

AVIFAUNAL AFFINITIES OF SOME ISLANDS IN THE JAVA SEA

by
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Various islands in the Java Sea, south of Borneo, were visited by Dr W.L. Abbott in 1907 during a collecting voyage written up by Oberholser (1917). Later, Chasen (1935) used the results to determine that the zoogeographical affinity of these islands lies with Java, not with Borneo. Consequently Smythies (1957, 1960) excluded the islands from his treatment of the birds of Borneo.

The situation is a little more complicated than this implies, and here I use lists derived from Oberholser (1917), combined with my own visits to a few of these islands, to analyse the situation further. I made observations on Pulau Matasirih and P. Kadapangan on 15 October 1996, and on P. Marabatuan on 16 October 1996. The islands referred to are shown in Fig. 1, and lists for each island group are given in Table 1. Each of the islands has various names. Masalembu is also known as Salembu, Salembu Besar, Masalombo Besar and Kar Selembu. (Kar is an ancient word in South east Asia, possibly Sanskrit, meaning 'island' and applicable to many localities, such as the well known example Car Nicobar.) The Matasirih group is also known as Pulau Laut Kecil, and within this group Kadapangan is also known as Maradapan, and Kalambau as Kalangbahu. In old literature and maps a Dutch series of names is also available, for instance Arends Island is Karamian. There is therefore plenty of scope for mis labelling and misunderstanding.

There are clearly many gaps in these lists. Oberholser was able to list only birds collected, presumably by shooting, without any field observations. Conversely, my visits were very brief and lacked any opportunity whatever for exploring away from the immediate coastline. Most of the differences between the lists for the various islands therefore lack significance because the species are known to range widely, for example the observations of seabirds, and of White bellied Sea eagle *Haliaeetus leucogaster* and Brahminy Kite *Haliastur Indus*. Others lack significance because they are migrants which could occur on any island, for example Barn Swallow *Hirundo rustica* and Pacific Golden Plover *Pluvialis fulva*.

Nevertheless, the lists are adequate to show several features. First, Masalembu has the closest affinity with Java. This is shown by the presence of Spotted Kestrel *Falco moluccensis* and White shouldered Triller *Lalage sueurii*, which are absent from Borneo and the other small islands, and *Oriolus chinensis* which is resident on Java and of uncertain status on Borneo (very rare there, and either vagrant or introduced). Masalembu and Karamian support a faunal element in common with the Lesser Sunda Islands which consists of small island forms that appear to have spread westwards along the centre of the Java Sea, not directly from Java. They include the Yellow crested Cockatoo *Cacatua sulphured*. Pink headed Imperial Pigeon *Ducula rosacea* and Orange footed Megapode *Megapodius reinwardt*.

The megapode is the only one of these species for which there is circumstantial evidence of occurrence on the Matasirih group. Oberholser (1917) wrote that "Megapodes were reported to Doctor Abbott, but no specimens were obtained by him". A specimen and other evidence were obtained from Masalembu and Karamian. During my visit to Matasirih villagers gave a name for megapodes, *burung alas*, but were otherwise not informative. Therefore, although it is likely that Orange footed Megapode

has occurred on this island, which is easily within the bounds of its flying abilities (Jones *et al.* 1995, the evidence is not complete.

Species that occur on Matasirih (nearer to Borneo) and not on Masalembu or Karamian (closer to Java) include the Large Green Pigeon *Treron capellei*, Red eyed Bulbul *Pycnonotus brunneus*, and Abbotirs Babbler *Malacocincla abbotti*. Each of these was described as an endemic subspecies by Oberholser (1917); respectively *T. c. passorhina*, *A. b. zaphaeus* and *M. a. sirensis*. It is interesting, but of unknown significance, that only one species of Imperial Pigeon is known so far from each island, the Pied Imperial Pigeon *Ducula bicolor* from Matasirih and Marabatium, and the Pink headed Imperial Pigeon from Masalembu and Karamian.

These differences make clear that the birds of Marabatuan and Matasirih are zoogeographically closest to those of Borneo, whereas those of Karamian and Masalenibu are closest to those of Java and the Lesser Sundas. As it happens, this coincides not only with proximity to Borneo and Java respectively but also with the administration of the various islands, whereby Marabatuan and Matasirih are part of the Kabupaten Dati II Kota Baru, administered from Kota Baru in Pulau Laut, South Kalimantan.

Consequently, mention of the birds of Marabatuan and Matasirih is included within a forthcoming volume on the birds of Borneo (Smythies 2000). Since Abbott's visit, most of these islands have been exploited for timber, and the vegetation, though much of it can still be considered forest, is in many places of low stature and very tangled. Several of the islands have also been exploited for iron nodules.

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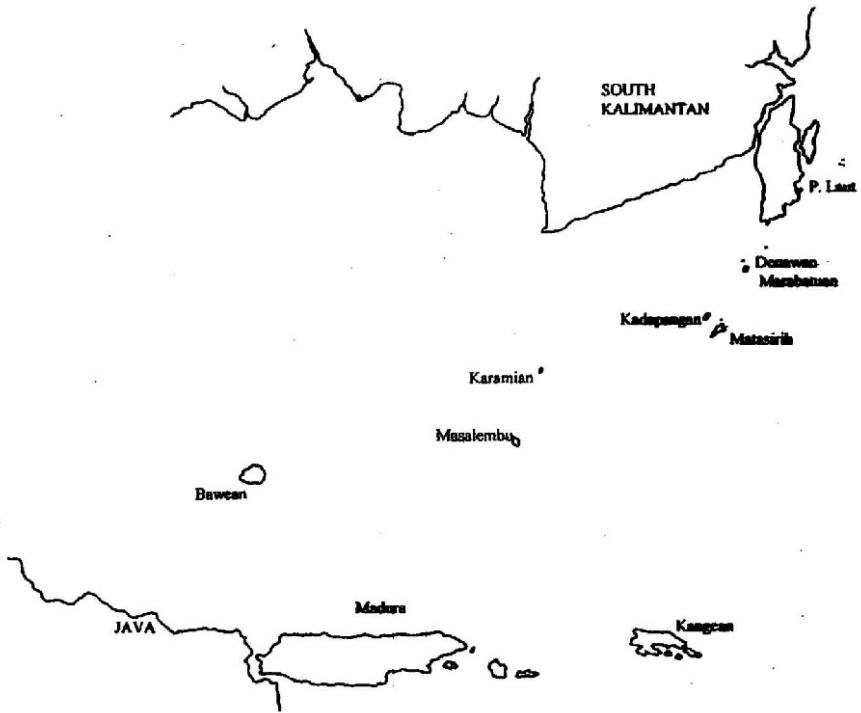


Table 1. Summary of birds recorded from various islands in the Java Sea

(a) Oberholser (1917)

(b) personal observations

	Masalembu	Karamian	Matasirih, Kalambau & Kadapangan	Marabatuan and Denawan
<i>Fregata ariel</i>			(b)	(b)
<i>Egretta sacra</i>			(b)	(b)
<i>Butorides striatus</i>				(b)
<i>Ixobrychus eurhythmus</i>			(a)	
<i>Haliastur indus</i>			(b)	(b)
<i>Haliaeetus leucogaster</i>			(b)	(b)
<i>Accipiter gularis</i>			(b)	(b)
<i>Faico moluccensis</i>	(a)			
<i>Megapodius reinwardt</i>	(a)	(a)	(a,b) ?	
<i>Amauromis phoenicurus</i>			(b)	(b)
<i>Gallitrex cinerea</i>			(a)	
<i>Pluvialis fulva</i>	(a)			
<i>Actitis hypoleucos</i>			(b)	
<i>Sterna bergii</i>				(b)
<i>Treron capellei</i>			(a)	
<i>Treron vemans</i>				(b)
<i>Ptilinopus melanospila</i>			(a)	
<i>Ducula rosacea</i>	(a)	(a)		
<i>Ducula bicolor</i>			(b)	(b)
<i>Caloenas nicobarica</i>			(b)	(b)
<i>Cacatua sulphurea</i>	(a)			
<i>Todiramphus chloris</i>	(a)	(a)	(a,b)	(b)
<i>Hirundo rustica</i>				(b)
<i>Hirundo tahitica</i>			(b)	(b)
<i>Motacilla flava</i>			(b)	
<i>Lalage sueurii</i>	(a)			
<i>Pycnonotus brunneus</i>			(a,b)	
<i>Copsychus malabaricus</i>			(a,b)	
<i>Malacocincla abbotti</i>			(a)	
<i>Macronous gularis</i>			(b)	
<i>Hypothymis azurea</i>			(b)	
<i>Zosterops chloris</i>	(a)	(a)	(a,b)	(b)
<i>Oriolus chinensis</i>	(a)	(a)		
<i>Dicrurus hottentottus</i>	(a)	(a)	(a)	
<i>Artamus leucorhynchus</i>	(a)			