

Instituto Florestal for logistical support; and to the following for identifying prey taxa: Dr. Leandro G. Oliveira (Insecta), Dr. Gustavo A.S. Melo (Decapoda), Dr. Yoko Wakabara (Amphipoda), Dr. Gustavo Righi (Haplotaxida), and Dr. Mario de Vivo (Mammalia). Marcos R. Souza drew the maps and Julio C. Roma kindly provided photographs. FLS was sponsored by CNPq Grant 132400/93-6.

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Accepted: 21 May 1995

Chelonian Conservation and Biology, 1995, 1(4):322-323
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The Date of Publication of Gray's *Catalogue of Shield Reptiles*

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John Edward Gray's *Catalogue of Shield Reptiles* (Gray, "1855" [1856b]) is cited by nearly all authors (e.g., Wermuth and Mertens, 1977; King and Burke, 1989; Iverson, 1992; Ernst et al., 1994) as having been published in 1855. The title page bears the date 1855, and the date of 1 December 1855 is printed at the end of the Introduction. However, Gray (1865) noted that the *Catalogue* "was printed many months before it appeared, as it had to wait to have the plates finished." Only Stejneger (1944) and Webb (1990) have cited the year of publication of the *Catalogue* as 1856, but did not discuss their reasons for doing so.

While examining the nomenclatural and taxonomic history of living trionychid turtles, I investigated the question of the date of publication of Gray's *Catalogue*. Since new names for several chelonian taxa were proposed in the *Catalogue*, the correct date of publication is unquestionably of interest. Some of these names also appear in another, concurrent chelonian taxonomic paper (Gray, "1855" [1856a]). Thus, the year and order of publication of these two references are important. This other paper was published in the *Proceedings of the Zoological Society of London* (PZS) in the December 1855 issue on pages 197-202. In this paper Gray stated (page 202) that "The new species described in this paper will be figured in the ... Catalogue ... which will shortly be published." Clearly this PZS paper (Gray, 1856a) was written before publication of the *Catalogue* (Gray, 1856b). According to Duncan (1937) the PZS paper (Gray, 1856a) was published between 22 January (pages 197-200) and 5 February (pages 201-202) 1856. Sherborn's (1934) notation of the date of publication of the *Catalogue* was 8 March 1855, but this year-date is clearly in error, especially in view of the printed date of 1 December 1855 in the Introduction to the *Catalogue*. Stejneger (1944), in his synonymy of *Trionyx argus* and *T. annulatus*, gives the date of publication of the *Catalogue* as 8 March 1856. George R. Zug (*pers. comm.*) noted that the copy of the *Catalogue* in the United States National Museum is annotated on the title page by Stejneger as follows: "rce. by Paris Academy ... in week ending March 17, 1856 (Richmond). Presented to the Trustees on 7 March 1856 and [undecipherable] the next day 8 March 1856 (Sherborn in letter to Richmond 10 June 1914)." Philip K. Tubbs, Executive Secretary, International Commission on Zoological Nomenclature (*in litt.*, 25 February 1993), also commented that "according to the records here, Gray's '1855' Shield Reptiles Catalogue was indeed issued on 8 March 1856. It should therefore be cited as Gray [1856]." The date for the publication of the *Catalogue* (Gray, 1856b) is therefore confirmed as 8 March 1856, about a month later than the publication of the PZS article (Gray, 1856a). Thus, none of the new names proposed by Gray in these two references were published in 1855. The corrected publication dates and citations of new names proposed by Gray in the two 1856 references, as determined by the present study, are listed below. Current valid taxa are marked with an asterisk (*).

Eleven new names were published first in the PZS article and should be referenced as "Gray, 1856a."

- Aromochelys* (p. 199)
- Aromochelys carinata** (p. 199)
- Chelodina colliei* (p. 200)
- Chelodina sulcata* (p. 201)
- Cuora** (p. 198)
- Cyclanosteus* (p. 201)
- Emyda ceylonensis* (p. 201)
- Kinosternon hippocrepis** (p. 198)
- Kinosternon punctatum* (p. 198)
- Macrochelys* (p. 200)
- Pseudemys** (p. 197)

Eighteen new names were published later in the *Catalogue* and should be referenced as "Gray, 1856b."

- Batagur** (p. 35)
- Chelodina sulcifera* (p. 59)
- Emys callirostris** (p. 25)
- Emys olivacea* (p. 30)
- Emys pulcherrimus** (p. 25)
- Emys sanguinolenta* (p. 26)
- Emys ventricosa* (p. 28)
- Emys venusta** (p. 24)
- Geoclemys** (p. 17)
- Hydraspis raniceps** (p. 55)
- Hydromedusa depressa* (p. 60)
- Kachuga** (p. 35)
- Macrolemys** (p. 48)
- Nicoria* (p. 17)
- Pangshura* (p. 36)
- Testudo geometrica nigriventris* (p. 8)
- Trionyx cariniferus* (p. 67)
- Trionyx frenatus* (p. 67)

Two significant issues of nomenclatural priority are raised by recognizing the publication of the PZS article as earlier than the *Catalogue*. One concerns the species-level names *Chelodina sulcata* Gray (1856a:201) and *Chelodina sulcifera* Gray (1856b:59). Both names are currently synonymized under *Chelodina longicollis*, the Australian common snake-necked turtle, but *C. sulcifera* has occasionally been considered taxonomically distinct as *C. longicollis sulcifera* (e.g., Wermuth and Mertens, 1977), with *C. sulcata* considered a junior synonym as *ex errore* for *C. sulcifera*. If the taxon in question is to be considered valid, then it would need to bear the name *C. longicollis sulcata* by virtue of nomenclatural priority with *C. sulcifera* redesignated as *ex errore* for *C. sulcata*.

The other issue of nomenclatural priority concerns the genus-group names *Macrochelys* Gray (1856a:200) and *Macrolemys* Gray (1856b:48). *Macrolemys* is the current valid generic name for the North American alligator snapping turtle. However, *Macrochelys* has priority as the earlier name, and *Macrolemys* should be considered a junior synonym as *ex errore* for *Macrochelys*. Interestingly, *Macrolemys* in the *Catalogue* is used in the text (1856b:48, 49) and in the List of Plates, whereas *Macrochelys* is used as the caption for all three plates (38, 39, and 40).

Two generic names, *Kachuga* and *Pangshura*, have occasionally been cited as "Gray, 1869" (e.g., Wermuth and Mertens, 1977; Iverson, 1992), but both taxa were first briefly defined as subgenera of *Batagur* in the *Catalogue* (Gray, 1856b:35 and 36, respectively); later Gray (1863) referred to "the sections *Kachuga* and *Pangshura*." In the

1869 paper Gray cited the *Catalogue* as a reference for *Kachuga* and *Pangshura*. Interestingly, the genus *Batagur*, first defined in the *Catalogue* (Gray, 1856b), was mentioned as a *nomen nudum* in the earlier PZS article (Gray, 1856a).

Acknowledgments. — I thank two of the reviewers of this manuscript, Kraig Adler for alerting me to the Duncan reference and the precise dates of publication of Gray's PZS paper, and George R. Zug for transcribing Stejneger's notation in the USNM copy of the *Catalogue*. I am most grateful to Anders G.J. Rhodin for his time and effort in embellishing the manuscript with nomenclatural data (including the priority of *Chelodina* names).

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Accepted: 28 May 1995