

THE ORIGINAL AUTHORSHIP AND TYPE SPECIMEN OF
DERMOCHELYS CORIACEA

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The Original Authorship and Type Specimen of *Dermochelys coriacea*

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The marine leatherback turtle, *Dermochelys coriacea*, was originally described by Linnaeus in 1766 under the binomen *Testudo coriacea*. This authorship has recently been challenged by Fretey and Bour (1980) who designate Vandelli (1761) as the original author and describe the extant "holotype" of *D. coriacea* in the Padua University Museum in Italy.

Linnaeus based his description of *D. coriacea* partly on the publications by Vandelli (1761) and Rondelet (1554), citing them in his original synonymy. Figures of *D. coriacea* from both of these works are re-published by Fretey and Bour (1980). We commend Fretey and Bour for their identification of the original Vandelli specimen whose figure served as a "type" for Linnaeus. However, it must be noted that in re-assigning the authorship of *D. coriacea* from Linnaeus (1766) to Vandelli (1761), Fretey and Bour disregard the criteria for availability of a scientific name as outlined by

the International Code of Zoological Nomenclature.

Article 11(f) of the Code clearly states that in order to be available, a proposed generic name must be a noun in the nominative singular (e.g., *Testudo*). In his paper, Vandelli utilizes three different "generic" names for the leatherback, none of them in the proper form: *Testudine* (ablative), *Testudinis* (genitive), and *Testudinem* (accusative). In addition, the "specific" name that Vandelli gives to the leatherback agrees with the case of the "genus" in each of the binomials used: *Testudine coriacea*, *Testudinis coriacea*, *Testudinem coriacea*. These names are essentially nothing more than vernacular descriptive terms. Nowhere does Vandelli employ the binomen *Testudo coriacea*.

In addition, Article 11(c) of the Code states that in order for a name to be available, the author must have consistently used binomial nomenclature in the entire work. Vandelli also describes the echinoderm *Holothurio* in the paper. It is nowhere referred to in a binomial form, and on page 5 of his paper he refers to it in italics as *Holothurium laeve, dichotomum, fucus marinis alligatum*. This is the descriptive format of typical pre-Linnean literature.

It is clear that Vandelli (1761) does not conform with the requirements of binomial nomenclature and that his paper cannot therefore be considered available for nomenclatural purposes. It is also clear that an available binomen for the leatherback turtle was not proposed in the paper. Therefore, the original authorship of *Dermochelys coriacea* remains Linnaeus, 1766.

Because of the nomenclatural unavailability of the work by Vandelli, the specimen in the Padua University Museum designated by Fretey and Bour as the holotype of *D. coriacea* (Vandelli, 1761) has no status as an original type. However, given the fact that a Linnean type specimen of *D. coriacea* has never existed (Lönnerberg, 1896; Andersson, 1900; Holm, 1957; Pritchard, 1980), and that Linnaeus' description was partly based on Vandelli's figure of the Padua specimen, the latter may be properly considered one of Linnaeus' syntypes in accordance with Article 73(c)(i) of the Code. It therefore seems appropriate to designate that specimen as the lectotype of *Dermochelys coriacea* (Linnaeus, 1766), and we so designate it.

According to Fretey and Bour, Vandelli's specimen was collected near Rome on the Italian coast of the Tyrrhenian Sea in the western Mediterranean. They designate this as the restricted type locality for *D. coriacea*, superseding Smith and Taylor's (1950) designation of Palermo, Sicily. In view of our proposal of the Padua University specimen as lectotype, Fretey and Bour's restriction of the type locality appears entirely appropriate.

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