype designation). As another possibility, in an e-mail to the Commission, Commissioner Alonso-Zarazaga suggested conserving *gigantea* under Duméril & Bibron's (1835) authorship with their specimen as neotype and giving it precedence over supposed synonyms. Either of these two alternatives could have served as the basis for further proposals if Frazier's plan had failed to gain a 2/3 majority of the vote. Kottelat explained that he voted FOR only for two reasons: (1) to bring the debate to a close; and (2) because of the conservational/bureaucratic argument. For the rest, he felt that the tone of many comments was unpleasant and he was disappointed that what he saw as very negative and personal perspectives were included in comments; he felt they added nothing to the Case. He said that fluctuations in taxonomic interpretation might be a problem for non-specialists, but it was not 'chaos'; it reflected the evolution of taxonomic research. Also voting FOR, Krell explained that he always found it painful from a scholarly perspective to disregard historical facts and intentions of authors. He thought that Bour was diligent and historically correct, and he hated to annul good work, but in this case, with the species in question being of high conservation and even political interest, he felt there was more at stake. Here we had a user group larger than usual, and the comments suggested that the user group would much prefer to go along with the solution presented in the original Case. Although he found the suggestion from Alonso-Zarazaga (above) the most elegant solution, a neotype had already been proposed. Going along with this was probably the most parsimonious solution, so he voted for the Case. Also voting FOR, Kullander said he agreed that *gigantea* was the best option for a name. Yet, he did not feel that the documentation reflected complete objectivity, and it was obvious that the preparation of the Case should have pointed to other options, as suggested by other Commissioners. Nevertheless, he felt it was better to have a decision than to let this issue be debated forever. Voting FOR, Ng said he felt the issue here remained as divided and messy as when it started, despite its long time in discussion. He said that, much as some of his colleagues argued for changes to the application or more time to deliberate, he was of the opinion that this divisive issue must be resolved – and this must be done via a vote. To be caught up in a 'historical log-jam' just for a name was not productive. For science to move ahead and for the species to be saved, which

remained his priority, he felt we needed to move beyond the name, whatever it was to be. The views of the proponents of this case were known and, to a great degree, he supported their views. However, he felt that the views of the opponents were also salient as they argued from their considerable collective experience and wisdom. He felt he was not able to say definitively who was right and who wrong in this situation. He said that the historical evidence and data were not completely convincing for either side; there were only high probabilities of likelihood in the submissions of both proponents and opponents. In such a conundrum, he took counsel from the comments by historian A.M. Roos (submitted to the Commission with voting papers, published herein) – there remained just too many ‘ifs’ and ‘maybes’. Ng felt that the Commissioners’ job, when faced with such a dilemma, was to make a clinical decision, and forge ahead regardless. The decision fixed the name for an animal that needed conservation, regardless of what its originators may have wished or intended, regardless of ‘historical authenticity’, regardless of sentiment which remained rife. He felt that the best way to do this was to fix a neotype that was unambiguous and clear-cut, and move on. Voting FOR, Rosenberg said he would have preferred that the name *Testudo gigantea* be attributed to Duméril & Bibron (1835) by setting aside Article 49 (regarding misidentification) and outlined other nomenclatural steps that might have accompanied that approach. Voting FOR, Yanega commented that, as in other recent cases, this reduced to the essential question as to whether familiarity and stability of a name were worth maintaining when scholarship and the Code opposed it; this was precisely why the Commission had the plenary power, and this was the kind of case where that power could best be put to use. There might be alternatives, but Yanega said that Frazier’s was the alternative put before the Commission, and it served the intended purpose.

Voting AGAINST, Štys said he found the arguments provided by Frazier (2009; BZN 66: 44–50) nomenclaturally unsupportable. Štys felt this also applied to most comments favouring Frazier’s proposal: some of them showed lack of knowledge of the provisions of the Code and lack of understanding of its spirit, ignored the relevant historical literature, and the very process of scientific study. He said it was counterproductive for emotions to replace scientific discussion, and that some zoologists had explicitly or implicitly expressed disbelief to scientists of MNHN in Paris while not having examined the historical (type) specimens involved. Since the Case evoked great interest among the general public he believed that it was the duty of the Commission to suggest its own alternative solutions and vote upon them, though he acknowledged that probably nobody would be fully satisfied with the outcome.

Splitting his vote, Harvey observed that this interesting but heated debate had no simple solution that would satisfy all parties. After much deliberation, his vote FOR the majority of the proposals was based on the urgent need to stabilise the specific name of the Aldabra tortoise. The rediscovery of a specimen thought to be the holotype of *Testudo gigantea* seemed to be incontrovertible, but straight application of the Code would result in the resurrection of a name that had been much less applied to the Aldabra tortoise than the specific name *gigantea*. Voting AGAINST the request to suppress the name *T. dussumieri*, he noted that there seemed little doubt that this name was simply a junior synonym of *T. gigantea*, as applied in 1(a), and no further action was necessary. Harvey noted that the stabilisation of the name

*T. gigantea* also conveniently stabilised the name *Aldabrachelys*, which had been frequently used for the Aldabra tortoise and its allies.

### Original references

The following are the original references to the names placed on Official Lists and Indexes by the ruling given in the present Opinion:

*Aldabrachelys* Loveridge & Williams, 1957, *Bulletin of the Museum of Comparative Zoology, Harvard*, **115**(6): 225.

*dussumieri*, *Testudo*, Gray, 1831, *Synopsis Reptilium; or short descriptions of the species of reptiles. Pt. I. Cataphracta, tortoises, crocodiles, and enaliosaurians*. viii, Treuttel, Wurtz & Co., London, p. 3.

*gigantea*, *Testudo*, Schweigger, 1812, *Königsberger Archiv Naturwissenschaft und Mathematik*, **1**: 327, 362.

The following is the reference for the description of the neotype:

**Frazier, J.** 2006. *Herpetological Review*, **37**(3): 275–280.