

Research Notes

New Maximum Size Record for the Goonch *Bagarius yarrelli* (Sykes 1839) (Siluriformes: Sisoridae) from the Ganges River

(Rekod Baru Saiz Maksimum bagi Goonch *Bagarius yarrelli* (Sykes 1839)
(Siluriformes: Sisoridae) dari Sungai Gangga)

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ABSTRACT

On 3 January 2008, one specimen of Goonch *Bagarius yarrelli* (Sykes 1839) (Siluriformes: Sisoridae) was caught by a conventional beach seine in the lower part of the Ganges River, NW Bangladesh. The specimen constitutes a new record of maximum length and weight for the Ganges River and the South Asia.

Keywords: Maximum length; Maximum weight; *Bagarius yarrelli*, Ganges River, Bangladesh

ABSTRAK

Pada 3 Januari 2008, satu spesimen Goonch *Bagarius yarrelli* (Sykes 1839) (Siluriformes: Sisoridae) telah ditangkap menggunakan pukat tarik pantai konvensional di bahagian hilir Sungai Gangga, di barat laut Bangladesh. Spesimen ini merupakan rekod baru bagi panjang dan berat maksimum bagi Sungai Gangga dan Asia Selatan.

Kata kunci: Panjang maksimum; berat maksimum; *Bagarius yarrelli*; Sungai Gangga; Bangladesh

INTRODUCTION

Species of genus *Bagarius* (Sykes 1839) are an important component of riverine and brackish water fisheries in Bangladesh. This genus is a member of the Sisoridae (Siluriformes) family that widely occurred in most of the Asian countries but, mostly distributed in the Indus, Ganges drainages, southern India east of the western Ghats, Mekong basin, XeBangfai basin (Laos) to Indonesia (Froese & Pauly 2007). It is also found in continental waters of Bangladesh and India. However, the natural stocks of this genus have dwindled to a great extent over the years (Allan et al. 2005).

Information on maximum length, weight and age are necessary to estimate the population parameters including asymptotic length and growth coefficient of fishes, which is important for fisheries resource planning and management. These measurements enter in most of the models used in stock assessments directly or indirectly (Borges 2001). Information on the maximum length and weight of *B. yarrelli* are very scarce in the literature. Allan et al. (2005) reported the maximum total length (200 cm) for *B. yarrelli* in the Mekong river basin in China. Unfortunately, there is no information on the maximum length of this species in south Asia including Bangladesh (Froese & Pauly 2007). The aim of the present paper is to report a new maximum length and weight of *B. yarrelli* in the South Asia.

MATERIALS AND METHODS

A specimen of Goonch *Bagarius yarrelli* (Sykes, 1839) was captured using a conventional beach seine (locally called *Ber Jal*) by the local fishers (Figure 1) from the lower part of Ganges River (known as Padma River in Bangladesh) near Pakshi (24°9'0"N, 89°4'12"E), Pabna, Northwestern Bangladesh at 0800 hour on 3 January 2008 (Figure 2). The specimen was then transferred to the local fish landing centre where all morphometric data were taken. Total length (TL), fork length (FL) and standard length (SL) were measured with a measuring tape up to the nearest 1 cm. Specimen was weighed with a balance up to the nearest 0.1 kg. Sex was determined by the external appearance of the genital area. After taking the data, the specimen was sold in the local fish market. The specimen was also examined for the presence of parasites both externally in the landing centre and internally in the fish market after dissecting.

RESULTS AND DISCUSSION

The captured sisorid catfish was a female of 148 cm (TL), 132 cm (FL), 124 cm (SL) and weighing 65.0 kg. This maximum length record in south Asia is comparable to the observations in the Mekong River basin, China, where the maximum size recorded was 200 cm TL for unsexed specimen (Allan et al. 2005). Bouakhamvongsa et al. (2005) reported that the maximum size 134 cm and maximum weight 34 kg of *B. yarrelli* in the Mekong River



FIGURE 1. Specimen of the Goonch *Bagarius yarrelli* (Sykes 1839) captured by the local fishermen from the lower part of the Ganges (Padma) River on 3 January 2008. The photograph was taken by local correspondence, Daily Naya Diganta (Bangladesh), 5 January 2008

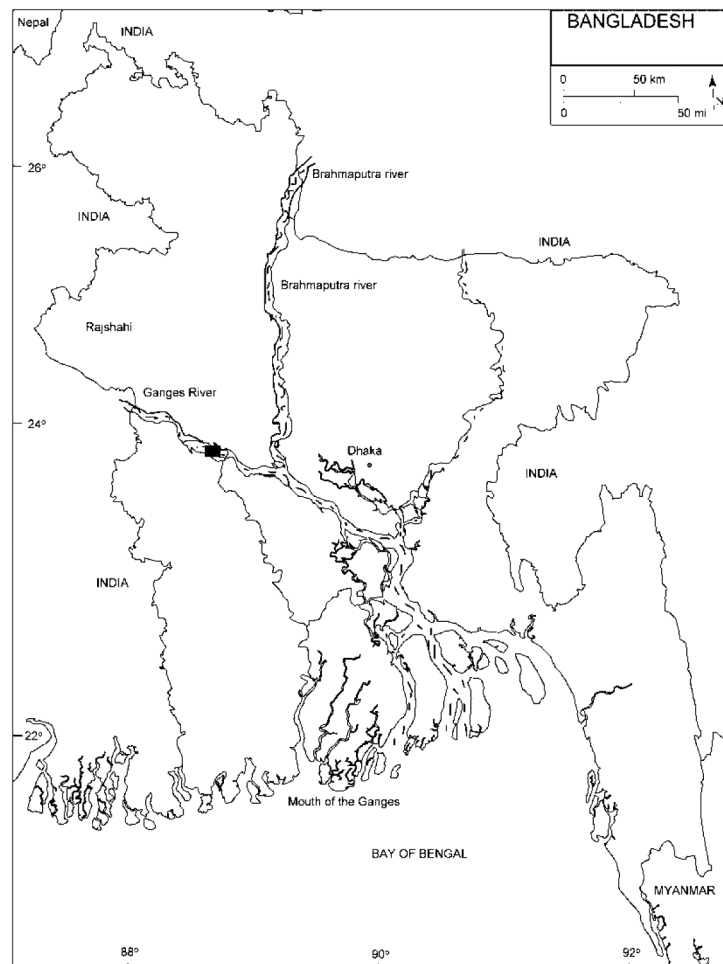


FIGURE 2. The site of the lower part of the Ganges (Padma River) where the specimen of the Goonch *Bagarius yarrelli* (Sykes 1839) was captured on 3 January 2008 is shaded (black)

in Lao PDR. As there is no information on maximum length and weight of *B. yarrelli* in the Indian sub-continent and therefore, it is not possible to compare with earlier maximum length and weight.

Considering the length-weight relationship of the short and deep body shape given in Froese and Pauly (2007) ($a = 0.02$; $b = 3.0$), the expected weight of 64.8 kg, a value very close to our observed value, indicates that this specimen has grown almost following the previous estimated relationship. The regional differences in maximum length and weight probably depend on the ecological conditions specially water temperature, which directly affect fish growth by influencing their physiology (Weatherley & Gill 1987; Mommsen 1998; Šantić et al. 2006). Moreover, ecological conditions directly influence food availability and subsequently fish growth (Weatherley & Gill 1987; Šantić et al. 2006).

ACKNOWLEDGEMENTS

The author would like to acknowledge Carl J. Ferraris Jr. (Portland, Oregon, USA) and Tyson Roberts (Thailand) for verifying the identification of the specimens and sending the necessary information on the species. The author wishes to express his gratitude to Pedro M. Leunda, Javier Oscoz and Rafael Miranda, University of Navarra, Pamplona, Spain for a critical reading of the manuscript. Also he wishes to express his gratitude to the spear fishers, Ishwardi, Bangladesh, who captured the specimen, and to the Editor, Daily Naya Diganta for the photograph (<http://www.dailynayadiganta.com/2008/01/05>).

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Received: 4 November 2009

Accepted: 17 November 2009