



## Naming one of the world's rarest chelonians, the southern *Batagur*

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### Abstract

Using mtDNA sequences of historical museum specimens, including the herein designated lectotype of *Tetraonyx affinis* Cantor 1847 and topotypic specimens of *Trionyx (Tetraonyx) cuvieri* Gray 1831 and *Tetronyx longicollis* Lesson 1834, we demonstrate that the name *Batagur affinis* (Cantor 1847) has to be used for a recently identified critically endangered terrapin species from Southeast Asia. Further, we provide evidence that *Batagur baska* (Gray 1830) historically was distributed from north-easternmost India and Bangladesh to at least the Ayeyarwady and Bago estuaries in Myanmar while *B. affinis* occurs in the southern Malay Peninsula and Sumatra. The taxonomic allocation of the extant and extirpated *Batagur* populations in the northern Malay Peninsula, Cambodia and southern Vietnam remains unclear. A museum specimen from the mid-19<sup>th</sup> century suggests that *B. baska* once also occurred in the Indus Delta of southern Pakistan.

**Key words:** Southeast Asia, South Asia, lectotype designation, taxonomy, endangered species

### Introduction

*Batagur baska* (Gray 1830), a large estuarine terrapin reaching a shell length of approximately 60 cm, is one of the most critically endangered chelonians of the world (IUCN, 2007; Kalyar *et al.*, 2007). Historically, it occupied a range extending from the Brahminy-Baitarini Delta (Orissa) and the Sundarbans Region (north-easternmost India, Bangladesh) through the Ayeyarwady (Irrawaddy) River mouth in Myanmar and the Malay Peninsula (southern Thailand, Malaysia) to Sumatra, Cambodia and southern Vietnam; however, it was extirpated in much of its former range (Moll, 1980; Das, 1991, 1995, 2001; Ernst *et al.*, 2000; Platt *et al.*, 2003; Kalyar *et al.*, 2007). *Batagur baska* is more or less confined to estuaries, mangrove belts and inshore beds of marine vegetation. During the reproductive season adult terrapins may travel far upstream to reach nesting beaches that are often located well above tidal influence (Kalyar *et al.*, 2007). In a recent paper, Praschag *et al.* (2007) demonstrated that *B. baska* actually consists of two genetically well-differentiated species. While it is clear that the name *B. baska* (Gray 1830), with type locality of “India”, has to be restricted to the species occurring in north-eastern India and Bangladesh, there are several candidates available for naming the second species from Indonesia and Malaysia (Praschag *et al.*, 2007). As national and international conservation measures are significantly influenced by zoological nomenclature, it is crucial to determine its valid name. To accomplish this goal, here we use mtDNA sequence data of historical museum specimens, including a syntype