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THE IDENTITY OF THE PLIO-PLEISTOCENE TURTLE, *GEOEMYDA PILGRIMI* PRASAD AND SATSANGI, 1967 (TESTUDINES: CRYPTODIRA: BATAGURIDAE)

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(with four text-figures)

ABSTRACT: The taxonomic status of the Plio-Pleistocene batagurid turtle from the Indian Siwaliks, *Geoemyda pilgrimi* Prasad and Satsangi (1967) is reevaluated. Based on an examination of the holotype, a partially preserved shell, it is concluded that the material is inseparable from the extant *Hardella thurjii* (Gray, 1831) which is distributed over the north of the south Asian region, and is being synonymized under it.

KEY WORDS: *Geoemyda pilgrimi*, taxonomy, *Hardella thurjii*, Plio-Pleistocene, India.

INTRODUCTION

The Plio-Pleistocene deposits of the Siwaliks of northern India and Pakistan have yielded large number of fossil turtles of the family Bataguridae, which have been described by several workers, including Lydekker (1876-1887). However, nearly all have been synonymized by Smith (1931) under extant species. Since Smith (1931), a further two species of fossil turtle belonging to the family Bataguridae have been described from India: *Geoclemys sivalensis* by Tewari and Badam (1969) from Punjab, which has been synonymized under *Geoclemys hamiltonii* by Das (1991a) and *Geoemyda pilgrimi* by Prasad and Satsangi (1967), whose specific status will be dealt with in this paper. The description of *Geoemyda pilgrimi* appeared in an abstract in 1963 (Prasad and Satsangi, 1963) and the complete paper appeared four years later (Prasad and Satsangi, 1967), Prasad (1968) republishing the description in a monograph of the fossil vertebrates of Haritalyanagar, Himachal Pradesh, northern India.

The fossil turtle was examined at the Geological Survey of India (GSI), Calcutta, India, and Recent turtles were studied at the Natural History Museum, London, Great Britain (BMNH), Bangladesh National Museum, Dhaka, Bangladesh (BNM), Madras Crocodile Bank Trust, Madras, India (MCBT), Naturhistorisches Museum, Vienna, Austria (NMW), Niederösterreiches Landmuseum, Vienna, Austria (NOLM), Oxford University (Zoological Museum) (OM), Oxford, Great Britain, Musée National d'Histoire Naturelle, Paris, France (MNHN), Natur-Museum und Forschung-Institut Senckenberg, Frankfurt/Main, Germany (SMF), Zoologisches Forschunginstitut und Museum Alexander Koenig, Bonn, Germany (ZFMK) and Zoological Survey of India, Calcutta, India (ZSI). Nomenclature of shell components follows Dundee (1989); in addition, the following terms have been used: suture (juncture between two bony plates), seam (juncture between two scutes) and sulcus (impression of seam on shell bones).

Referred material: GSI 18091. An incomplete shell (Fig. 1), showing four vertebrals, three pleurals and eight marginals. The anterior part of the carapace is partially preserved. The plastron is entire, except for the left gular and both anals. Cranial, limb and tail bones are unpreserved.

Measurements: The following measurements were taken on the fossil material with dial vernier calipers: Fossil length 168.7 mm, fossil width 132.4 mm; shell measurements: Nuchal length 9.1 mm, nuchal width 19 mm, vertebral I length 31.9 mm.

The following estimates were made based on the restored diagram (Fig. 2): Straight carapace length (SCL)- Distance between cervical at restored carapace midline to the posterior-most point of marginal XII: 200 mm; straight carapace width (SCW)- Distance across widest part of re-