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NOTES ON THE GIANT GOURAMY, *Osphronemus septemfasciatus* Roberts, 1992 (Perciformes: Osphronemidae) FROM BATANG KANOWIT IN SARAWAK, MALAYSIA

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ABSTRACT

This article is the first attempt to document the presence of the giant gouramy, Osphronemus septemfasciatus, from Batang Kanowit, Sarawak, Malaysia. The weight of the specimen was 20.5kg, and the estimated standard and total length was 724mm and 872mm respectively. This appears to be the largest individual of the species recorded. This article also highlighted the importance of Batang Kanowit as a fishing ground for the local communities living along the river. Existing and potential threats to aquatic life in Batang Kanowit are discussed and conservation significance of the river is emphasised.

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by

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Abstract

This article is the first attempt to document the presence of the giant gouramy, *Osphronemus septemfasciatus*, from Batang Kanowit, Sarawak, Malaysia. The weight of the specimen was 20.5 kg, and the estimated standard and total length was 724 mm and 872 mm respectively. This appears to be the largest individual of the species recorded. This article also highlighted the importance of Batang Kanowit as a fishing ground for the local communities living along the river. Existing and potential threats to aquatic life in Batang Kanowit are discussed and conservation significance of the river is emphasised.

INTRODUCTION

Members of the genus *Osphronemus Lacepède*, 1801 (Family Osphronemidae) are commonly regarded as 'giant gouramies' on account of its extreme size relative to its congeners. It is a monotypic genus within the subfamily Osphroneminae, which at present contains four species namely, *Osphronemus goramy* Lacepède, 1802, *O. laticlavius* Roberts, 1992, *O. septemfasciatus* Roberts, 1992 and *O. exodon* Roberts, 1994 (Roberts, 1992, 1994; Kottelat *et al.*, 1993; Eschmeyer & Fong, 2011; Eschmeyer & Fricke, 2011). Other members of this family belong to the subfamily Belontiinae (with one genus), Luciocephalinae (six genera) and Macropodinae (six genera).

Giant gouramies originate from the Sunda region, but the distribution of each species is rather localised. *Osphronemus exodon* (Elephant ear gourami) is restricted to the Mekong River basin (Roberts, 1994) and it has been categorised as vulnerable in the IUCN

Red List of Threatened Species (IUCN, 2011). *Osphronemus laticlavius* (Giant red tail gourami) and *O. septemfasciatus* have been recorded only from Borneo with the former species occurring in Sabah, while the latter species is relatively widespread in the central and southern parts of Borneo (Roberts, 1992; Rachmatika *et al.*, 2005). Only *O. goramy* (Giant gourami) is widely distributed in the Southeast Asia, including Indochina, Peninsular Malaysia, Sumatra and Java (Roberts, 1992; Kottelat *et al.*, 1993). However, this latter species has been introduced into many tropical countries and its presence in Borneo may be due to past human introductions (Roberts, 1992).

Giant gouramies are popular species for food and ornamental fish trade in the Southeast Asian region (Roberts, 1992; Ng & Tan, 1997; Du & Starr, 2010). *Osphronemus goramy* is among the 10 main species of aquarium fishes traded in Vietnam with a price for 50 mm length of the gouramy commanding USD$0.25 (Du & Starr, 2010). In 2004, Vietnam exported 150,000 fingerlings of *O. goramy* to Cambodia for pond and cage culture industry (Nam & Leap, 2007). The giant gouramy is also one of most common species cultured in Indonesia (Budhiman, 2007). Inger & Chin (1962) reported that *O. goramy* is reared in ponds in all districts of Sabah. Ng and Tan (1997) have classified *O. laticlavius* together with Arowana (*Scleropages formosus*) and sawfish (*Pristis microdon*) into Category III of aquarium fish trade because of their high market demand and high price. Prices for each individual specimens of the giant gouramy can fetch over USD$34 (www.animal-world.com). It was reported that this species can grow up to 400-500 mm length in the tank and is expected to live up to 40 years (www.aqua-fish.net). No scientific research has been done to verify this observation though life span of the gouramy in Lower Mekong River basin has been reported as 10½ years (Eric, 2006). Two other giant gouramies, *O. exodon* and *O. septemfasciatus* have not yet been seriously introduced into the aquarium fish industry. Nevertheless, the two gouramies are important source of protein and subsistence income for the local communities in Borneo and Mekong River basin in Indochina region, respectively. Roberts & Baird (1995) reported that *O. exodon* is commonly marketed in Vientiane, southern Laos. Rachmatika *et al.* (2005) reported that *O. septemfasciatus* is one of most common and preferred species caught for food by the communities in Malinau River basin of East Kalimantan, Borneo. This giant gouramy is reared in ponds by the Iban communities in Mujong River of upper Batang Rajang, which can grow up to 7 kg (Pui Yong Min, *pers. comm.*).

Information on giant gouramies in Sarawak has not been well publicised. Two species of giant gouramy can be found in Sarawak, viz. *O. goramy* and *O. septemfasciatus*. *Osphronemus goramy* has been recorded from the lower reaches of Sarawak River (Atack, 2006), Bunan River, Bunut River, Teru River and Loagan Bunut Lake (Nyanti *et al.*, 2006). The second species, *O. septemfasciatus*, has been recorded from Batang Baram, Tinjar River (Roberts, 1992) and the lower reaches of Batang Rajang (Parenti & Lim, 2005). This article is the first to document the presence of *O. septemfasciatus* from Batang Kanowit based on photographs and anecdotal evidence. It serves to highlight the importance of Batang Kanowit as a fishing ground for the local communities living along the river. Existing and potential threats to aquatic life in Batang Kanowit are discussed and conservation significance for the river is highlighted.

BATANG KANOWIT AND ITS IMPORTANCE AS FISHING GROUND

Batang Kanowit is one of major tributaries of Batang Rajang, the longest river system in Malaysia. It flows from Julau District in the south to Kanowit District in the north and meets the lower reaches of Batang Rajang at Kanowit Town. Batang Kanowit is fed by several major tributaries, such as Julau River, Merurun River, Lijan River, Mujok River and Ensiring River of which the latter two rivers originate from the Lanjak Entimau Wildlife Sanctuary (Fig. 1). Batang Kanowit basin receives high rainfall throughout the year with mean annual precipitation of 3,297 mm while the relative drier months are between May and September (Anon., 2010). During wet season which is between November and March, water level of Batang Kanowit will rise gradually and the water is highly turbid due to land use activities in the catchment areas. The water level of smaller rivers in particular, can drop very fast and become clear within a few days with no subsequent rainfall.

Batang Kanowit and its major tributaries play a vital role as mode of transportation, and source of food fish and water for the Iban community. The Iban community constitutes about 90% of the total population in Julau District (Department of Statistics, Malaysia, 2010), of which majority of them live along Batang Kanowit and its tributaries. Most of them are farmers but they still rely on forests and rivers for source of food supplement and income (Anon., 2010).

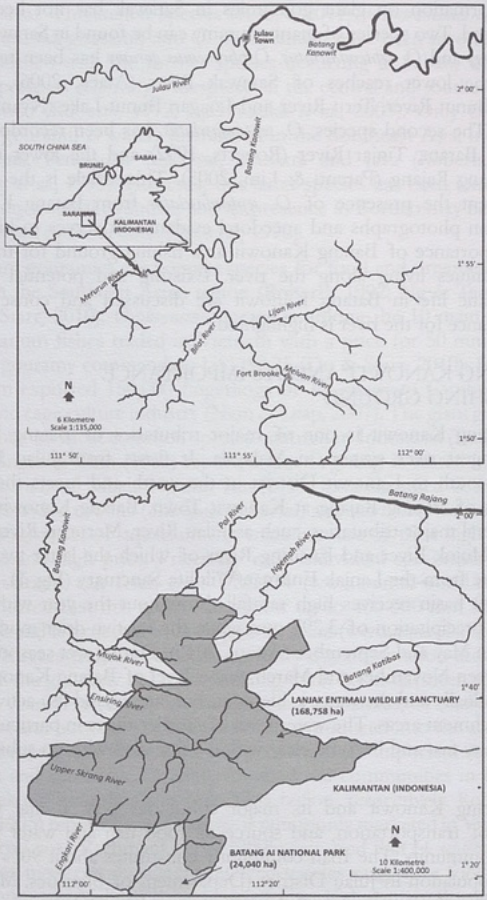

Fig. 1: Maps showing middle (top) and upper (bottom) reaches of the Batang Kanowit (adapted from Soepadmo & Chai, 2000; Anon., 2010).