

BIRD TO WATCH

A note on the breeding success of Milky Stork *Mycteria cinerea* in 2008, South Sumatra province, Indonesia and more on its diet

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Introduction

Our project to rediscover breeding colonies of the threatened Milky Stork *Mycteria cinerea* in South Sumatra province has already been documented (Iqbal & Hasudungan 2008, Iqbal *et al.* 2008a) and resulted in the rediscovery, after a gap of 20 years, of a breeding colony in June 2008 holding at least 31 nests and 65–75 adult birds at Kumpai lake.

Current breeding success

Unfortunately, because it is physically difficult, time-consuming and expensive to access Kumpai lake, there was no follow-up fieldwork to monitor breeding success in the area. However, we found at least 81 juveniles feeding with adults in Siput river (02°06'36.0"S 104°54'28.6"E), and Jentolo river (02°08'31.2"S 104°58'05.4"E) on the coast of the Banyuasin Peninsula on 1 November 2008 and a group with six juveniles was observed resting in mangroves on Lumpur river (03°35'29.9"S 105°49'14.2"E), Ogan Komering Ilir district, on 30 November 2008. The juveniles were identified by their greyish-brown upperparts in contrast with the white adult plumage (Sonobe & Usui 1993, Robson 2005). Imanuddin & Mardiasuti (2003) reported this plumage about 60 days after hatching.

During monitoring work in July 2008 no young storks in this characteristic plumage had been seen on the east coast from the Lumpur river to the Banyuasin Peninsula. Despite the long distance from the only known breeding colony at Kumpai lake to the Lumpur river (115 km) and the Banyuasin Peninsula (120 km), it is possible that the juveniles seen in November originated there, as Milky Stork are known to range over 200 km in a single day (Allport & Wilson 1986). On the other hand our recent intensive interview programmes with local people suggest that there may be two more (unconfirmed) breeding sites nearer the Banyuasin Peninsula, at Kuala Puntian and on the Siput river. Further survey work is required to locate these and other additional breeding colonies and monitor all subpopulations where possible so that reproductive success can be gauged, trends tracked and significant threats identified.

Foraging and food

There is a comprehensive review of the prey species and diet of Milky Stork (BirdLife International 2001); this indicates that common food items of adult Milky Storks are large (10–23 cm) mudskippers *Periophthalmus* sp., but small fish, snakes, frogs, prawns and crabs are also taken. This apparent dependence on mudskippers has been noted by more recent workers (Li *et al.* 2006). A prey species described as a large “blanak” (Bartels 1915–1930 in BirdLife International 2001) must be a reference to mullet locally known as “belanak” in South Sumatra (Burhanuddin *et al.* 1998).

Local people who collected young Milky Stork in South Sumatra province reported that they usually found fish in the nests, including Milkfish *Chanos chanos* (locally called Bandeng), Elongate Mudskipper *Pseudapocryptes elongatus*, (locally called Janjan), Giant Mudskipper *Periaptholomodon schlosserii* (locally called Seluncat), and Mullet *Moolgarda* sp. / *Chelon* sp., (locally called Belanak). Elongate Mudskipper was the species most commonly found (Iqbal *et al.* 2008b).

On 1 November 2008, we tried to make a detailed observation of prey items taken by Milky Stork feeding on the Banyuasin Peninsula mudflats. Of 46 individuals present, 28 (61%) were seen to feed on catfish *Arius* sp., three (6%) on Mullet, two (4%) on Fourfinger Threadfin *Eleutheronema tetradactylum*; single birds were seen to take Chinese Silver Pomfret *Pampus chinensis*, shrimp *Penaeus* sp. and a crab, whilst ten (22%) took unidentified items. The first author also noted a Milky Stork eat an Eel Catfish *Plotosus canius* at the Banyuasin Peninsula on 13 July 2008. Surprisingly no storks were seen to take mudskippers although they were common on this mudflat, suggesting a preference for other prey, but we have found no previous reports of Milky Stork eating catfish. Based on historical records (BirdLife International 2001) and our recent observations, 19 different aquatic species have been seen to be taken by Milky Storks. Swennen & Marteiijn (1987) assumed that the decline of the breeding population of the Milky Stork in Malaysia was not caused by lack of food on potential feeding grounds but further

study is needed to confirm this hypothesis. Better understanding of preferred diet will help to increase understanding of the bird's habitat requirements and further work is required on the species's general ecology and to clarify its ecological requirements (BirdLife International 2008).

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