

BIRDS OF ALAS PURWO NATIONAL PARK, EAST JAVA

By

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Summary

This paper details some of the more important and interesting records from Alas Purwo National Park in East Java. Most of these come from the author's work in the Park from May 1997 until September 1999, though records are included from many other sources. Details are given of the status of all of the species that are classed as threatened or near threatened by Collar *et al.* (1994), along with those that are altitudinally or distributionally unexpected. A full systematic list of the species recorded in and around the Park is included, some 227 to date (with an additional 11 'possible' species).

Ringkasan

Tulisan ini mendaftarkan beberapa catatan burung yang penting atau menarik dari Tainan Nasional Alas Purwo, Jawa Timur. Kebanyakan catatan ini berasal dari pekerjaan penulis di kawasan ini dari bulan Mei 1997 sampai bulan September 1999, tetapi catatan dari banyak sumber lain juga dimasukkan. Data adalah ditulis tentang statusnya semua jenis yang terancam punah atau mendekati terancam punah (dalam Collar *et al.* 1994), dan juga jenis yang tidak bias di ketinggian atau daerah ini. Daftar sistematis lengkap semua jenis yang dicatat dalam dan sekitarnya kawasan ini dilampirkan, sebesar 227 jenis (dengan tambahan 11 jenis yang belum pasti).

Introduction

Alas Purwo National Park (43,420 ha) lies on the Blambangan peninsula in the south east corner of Java (8° 26' 8° 47'S, 114° 20' 114° 36'E), shown in Figure 1. The area, designated as a National Park in 1992, is an uplifted limestone plateau, dominated by lowland monsoon and bamboo forest. The lush coastal forest rapidly grades to drier, bamboo dominated hill forest, though many inaccessible valleys still hold thick monsoon forest. The Marengan peninsula (from Rowobendo west to Cungur) was planted with commercial tree species in 1961-64, but still retains its dry grass and herb dominated understorey. In the far west of the Park, the tidal Segoro Anak river meets Trianggulasi Bay at Cungur, forming a small, somewhat sandy estuary. Segoro Anak itself is lined by rich mangroves for many kilometres inland. Other mangroves, at Sunglon Ombo and Sembulungan, are more disturbed and open. A man-made savannah at Sadengan covers 84 ha with a large viewing tower, surrounded by lush monsoon forest.

The Park holds a relatively complete lowland fauna, including healthy populations of the threatened Banteng *Bos javanicus* and Ajag *Cuon alpinus*, an endemic subspecies of the Indian Dhole. The avifauna is also surprisingly complete, with 227 (possibly 238) species being notable for such a lowland site. This total includes some 16 threatened or near threatened species (1 Endangered, 5 Vulnerable and 10 Near Threatened), 50 long distance migrants and 12 that are endemic to Java and Bali. The only species recorded from the Park but excluded from this summary is a record of White-winged Duck *Cairina scutulata* that is found on an official species list, but of unknown origin. This might have been mistaken for a Whistling duck record!

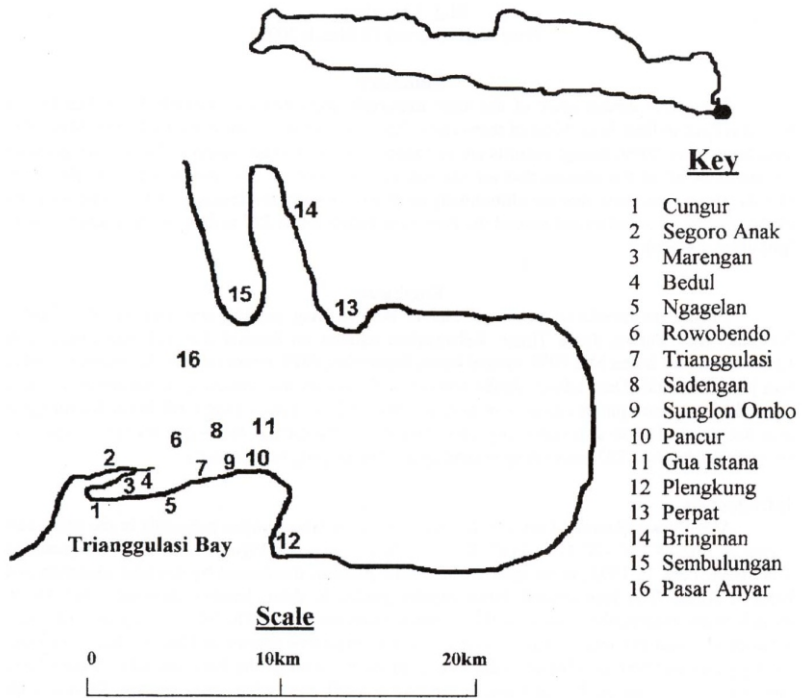


Figure 1. Location of sites mentioned in the text

Previous to the author's work, there has not been a full survey of the birdlife of the Park. Limited fieldwork has been carried out by various observers as listed below, though is far from comprehensive. A majority of the species records from the Park originate from the easily accessed coastal forest. No doubt there are yet more new species to be found in the impenetrable bamboo dominated forest and deep valleys in the centre of the Park.

Species summaries

The following summaries cover those species that are:

listed in Collar et al (1994) as threatened or near threatened:

EN endangered;

VU vulnerable;

NT near threatened;

endemic to Java and Bali (**JB**);

altitudinally or distributionally unexpected;

of general interest.

Species order and nomenclature follow Andrew (1992). All records are attributable to the author unless otherwise noted as follows:

BvB Bas van Balen (November 1989, May 1990 and August 1992);

DiW Dick Watling (1990);

DuW Duncan Watson (Dec 1997);

HP Herbert Piers (November 1989)

H&T Simon Hedges and Martin Tyson (1992-98);

MI Mochamad Indrawan (1993-95);

TNAP Taman Nasional Alas Purwo (internal reports).

Frigatebirds *Fregata* sp. Frigatebirds are occasionally seen feeding in Trianggulasi Bay. **Lesser Frigatebird** *Fregata ariel* is by far the commonest, with most records coming from July to November (max. 15; 15/11/97). **Great Frigatebird** *Fregata minor* has been recorded only once past Cugur (27/7/98), with a single, undated, 1997 record of **Christmas Frigatebird** *Fregata andrewsi* (VU).

Oriental Darter *Anhinga melanogaster* NT Recorded 'several' times by Park staff along Segoro Anak, though with no recent records.

Brown Booby *Sula leucogaster* Occasionally seen passing Trianggulasi Bay (max. 50+; 29/7/98), though never regular. Over the period late November to mid December 1998, at least 23 birds were found dead or incapacitated along the beach from Trianggulasi to Cugur. All of these birds (and also a single juvenile Great Crested Tern *Sterna bergii*) were suffering from acute poisoning that led to the haemorrhaging of all major organs. The cause of this incident is still not known, though dead birds were also reported from Meru Betiri National Park (Made Astuti *in litt.*)

Australian Pelican *Pelecanus conspicillatus* A single old but reliable record of an adult bird caught by fishermen at Bringinan (Jan 1985). This bird was confiscated by Park staff and later released. Other more recent claims of 'tens' of birds off Sembulungan in the early 1990's remain unconfirmed.

[**Grey Heron** *Ardea cinerea*] A single bird flushed from a small river at Sadengan (7/8/99) was thought to be this species, though could not be confirmed.

Great billed Heron *Ardea sumatrana* NT Regularly seen (on 50% of standard recording days) along the exposed shore at Plengkung, though rarely more than single birds. Maximum count of three birds along 3 km of beach around Plengkung (19/5/99). A very downy juvenile was also seen at Pancur (20/5/99), though breeding is not suspected in the Park. Also occasionally seen over Sadengan and the offices at Pasar Anyar, with a single record from Cungur (716198)

Purple Heron *Ardea purpurea* New records for the Park are of a single bird, with a Great billed Heron, in mangroves at Cungur (716198) and another at the same location (419199). There is an earlier un referenced record found on an Alas Purwo website (Ed Colijn)

Egrets *Egretta* sp. Standard observations of Reef Egret *Egretta sacra* show that 87% of those occurring in the Park are of the dark form. Other egrets are rarely seen away from traditional roost sites. Maximum roost counts from Marengan are: 20 Great Egret *Casmerodius alba* (21/2/99); 72 Little Egret *Egretta garzetta* (26/11/98), and a single count of 970 **Cattle Egret** *Bubulcus ibis* presumably heading out of a roost at Sembulungan (118197). There is only a single record of Intermediate Egret *Egretta intermedia*, of four birds at Sembulungan (M1; 28 30/9/95)

Javan Pond heron *Ardeola speciosa* Occasionally seen at low tide at Plengkung, but with counts of 302 using the roost at Marengan (6/8/99) and 100 at Sembulungan (M1; 28 30/9/95)

Black crowned Night heron *Nycticorax nycticorax*. The only records are of five birds (juveniles and adults) alighting briefly in mangroves at Segoro Anak (BvB; 19 21/11/89), and a single bird heard overhead at 04: 15 hrs near Sadengan (BvB; 17/5/90)

Milky Stork *Mycateria cinerea* VU The only records are of six birds over Trianggulasi Bay (DiW; 17/3/90), and a single undated record in Park film though these may refer to the birds.

Woolly necked Stork *Ciconia episcopus* Records are as follows: c.15 20 foraging on the ground in teak forest near Rowobendo (BvB; 19/11/89); 13 along Segoro Anak (BvB; 20/11/89); two on exposed rock flats at Plengkung (1916197); two heading east over Sadengan (271"); a single bird in Teak forest north of Rowobendo (1913199); two birds high over Pasar Anyar (2015199) and a single high over Pasar Anyar with Lesser Adjutants *Leptoptilus javanicus* (20/7/99).

Lesser Adjutant *Leptoptilus javanicus* **VU** Regularly seen feeding at Sadengan, with maximum counts of 51 (MI; 30/10/93) and 28 (8/10/97). Breeding was suspected in 1998, but not proven, though in 1999 nine nests fledged 13 young at Sadengan (see Grantham 2000" for more details)

Osprey *Pandion haliaetus* A single, very white headed bird at Sadengan (BvB; 12/8/92) is the only record.

(Oriental Honey buzzard *Pernis ptilorhynchus*) A bird seen distantly over forest near Perpat (BvB; 15/5/90) showed an elastic flight typical of honey buzzards. It showed a broad, dark terminal bar on the tail and is likely to have been this species, presumably a migrant *orientalis*.

Black winged Kite *Elanus caeruleus* Pound on official Park lists, but with no further details. Possibly refers to a single bird at Sadengan (DiW; 1/2/90). The only recent record is of a lone bird also over Sadengan (5/8/99)

Brahminy Kite *Haliastur Indus* A single record of an immature bird (possibly third year) flying along the beach at Ngagelan (26/11/98)

Grey headed Fish eagle *Ichthyophaga ichthyaetus* **NT** The only records are of a single bird seen well over beach forest at Perpat (BvB; 14/5/90), possibly the same bird calling over Pancur (BvB; 19/5/90), a single adult at Perpat (1/8/97) and an adult bird at distance over fields near Pasar Anyar (15/5/99). Probable immature birds were also seen over fields near Pasar Anyar (24/3/99) and at sea from Cungur (5/5/99), though their identity could not be confirmed.

Crested Goshawk *Accipiter trivirgatus* A single record of an adult male that hit a window and died at Trianggulasi Bay (28/6/99).

Japanese Sparrow hawk *Accipiter gularis* Only occasionally seen, with most migrants presumably crossing the Ball Strait further north. Records, all of singles, are as follows: unseasonal male at Plengkung (28/6/97); males at Plengkung (1/9/97), Cungur (13/12/97) and Pasar Anyar (20/3/99) and a female/immature at Sadengan (12/12/98).

Black Eagle *Ictinaetus malayensis* There are only two definite records, both of single birds: over mangroves at Marengan (30/6/97) and soaring over Sadengan (20/7/97). Other records of 'Black' Eagles could refer to dark morph Changeable Hawk eagles *Spizaetus cirrhatus*.

Rufous bellied Eagle *Hieraaetus kienerii* Recently recorded on only three occasions: single birds in dense forest near Sadengan (17 & 25/6/97) and a bird in open hill forest to the west of Pasar Anyar (21/11/97). There is a single previous record of an adult at Sadengan (BvB; 18/5/90)

Javan Hawk eagle *Spizaetus bartelsi* **EN JB** There were only three reliable records during the period. The first was seen in open forest to the south of Sadengan (11/11/97). This bird was in fresh plumage and was thought to be a sub adult. The breast and especially underparts were heavily barred black, with only a hint of rusty tones, most pronounced on the upper breast. The face was very rusty with dark streaking on the cheeks and an obvious malar stripe. The long, double crest was as adult, with clean white tips. In flight, the underwing appeared very pale buff, barred black with an obvious dark carpal patch, with only light barring on the tail. The wings were very rounded and held noticeably forward, reminiscent of Crested Serpent eagle *Spilornis cheela*, also showing slightly spotted upperwing coverts similar to this species. The second bird was again at Sadengan, circling the viewing tower (11/6/99). This bird showed wholly white underparts, head and underwing, except for dark barring on the wing tips. The upperparts were dark chocolate brown, with a paler patch at the base of the primaries and slightly paler primaries and outer secondaries. Again, the wing shape and the way the wings were held were reminiscent of Crested Serpent Eagle. The third record is of a single bird also at Sadengan (16/7/99). This bird showed dull brown, uniform upperparts, with paler breast and belly, possibly lightly barred. The pale underwing was heavily barred black, with an obvious dark carpal patch. Again, wing shape and position were characteristic.

Other records include three birds seen during an eight day census in May 1990 (van Balen 1999). These were a juvenile and an adult at Semibulungan and a single bird near Sadengan. Various other records of this species, including a record of three birds at Gua Istana (KSBK *in litt.*), are unconfirmed and should be treated cautiously.

Oriental Hobby *Falco severus* The only record is of a lone bird chasing other raptors at Sadengan (DiW; 1/2/90).

Peregrine Falcon *Falco peregrinus* A single record of a bird chasing a Collared Kingfisher *Halcyon chloris* at Cungur (3/6/197). The darkness of this bird's underparts and mantle suggested it was of the resident race *ernesti*. If this is so, there is the possibility that birds may be breeding along the cliffs west of Gritjagan, which would be the first recorded nesting in lava away from volcanoes (BvB *in litt.*).

Red Junglefowl *Gallus gallus* Most common in coastal forest around the northern coast of the Park (TNAP). Between Pancur and Plengkung, seen on 44% of standard survey days. Less often seen in the more closed interior forest and absent in the open forest between Rowobendo and Cungur, where it is replaced by Green Junglefowl *Gallus varius*.

Green Peafowl *Pavo muticus* **VU** Common in the more open areas of the Park, primarily Sadengan and the dry forest between Rowobendo and Cungur. Census work has probably failed to truly measure the size of the population, with estimates put at 168-268 (Indrawan 1995). Birds regularly use Sadengan as both a feeding and displaying ground, with a maximum count of 15 females (13/11/97).

and 7 males (5/9/97). A pair with 'many' small chicks west of Rowobendo (early June 1997) and a female with six free flying chicks at Sadengan (20/12/97) are the only proven breeding records.

Button quails *Turnix* sp. The status of button quails in the Park is unclear. There are only two positive records of **Small Button quail** *Turnix sylvatica*: a single bird running across a road through teak forest, north of Rowobendo (2/2/99), and a male in similar habitat 4 km south of Pasar Anyar (27/2/99). Button quails are often seen at Sadengan, though there is only a single definite record of **Barred Button quail** *Turnix suscitator* (7/8/99). This individual appeared very dark compared to other (unidentified) button quails seen here, so some of these records may refer to Small Button quail.

White breasted Waterhen *Amauromis phoenicurus* The only records are of a bird in a small river mouth between Pancur and Plengkung (1/9/97) and a bird in mangroves at Sunglon Ombo (18/11/97).

Kentish Plover *Charadrius alexandrinus* The only record of this rare migrant is of a flock of 84 birds seen in a dune slack at Cungur (15/3/98). See Grantham (in prep.) for details on the identification and status of this and the following three species. Additional records of 'Kentish Plover' at Cungur (BvB; 19 21/11/89) must remain uncertain as they could refer to Javan Plover *Charadrius javanicus*.

Javan Plover *Charadrius javanicus* **NT JB** Common from Cungur east along Segoro Anak. Pre breeding numbers can reach 70+, with most birds presumably dispersing inland to breed. Displaying and territorial birds are seen at Cungur from May to August, with two records of pairs with small chicks (31/8/98 & 15/6/99) and a bird on a nest with three eggs on an open dune slack at Cungur (4/9/99). Breeding has also been observed inland at Erpa, where a nest with two eggs was found (11/6/97).

Red capped Plover *Charadrius ruficapillus* Single record of this rare austral vagrant, of a single bird seen with Javan Plovers at Cungur (31/8/97). See Grantham (in prep.) for details.

Malaysian Plover *Charadrius peronii* **NT** A pair in breeding plumage was seen in ideal breeding habitat (small coralline cove) between Pancur and Plengkung (1/3/98), though the birds were not seen again in this area. See Grantham (in prep.) for details.

Oriental Plover *Charadrius veredus* A single male in breeding plumage was seen on the beach near Ngagelan (24/3/98) and is thought to represent the first record for East Java.

Whimbrel *Numenius phaeopus* A common passage migrant through the Park, though their racial origin is unclear. Most birds subspecifically identified over the period showed characteristics of the *wsstsi* *nhfipfinus* race. Further details can be found in Grantham (2000¹¹).

Eurasian Curlew *Numenius arquata* The only records are of two at Plengkung (28/6/97), a group of 11 birds at Cungur (13110197) and three birds with Whimbrels at Sembulungan (8/8/99).

Far Eastern Curlew *Numenius madagascariensis* Single record of one at Cungur (27/9/98).

[**Black tailed Godwit** *Limosa limosa*] A record cited in Indrawan *et al.* (1997) is erroneous and probably refers to Bar tailed Godwit *Limosa lapponica* (BvB pers comm..).

Marsh Sandpiper *Tringa stagnatalis* A 'probable' record from Cungur (BvB; 19/11/89), an unconfirmed record of 10 at Sembulungan (M1; 28 30/9/95) and a single bird at Marengan (2413198) are the only records.

Wood Sandpiper *Tringa glareola* Single record of eight birds at Sembulungan (M1; 28 30/9/95).

Ruddy Tarnstone *Arenaria interpres* The only records are of 10 birds between Trianggulasi and Plengkung (DiW; 27/3/90), 3 birds at Plengkung (1/9/97) and a single present them on 7/10/97.

Great Knot *Calidris tenuirostris* The only records are of a group of six birds with Whimbrels on the beach near Trianggulasi (17/11/97) and two birds at Cungur (27/9/98).

Sanderling *Calidris alba* Additional to the status summary in Table 1, there is a record of a bird carrying a metal band and an orange leg flag on the beach at Cungur (31/8 4/9/97). This bird had been marked in southern Victoria, Australia, some time since 1990. This was the first time that a colour marked bird had been reported in Indonesia.

Rufous necked Stint *Calidris ruficollis* As for Sanderling, of interest is a record of a bird carrying a metal band and an orange leg flag at Cungur (13/10/97). This bird had also been marked in southern Victoria, Australia, sometime since 1990. This record along with the Sanderling above are the only reported leg flag sightings; from Indonesia.

Curlew Sandpiper *Calidris ferruginea* A single record of a bird with Sanderling at Segoro Anak (BvB; 20/11/89).

Broad billed Sandpiper *Limicola falcinellus* A single record of this rare mi~ of a lone bird at Cungur (31/8/98).

White headed Still *Himantopus leucocephalus*

The only recent record, following an old undated record from Park files, is of a single adult and an immature seen feeding on exposed mud at Marengan (24/3/98).

Red necked Phalarope *Phalaropus lobatus* A single record of "swimming phalaropes" 2-3 km off the eastern shore of the Park (HP, 11/12/11/89) during a heavy passage of jaegers.

Black Thick knee *Esacus magnirostris* A resident pair at Cungur was present throughout 1997 and 1998, raising a single chick in December 1997, with the three birds regularly seen until June 1998. One bird then appeared to leave the area, though four birds were present (in two pairs) in 1999 (10/6/99). The only record away from Cungur is of two birds heading east past Triangulasi (10/8/97).

Table 1 Summary of commoner shorebird passage through Alas Purwo National Park.

Species	Passage period	Max. number	Max. summering
Grey Plover	late Aug - late Apr	18 (BvB; 19/21/11/89)	6 (22/5 - 10/8/98)
Pacific Golden Plover	scarce	45 (BvB; 19/21/11/89)	1 (22/5 - 31/8/98)
Lesser Sand plover	mid Aug - late Apr	126 (10/8/98)	12 (15/6/99)
Greater Sand plover	late Aug - mid Oct	20 (MI; 28/30/9/95)	1 (5/5/99)
Whimbrel	Aug? - Apr?	134 (24/3/98)	31 (22/5/98)
		35 (24/3/98)	
Common Redshank	mid Aug - late Apr	200 (MI; 28/30/9/95)	
Common Greenshank	late Aug - late Mar	8 (24/3/98)	
Terek Sandpiper	late Aug - mid Apr	9 (25/4/98)	3 (5/5/99)
Common Sandpiper	mid Aug - ???	34 (11/8/99)	10 (26/7/98)
Grey tailed Tattler	early Sept - late Apr	8 (1/9/97)	10 (26/7/98)
Sanderling	late Aug - late Apr	220 (7/10/97)	
Rufous necked Stint	early - late Oct	52 (13/10/97)	2 (5/5/99)

The table shows the main passage periods, maximum counts (though these are only an indication of the total number of birds using the Park on passage) and the maximum count of birds 'summering' in the Park.

Jaegers *Stercorarius* sp. There is a notable record of jaeger passage, of 'many' birds at 2-3 km off the eastern shore of the Park, during November 1999. Of c. 40 birds seen during 11-12 November, 4+ were adult **Arctic Jaeger** *Stercorarius parasiticus*, with 2+ juvenile **Pomarine Jaeger** *S. pomarinus*. Most of the remainder were probably also Arctic Jaeger based on size (HP in Balen 1991*). Additional records of Pomarine Jaeger are a dark morph adult east past Cungur (13/12/97) and a pale morph adult chasing Great Crested Terns at Cungur (25/4/98).

Gull sp. *Larus* sp. One unidentified gull was observed 2-3 km off the eastern point of the Park (HP; 11/12/11/89). This is likely to have been Common Black headed Gull *Larus ridibundus*, previously unrecorded in Java, though becoming more frequent in Indonesian waters (Argeloo 1993).

White whiged Tern *Chlidonias leucopterus* The only record is of 150 birds at Sembulungan (M1; 28 30/9/95).

Gull billed Tern *Gelochelidon nilotica* A single record of two birds at Sembulungan (M1; 2830/9/95).

Common Tern *Sterna hirundo* Rarely seen away from the rocky shore at Plengkung, when it is still only occasional. Maximum count of 140 passage birds, still in summer plumage with very young juveniles, at Plengkung (24/7/97).

Black naped Tern *Sterna sumatrana* Previously unrecorded in the Park, this is the most regular tern species at Plengkung. Maximum count of 40 birds with juveniles (24/7/97).

Bridled Tern *Sterna anaethetus* An occasional passage bird through Trianggulasi Bay. The only notable records are of 400+ birds passing east at sea past Plengkung (19/6/97), a steady eastward movement of birds (3-5 birds per minute, all day) in Trianggulasi Bay (2114198) with over 100 fishing in the bay four days later and c.30 birds feeding off Plengkung (19/5/99). There is also a single inland record of a lone bird at Cungur (419199).

Great Crested Tern *Sterna bergii* By far the commonest tern in the Park, regularly recorded at Cungur Peak numbers are seen from September to December, with a maximum high tide roost count of 3600 (4/10/98).

Orange breasted Green Pigeon *Treron bicincta* A pair seen at close range in forest adjoining the Sadengan grazing ground (18/2/98), a possible male at Cungur (21n197) and a pair at Bedul (2616199) are the only records of this rare coastal species. A large roost of 30+ birds in mangrove edge at Sembulungan (11/8/99) were possibly also this species. Lewis (in Balen 1991b) describes this species as the most common green pigeon in Baluran National Park (East Java), with Balen also describing the first record for Bali. It would appear that the distribution of this species in East Java and Bali is poorly documented, worthy of further observation.

Black naped Fruit dove *Ptilinopus melanospila* Heard in forest bordering the teak plantation new Pasar Anyar (BvB; 19/11/89 and 14, 16 20/5/90). Several were also seen and taperecorded in the same area (BvB; 20/11/89).

Green Imperial Pigeon *Ducula aenea* Occasional bird of coastal forest recorded at Ngagelan, Trianggulasi and Pancur.

Pied Imperial Pigeon *Ducula bicolor* Single record of a bird in mangroves at Sembuluqpn (11/8/99). Additionally, also appears on an Alas Purwo website (Ed Colijn).

Zebra Dove *Geopelia striata* Restricted to the dry forest and mangrove around Cuner and Marengan, where it is regular, but only in small number.

Yellow throated Hanging parrot *Loriculus pusillus* **NT JB** Only occasionally on in the Park, though calling birds are often heard overhead. Recorded on 16% of standard surveys, with most records from the semi open coastal forest around Trianggulasi.

Cuckoos *Cuculms* spp. The status of **Indian Cuckoo** *Cuculus micropterus* and **Oriental Cuckoo** *Cuculus saturatus* in the Park is unclear. There are several records of 'cuckoos', though accurate field identification is often not possible. Records are summarised below:

Date	Species	Notes	Observer
19/11/89	(Indian)	Somewhat large, creamy vent/belly, grey throat, undertail barred with broad dark terminal bar, breast finely barred	BvB
	Oriental	Rufous brown (uniform above?)	
	?	Throat greyish brown, faintly barred, back rufous brown with fine black bars, breast thinly barred, no clear eyering, belly yellowish cream	
	(Oriental)	Rufous brown	
	?	Uniform brownish grey upperparts	
20/11/89	?	Medium rufous brown, almost without barring	
21/11/89	?	Brown	
26/10/97	?	Single male	MJG
17/11/97	?	Two 'brown' birds	

From these records, only the Oriental Cuckoo on 19/11/89 was definitely identified. The large size of the first bird suggests Indian Cuckoo, though this remain unconfirmed. Interestingly, a single passage of cuckoos has also been observed though Bali Barat National Park in October 1989 (BvB *in litt.*)

Banded bay Cuckoo *Cacomantis sonneratii* One heard near Sadengan (BvB; 17/5/90).

(**Palntive Cuckoo** *Cacomantis merulinus*) Birds often heard calling in coastal forest in the evening were thought to be this species, but this was not confirmed.

Violet Cuckoo *Chrysococcyx xanthorhynchus* A lone male in thick bamboo forest near Sadengan (31/7/97) is the only record.

Asian Koel *Eudynamis scolopacea* A calling male near Bedul (BvB; 20/11/89).

Collared Scopsowl *Otus lempiji* Two calling birds at Sadengan and three heard at Pasar Anyar (BvB; 19/5/90) are the only definite records. Scopsowl type calls are also frequently heard throughout most of the Park.

Buffy Fish owl *Ketupa ketupa* An unconfirmed record of a roosting bird in thick forest near Sadengan (AKASIA pers. comm; 15/10/97) and a single roosting bird photographed at Perpat (TNAP; 20/8/99).

Javan Owlet *Glaucidium castanopterum* **JB** Voice records are of a single bird in non teak forest near Pasar Anyar (20+21/11/89), a single at Sadengan (BvB; 17/5/90) and several birds there two days later.

Brown Boobook *Ninox scutulata* A single bird was watched hawking over a wet flash at Sadengan at dusk (23n197), probably also seen there the previous evening. This bird, or another, was then flushed from a daytime roost between Pancur and Plengkung (24f7/97). These two sites are over 7 km apart, though the records were thought to refer to the same bird. Of interest, the date of this records infers that the bird was not of the winter migrant race, but of the resident race which is mainly found in West Java. However, the species has probably been overlooked in East Java, having recently been tape recorded in Meru Betiri National Park and also in Bali Barat National Park (BvB in litt.).

Spotted Wood owl *Strix seloputo* Regularly heard at dusk at Sadengan where it also occasionally hunts. Previous records are of four birds calling in teak forest near Pasar Anyar (BvB; 15/5/90) and a single bird seen at Sadengan (BvB; 12/8/92)

Savanna Nightjar *Caprimulgus affinis* Previously unrecorded in the Park, this species is regularly seen along open tracks and at Sadengan at dusk. A regular daytime roost at Cungur in short dune grass has held a maximum of 11 birds (15/3/98).

Edible nest / Black nest Swiftlet *Aerodramus fuciphagus* / *maxinus* Common throughout the Park, though with very few documented nesting areas, most of which are in remote caves. Reports from Park staff suggest that all of these birds are Edible nest Swiftlets, with no records of black nests in these caves.

Linchi Swiftlet *Collocalia linchi* Previously unrecorded or overlooked in the Park, this species is commonly seen in all habitats, especially at dusk.

Brown backed Needletail *Hirundapus giganteus* An occasional passage bird, with most records coming from Sadengan: two birds east at dusk (8/8/97), 16 south at dusk (16/9/98) and 16 south at dusk (17n/99). There are then two additional records of southerly passage with Forktailed Swifts *Apus pacificus*: 480+ (15/2/98) and c.150 (19/1/99). The only record away from Sadengan is of a single bird east over Senibulungan (15/8M). This passage appears to back up observations by Holmes (1994) that

swifts (not necessarily only of the genus *Apus*) often migrate through the region in mixed species groups, though the August records are somewhat early. However, during his observations, no Brown backed Needletails were seen to pass, very different to the situation in Alas Purwo.

Silver rumped Swift *Raphidura leucopygialis* One record, one past Ngagelan (15/7/97).

Fork tailed Swift *Apus pacificus* Occasionally recorded passing through the Park with Brown backed Needletails: 150+ (15/2/98) and < .650 (19/1/99). Additionally, many hundreds were seen feeding over the beach at Trianggulasi and passing at sea (22/12/97), the day after a small passage of Little Swift *Apus affinis*.

Little Swift *Apus affinis* A small group briefly over the beach at Trianggulasi (DuW; 21/12/97) is the only record.

Oriental Dwarf Kingfisher *Ceyx erithacus* Birds of the *rufidorsus* subspecies were recorded on 10% of standard surveys around Sadengan and 7% between Pancur and Plengkung.

Banded Kingfisher *Lacedo pulchella* Uncommon, but regular, in most forested areas. Records come from most months, with no peak in activity. Pairs are occasionally seen, mostly during November December.

Black capped Kingfisher *Halcyon pileata* A single record of a bird in coastal forest between Trianggulasi and Sadengan (MI; 30/10/93). See Indrawan *et al.* (1997) for more details.

Javan Kingfisher *Halcyon cyanoventris* **JB** Common around Sadengan (71% of standard surveys). Elsewhere, uncommon in most forest types (e.g. 25% of standard surveys between Pancur and Plengkung).

Sacred Kingfisher *Halcyon sancta* Regular austral migrant, but never numerous. Birds arrive from mid May and are mostly found around the mangroves at Cungur and Sunglon Ombo. Maximum count of four birds at Cungur (22/5/98). Exceptionally late birds are a single at Sadengan (15/11/97) and another, or possibly the same, found moribund at Sunglon Ombo, later dying in captivity (18/11/97)

Chestnut headed Bee eater *Merops leschenaulti* Common throughout the Park in more open areas. Of interest, 18 birds were seen to arrive over the sea at Trianggulasi (4/12/97), resting briefly before heading inland. The origin of these birds is not clear.

Blue tailed Bee eater *Merops philippinus* This Asian migrant is regularly seen in large numbers in the mangroves at Cungur (max. 41; 2/2/99), with most records strangely coming from February. There

is, however, also a record of two very late birds in May (BvB; 18/5/90). Away from Cungur, the only record is of a single bird at Sadengan (15/11/97).

Hornbills Three species of hornbill are regular in the Park, of which **Asian Pied Hornbill** *Anthracoceros albirostris* is by far the most common, being seen in all habitat types. **Rhinoceros Hornbill** *Buceros rhinoceros* is more restricted to thick hid forest, with pairs occasionally seen displaying at Sadengan (max. 7; 4/7/98). The least common of the three is **Wreathed Hornbill** *Rhyticterps undulatus* though a count of 15 at Sadengan (5/1/98) is exceptional.

Lineated Barbet *Megalainw lineata* A lone bird with other barbets near Sadengan (3/9/97).

Black banded Barbet *Megalaima javensis* **NT JB** Often beard in all forest types, though only occasionally seen. Recorded (visually) on 10% of standard surveys at Sadengan.

Orange fronted Barbet *Megalaima armillaris* **JB** The monotone, almost trilled, call of this predominantly montane species is occasionally heard in the Park, though with only two sight records, both of singletons: in thick forest north of Gua Istan at c.50m asl (2/7/97) and in open forest near Sadengan at <10m asl (11/11/97). The former was identified on cad and only showed an orange band on the underparts, lacking the black breast band and blue throat patch of adult Blue eared Barbet *Megalaima australis*. Though immature Blue eared can also lack these features, the call was diagnostic. The latter bird was seen very well with Black banded and Blue cared Barbet. Again, this bird only showed orange on the upper breast lacking the obvious yellow cheek patch of Blue eared (at all ages). These are unusual lowland records of an elusive species normally only recorded in more sub montane areas, though it has been recorded down to c. 150m (BvB *in litt.*)

Laced Woodpecker *Picus vitratus* The only records are as follows (all BvB): heard new Pasar Anyar (14/5/90); heard near Bringinan (16/5/90); beard near Sadengan (17/5/90); tape recorded female at ground level (18/5/90); near Pasar Anyar (20/5/90); single at Sadengan (12/8/92).

Checker throated Yellownape *Picus mentalis* Single record of a bird seen briefly in nola teak forest near Pasar Anyar (BvB; 15/5/90).

Crimson winged Yellownape *Picus puniceus* Single recent record of a bird in open, dry forest near Ngagelan (30/6/97).

Banded Woodpecker *Picus miniaceus* Only three recent records: near Sadengan (14/11/97); in open forest at Sadengan (31/8/97) and a 'possible' also at Sadengan (15/6/99). Previously recorded by BvB near Pasar Anyar (15,20+21/5/90).

Grey Slaty Woodpecker *Mulleripicus pulverulentus* Single bird seen in open secondary forest south of Sadengan (11/11/97). Previous records are of a bird tape recorded near Gua Istana, (BvB; 18/5/90) and duce birds seen near Pancur (BvB; 19/5/90).

White bellied Woodpecker *Dryocopus javensis* Occasionally seen in pairs in the dry forest around Ngagelan, though at a low density, with a single record of a male atypically in teak forest near Trianggulasi (8/5/99)

Brown capped Woodpecker *Dendrocopus moluccensis* Probable voice record in teak forest near Pasar Anyar on two dates (BvB; 20+21/11/89).

Grey and buff Woodpecker *Hemicircus concretus* Singles have been seen on only three occasions: in disturbed coastal forest between Pancur and Plengkung (24/7/97), in coastal forest near Trianggulasi (3/8/97) and in dense bamboo forest near Sadengan (11/11/97).

Greater Goldenback *Chrysocolaptes lucidus* The only records are as follows (all BvB): heard in non teak forest near Pasar Anyar (14/5/90); possibly heard near Pasar Anyar (18/5/90); tape recorded in forest around Pancur (18/5/90).

Banded Broadbill *Eurylaimus javanicus* There are only two records of calling birds (both BvB): near Bringinan (16/5/90); near Pancur (19/5/90).

Singing Bush lark *Mirafra javanica* Voice records around Pasar Anyar on two dates (14+15/5/90) are the only records (BvB).

Barn Swallow *Hirundo rustica* Recorded from mid September to early March, though never in large numbers.

Yellow Wagtail *Motacillaflava* One, possibly two, immature birds at Cungur (2/2/99).

Richard's Pipit *Anthus novaeseelandiae* One record of two birds at Sadengan (BvB; 17/5/90).

Lesser Cuckoo shrike *Coracina fimbriata* The only records are as follows (all BvB): tape recorded near Pasar Anyar (14/5/90); male seen in a large mixed flock near Sadengan (15/5/90); again at Sadengan (17/5/90); heard near Pancur (19/5/90); male tape recorded near Pasar Anyar (20/5/90).

White rumped Shama *Copsychus malabaricus* Only recorded three times during the period: singing male near Sadengan (12/5/97); a lone bird in bamboo forest north of Gua Istana (21/11/97) and a pair in bamboo forest at Gua Istana (16/9/98).

(Orange headed Thrush *Zoothera citrina*) There is a single record of a bird calling near Pasar Anyar (BvB; 15/5/90). However, Chestnut capped Thrush *Zoothera interpres* is also possible and could not be eliminated.

Temminck's Babbler *Trichastoma pyrrogenys* A calling bird tape recorded at distance near Gua Istana. (18/5/90) and a single bird in open scrub near Triangpuasi (9/5/99) are the only records.

Horsfield's Babbler *Trichastoma sepiarium* Regularly heard and seen in the Park at sea level (though described by MacGinnon and Phillipps (1993) as locally common between 300-1400m). Recorded on 32% of standard surveys around Sadengan and 31% between Pancur and Plengkung.

Large Wren babbler *Napothera macrodactyla* NT Single record of a bird in bamboo forest west of Pasar Anyar (21/11/97). Previously tape recorded by BvB near Pasar Anyar (21/11/89 and 16/5/90) and heard near Sadengan (17+20/5/90).

Crescent chested Babbler *Stachyris melanothorax* JB Recent records are of a single bird seen with Olive backed Tailorbirds *Orthotomus sepium* and Grey cheeked Tit babbler *Macronous flavicollis* in thick scrub between Pancur and Plengkung (19/6/97) and two birds with Olive backed Tailorbirds, Black winged Hemipus *Hemipus hirundinaceus* and Ruby cheeked Sunbird *Anthreptes singalensis* in monsoon forest near Sadengan (5/8/99). Between 20-21/11/89 and 1420/5/90, regularly tape recorded by BvB.

Grey cheeked Tit babbler *Macronous flavicollis* JB Common in all habitats. Recorded on standard surveys as follows: 81% Pancur to Plengkung; 61% Sadengan; 33% Marengan.

(Oriental Reed warbler *Acrocephalus orientalis*) A single warbler seen in mangrove edge at Cungur (22/12/97) was thought to be this species, though its identity could not be confirmed.

Zitting Cisticola *Cisticola juncidus* Common in the scrub areas at Sadengan. Unrecorded by BvB, so may be a new arrival.

(Yellow bellied Prinia *Prinia flaviventris*) One seen briefly in scrub between Sadengan and Trianggulasi was possibly this species, though it could not be relocated (DuW; 21/12/97).

Olive backed Tailorbird *Orthotomus sepium* JB Common in most open areas. During standard surveys, recorded on 75% of occasions at Marengan, 69% between Pancur and Plengkung and 42% around Sadengan.

Fulvous chested Rhinomyias *Rhinomyias olivacea* Tape recorded by BvB during 15-19/5/90.

Yellow rumped Flycatcher *Ficedula zanthopygia* An immature male in a very retarded state of moult was seen in open forest along the mangroves at Cungur (DuW, 22/12/97).

Hill Blue Flycatcher *Cyomis banyumas* Uncommon in coastal forest. Recorded on 25% of standard surveys between Pancur and Plengkung and 16% around Sadengan.

Maroon breasted Philentoma *Philentoma velatum* The only records are of birds in bamboodominated forest around Sadengan: pair (15/6/97), single male (11/11/97) and a pair (14/9/98). There is also a record of a single wing found in mangroves at Sembulungan (8/8/99)

Mangrove Whistler *Pachycephala grisolla* Singing birds are occasionally heard in the open forest along the Marengan peninsula, though the only sight record is of a single bird there (30/7/99). Birds have been tape recorded by BvB in beach forest new Sadengan and new Bringinan (November 1989 and May 1990).

(Flowerpecker sp. *Prionochilus* sp.) A single unidentified flowerpecker was seen in low trees along the edge of an open grassy area near mangroves at Marengan (30/7/99). This bird showed a dull green mantle, contrasting slightly with a blue grey head. Towards the back of the crown was a small, but obvious, bright red patch. The belly and breast were quite bright yellow, contrasting with a pale off white throat. The only species that might fit this description is Crimson breasted Flowerpecker *Prionochilus percussus*, a rare lowland bird found in West Java and Borneo. This may be the correct identification, though whether its origins are natural or cage derived is unclear.

Thick billed Flowerpecker *Dicaeum agile* A single record of this rarely reported bird in a small mixed flock in the canopy of open forest between Pancur and Plengkung (1/9/97). The dull, featureless plumage and sideways wagging of the tail were characteristic, though this bird showed an unusually heavily streaked breast.

Plain Flowerpecker *Dicaeum concolor* A lone bird was seen in open plantation forest at sea level at Marengan (22/12/97)

Purple throated Sunbird *Nectarinta sperata* The only records are of several birds seen in a large (probably locally migrating) gathering of flowerpeckers and sunbirds near Sadengan (8/10/97) and a single bird in a mixed flock near Sadengan (11/1/97). There are very few records, and the region is distant from the known centre of population in West Java.

(Violet tailed Sunbird *Aethyphyga mystacalis* **JB**) A sunbird in flight near Bedul (30/6/97) was tentatively identified as this species.

Little Spiderhunter *Arachnothera longirostra* Only one record: a single bird in low scrub near Sadengan (11/11/97).

Java Sparrow *Padda oryzivora* **VU** Despite being once described as 'common' in the north of the Park (TNAP), the only recent record is of two birds in scrub at Pasar Anyar (TNAP; March 1999).

Short tailed Starling *Aplonis minor* A single record of three birds in open, dry bamboo forest near Sadengan (11/11/97).

Asian Glossy Starling *Aplonis panayensis* Recorded by BvB on several dates in May 1990. The maximum count was of 90 birds in seven flocks around Trianggulasi (BvB; 17/5/90).

Asian Pied Starling *Sturnus contra* Appears on official Park lists, but there have been no recent records.

Black winged Starling *Sturnus melanopterus* **NT JB** Occasionally seen feeding around Banteng at Sadengan, with a maximum count of three birds (18/2/98)

Hill Myna *Gracula religiosa* The only records are of a single bird with White vented Mynas *Acridotheres javanicus* between Pancur and Plengkung (24/7/97) and up to seven birds in coastal forest near Trianggulasi (18 19/11/08).

Dark throated Oriole *Oriolus xanthonotus* Tape recorded in non teak forest near Pasar Anyar (BvB; 15/5/90) and another pair tape recorded nearby (20/5/90).

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Appendix 1 Systematic list of species recorded in and around Alas Purwo National Park.

The list shows degree of abundance as follows:

- R rare. Personally recorded by the author on three or fewer occasions;
- O occasional. Recorded on more than three occasions, but not regularly;
- U uncommon. Often recorded, but irregularly or in small numbers;
- C common. Regularly recorded, seasonally for migrants.

Species in bold refer to new records for the Park from the authors personal observations and those marked with # refer to species not recorded by the author over the period. Those in brackets refer to species where identification is uncertain.

	Great Frigatebird	<i>Fregata minor</i>	R
	Lesser Frigatebird	<i>Fregata ariel</i>	O
	Christmast Frigatebird	<i>Fregata andrewsi</i>	R
#	Oriental Darter	<i>Anhinga melanogaster</i>	R
	Brown Booby	<i>Sula leucogaster</i>	U
#	Australian Pelican	<i>Peleoanus conspicillatus</i>	R
	(Grey Heron)	<i>Ardea cinerea</i>	R
	Great billed Heron	<i>Ardea sumatrana</i>	U
	Purple Heron	<i>Ardea purpurea</i>	R
	Great Egret	<i>Casmerodius alba</i>	U

	Intermediate Egret	<i>Egretta intermedia</i>	R
	Little Egret	<i>Egretta garzetta</i>	U
	Reef Egret	<i>Egretta sacra</i>	C
	Cattle Egret	<i>Bubulcus ibis</i>	U
	Javan Pond heron	<i>Ardeola speciosa</i>	U
	Striated Heron	<i>Butorides striatus</i>	U
#	Black crowned Night heron	<i>Nycticorax nycticorax</i>	R
#	Milky Stork	<i>Mycteria cinerea</i>	R
	Woolly necked Stork	<i>Ciconia episcopus</i>	O
	Lesser Adjutant	<i>Leptoptilus javanicus</i>	C
#	Osprey	<i>Pandion haliaetus</i>	R
#	(Oriental Honey buzzard)	<i>Pernis ptilorhynchus</i>	R
	Black winged Kite	<i>Elanus caeruleus</i>	R
	Brahminy Kite	<i>Haliastur indus</i>	R
	White bellied Sea eagle	<i>Haliaeetus leucogaster</i>	C
	Grey headed Fish eagle	<i>Ichthyophaga ichthyaetus</i>	O
	Crested Serpent eagle	<i>Spilomis cheela</i>	C
#	Crested Goshawk	<i>Accipiter trivirgatus</i>	R
	Japanese Sparrow-hawk	<i>Accipiter gularis</i>	O
	Black Eagle	<i>Ictinaetus malayensis</i>	R
	Rufous bellied Eagle	<i>Hieraaetus kienerii</i>	O
	Changeable Hawk eagle	<i>Spizaetus cirrhatus</i>	U
	Javan Hawk eagle	<i>Spizaetus bartelsi</i>	R
	Black thighed Falconet	<i>Microchierax fringillarius</i>	U
	Spotted Kestrel	<i>Falco moluccensis</i>	U
#	Oriental Hobby	<i>Falco severus</i>	R
	Peregrine Falcon	<i>Falco peregrinus</i>	R
	Red Junglefowl	<i>Gallus gallus</i>	C
	Green Junglefowl	<i>Gallus varius</i>	C
	Green Peafowl	<i>Pavo muticus</i>	C
	Small Button-quail	<i>Turnix sylvatica</i>	?U
	Barred Button quail	<i>Turnix suscitator</i>	?R
	White-breasted Waterhen	<i>Amauornis phoenicurus</i>	R
	Grey Plover	<i>Pluvialis squatarola</i>	U
	Pacific Golden Plover	<i>Pluvialis fulva</i>	O
	Kentish Plover	<i>Charadrius alexandrinus</i>	R
	Javan Plover	<i>Charadrius javanicus</i>	C
	Red-capped Plover	<i>Charadrius ruficapillus</i>	R
	Malaysian Plover	<i>Charadrius peronii</i>	R
	Lesser Sand plover	<i>Charadrius mongolus</i>	C
	Greater Sand plover	<i>Charadrius leschenaultii</i>	U
	Oriental Plover	<i>Charadrius veredus</i>	R

	Whimbrel	<i>Numenius phaeopus</i>	C
	Eurasian Curlew	<i>Numenius arquata</i>	R
	Far-Eastern Curlew	<i>Numenius madagascariensis</i>	R
	Bar tailed Godwit	<i>Limosa lapponica</i>	U
	Common Redshank	<i>Tringa totanus</i>	U
	Marsh Sandpiper	<i>Tringa stagnatalis</i>	R
	Common Greenshank	<i>Tringa nebularia</i>	U
#	Wood Sandpiper	<i>Tringa glareola</i>	R
	Terek Sandpiper	<i>Xenus cinereus</i>	U
	Common Sandpiper	<i>Actitis hypoleucos</i>	C
	Grey tailed Tattler	<i>Heteroscelus brevipes</i>	U
	Ruddy Turnstone	<i>Arenaria interpres</i>	R
	Great Knot	<i>Calidris tenuirosiris</i>	R
	Sanderling	<i>Calidris alba</i>	C
	Rufous necked Stint	<i>Calidris ruficollis</i>	C
#	Curlew Sandpiper	<i>Calidris ferruginea</i>	R
	Broad-billed Sandpiper	<i>Limicola falcinellus</i>	R
	White headed Stilt	<i>Himantopus leucocephalus</i>	R
#	Red necked Phalarope	<i>Phalaropus lobatus</i>	R
	Beach Thick-knee	<i>Easacus magnirostris</i>	U
	(Pratincole sp.)	<i>Grareola / Stiltia sp.</i>	R
	Pomarine Jaeger	<i>Stercorarius pomarinus</i>	R
#	Arctic Jaeger	<i>Stercorarius parasiticus</i>	R
#	Gull sp.	<i>Larus sp.</i>	R
#	White winged Tern	<i>Chlidonias leucopterus</i>	R
#	Gull billed Tern	<i>Gelochelidon nilotica</i>	R
	Common Tern	<i>Sterna hirundo</i>	O
	Black-naped Tern	<i>Sterna sumatrana</i>	U
	Bridled Tern	<i>Sterna anaethetus</i>	O
	Great Crested Tern	<i>Sterna bergii</i>	C
	Grey cheeked Green Pigeon	<i>Treron griseicauda</i>	C
	Pink necked Green Pigeon	<i>Treron vernans</i>	U
	Orange-breasted Green Pigeon	<i>Treron bicincta</i>	O
#	Black naped Fruit dove	<i>Ptilonopus melanospila</i>	R
	Green Imperial Pigeon	<i>Ducula aenea</i>	O
	Pied Imperial Pigeon	<i>Ducula bicolor</i>	R
	Ruddy Cuckoo dove	<i>Marcropygia emiliana</i>	R
	Island Collared Dove	<i>Streptopelia bitorquata</i>	U
	Spotted Dove	<i>Streptopelia chinensis</i>	C
	Zebra Dove	<i>Geopelia striata</i>	U
	Emerald Dove	<i>Chalcophaps indica</i>	U
	Red breasted Parakeet	<i>Psittacula alexandri</i>	U

	Yellow throated Hanging parrot	<i>Loriculus pusillus</i>	U
#	(Indian Cuckoo)	<i>Cuculus micropterus</i>	R
#	Oriental Cuckoo	<i>Cuculus saturatus</i>	R
#	Banded bay Cuckoo	<i>Cacomantis sonneratii</i>	R
	(Plaintive Cuckoo)	<i>Cacomantis merulinus</i>	?U
	Rusty breasted Cuckoo	<i>Cacomantis sepulchralis</i>	O
	Violet Cuckoo	<i>Chrysococcyx xanthorhynchus</i>	R
	Drongo Cuckoo	<i>Surniculus lugubris</i>	R
#	Asian Koel	<i>Eudynamis scolopacea</i>	R
	Red billed Malkoha	<i>Zanclostomus javanicus</i>	O
	Chestnut breasted Malkoha	<i>Rhamphococcyx curvirostris</i>	U
	Greater Coucal	<i>Centropus sinensis</i>	O
	Lesser Coucal	<i>Centropus bengalensis</i>	R
#	Collared Scopsowl	<i>Otus lempiji</i>	R
#	Buffy Fish owl	<i>Ketupa ketupu</i>	R
#	Javan Owlet	<i>Glaucidium castanopterum</i>	R
	Brown Boobook	<i>Ninox scutulata</i>	R
	Spotted Wood owl	<i>Strix seloputo</i>	O
	Large tailed Nightjar	<i>Caprimulgus macrurus</i>	U
	Savanna Nightjar	<i>Caprimulgus affinis</i>	C
	Edible nest Swiftlet	<i>Aerodramus fuciphagus</i>	?C
	(Black nest Swiftlet)	<i>Aerodramus maximus</i>	?
	Linchi Swiftlet	<i>Collocalia linchi</i>	C
	Brown-backed Needletail	<i>Hirundapus giganteus</i>	O
	Silver-rumped Swift	<i>Rapidura leucopygialis</i>	R
	Fork-tailed Swift	<i>Apus pacificus</i>	O
#	Little Swift	<i>Apus affinis</i>	R
	Asian Palm Swift	<i>Cypsiurus balasiensis</i>	O
	Grey rumped Tree swift	<i>Hemiprocne longipennis</i>	C
	Small Blue Kingfisher	<i>Alcedo caeruleascens</i>	U
	Oriental Dwarf Kingfisher	<i>Ceyx erithacus</i>	U
	Banded Kingfisher	<i>Lacedo pulchella</i>	U
#	Black capped Kingfisher	<i>Halcyon pileata</i>	R
	Javan Kingfisher	<i>Halcyon cyanoventris</i>	C
	Sacred Kingfisher	<i>Halcyon sancta</i>	U
	Collared Kingfisher	<i>Halcyon chloris</i>	C
	Chestnut headed Bee eater	<i>Merops leschenaulti</i>	C
	Blue tailed Bee eater	<i>Merops philippinus</i>	U
	Common Dollarbird	<i>Eurystomus orientalis</i>	C
	Wreathed Hornbill	<i>Rhyticercops undulatus</i>	U
	Asian Pied Hornbill	<i>Anthracoceros albirostris</i>	C
	Rhinoceros Hornbill	<i>Buceros rhinoceros</i>	C

	Lineated Barbet	<i>Megalaima lineata</i>	R
	Black banded Barbet.	<i>Megalaima javensis</i>	C
	Orange-fronted Barbet	<i>Megalaima armillaris</i>	R
	Blue eared Barbet	<i>Megalaima australis</i>	C
#	Laced Woodpecker	<i>Picus vittatus</i>	R
#	Checker throated Yellownape	<i>Picus mentalis</i>	R
	Crimson winged Yellownape	<i>Picus puniceus</i>	O
	Banded Woodpecker	<i>Pieris miniaceus</i>	R
	Common Goldenback	<i>Dinopium javanese</i>	R
	Grey Slaty Woodpecker	<i>Mulleripicus pulverulentus</i>	R
	White-bellied Woodpecker	<i>Dryocopus javensis</i>	U
	Fulvous breasted Woodpecker	<i>Dendrocopus macei</i>	R
#	Brown capped Woodpecker	<i>Dendrocopus molluccensis</i>	R
	Grey-and-buff Woodpecker	<i>Hemicircus concretus</i>	R
#	Greater Goldenback	<i>Cluysocolaptes lucidus</i>	R
#	Banded Broadbill	<i>Eurylaimus javanicus</i>	R
	Banded Pitta	<i>Pitta guajana</i>	C
#	Singing Bush lark	<i>Miraфра javanica</i>	R
	Barn Swallow	<i>Hirundo rustica</i>	C
	Pacific Swallow	<i>Hirundo tahitica</i>	C
	Yellow wagtail	<i>Hirundo flava</i>	R
#	Richard's Pipit	<i>Anthus novaeseelandiae</i>	R
	Malaysian Cuckoo shrike	<i>Coracina javensis</i>	R
#	Lesser Cuckoo shrike	<i>Coracina fimbriata</i>	R
	White shouldemd Triller	<i>Lalage sueurii</i>	U
	Small Minivet	<i>Pericrocotus cinnamomeus</i>	C
	Scarlet Minivet	<i>Pericrocotus flameus</i>	C
	Black winged Hemipus	<i>Hemipus hirundinaceus</i>	C
	Large Wood shrike	<i>Tephrodornis gularis</i>	R
	Black headed Bulbul	<i>Pycnonotus atriceps</i>	O
	Black crested Bulbul	<i>Pycnonotus melanicterus</i>	U
	Sooty headed Bulbul	<i>Pycnonotus aurigaster</i>	C
	Yellow vented Bulbul	<i>Pycnonotus goiavier</i>	C
	Olive winged Bulbul	<i>Pycnonotus plumosus</i>	R
	Cream vented Bulbul	<i>Pycnonotus simplex</i>	C
	Grey cheeked Buibul	<i>Criniger bres</i>	C
	Common lora	<i>Aegithina tiphia</i>	C
	Greater Green Leafbird	<i>Chloropsis sonnerati</i>	C
	Blue winged Leafbird	<i>Chloropsis cochinchinensis</i>	U
	Long tailed Shrike	<i>Lanius schach</i>	U
	Magpie Robin	<i>Copsycus saularis</i>	O
	White rumped Shama	<i>Copsycus malabaricus</i>	R

	Pied Bush chat	<i>Saxicola caprata</i>	O
#	(Orange headed Thrush)	<i>Zoothera citrina</i>	R
	Black capped Babbler	<i>Pellorneum capistratum</i>	U
	Temminck's Babbler	<i>Trichastoma pyrogenys</i>	R
	Horsfield's Babbler	<i>Trichastoma sepiarium</i>	U
	Large Wren babbler	<i>Napothera macrodactyla</i>	R
	Crescent chested Babbler	<i>Stachyris melanothorax</i>	U
	Grey checked Tit babbler	<i>Macronous flavicollis</i>	C
	Striated Grassbird	<i>Megalurus palustris</i>	O
	(Oriental Reed-warbler)	<i>Acrocephalus orientalis</i>	R
	Zitting Cisticola	<i>Cisticola juncidus</i>	C
	Bar winged Prinia	<i>Prinia familiaris</i>	C
#	(Yellow bellied Prinia)	<i>Prinia flaviventris</i>	R
	Common Tailorbird	<i>Orthotomus sutorius</i>	O
	Olive backed Tailorbird	<i>Orthotomus sepium</i>	C
	Yellow bellied Warbler	<i>Abroscopus superciliosus</i>	R
#	FuIvous chested Rhinomyias	<i>Rhinomyias olivacea</i>	R
#	Yellow rumped Flycatcher	<i>Ficedula zanthopygia</i>	R
	Hill Blue Flycatcher	<i>Cyornis banyumas</i>	C
	Flyeater	<i>Gerygone sulphurea</i>	C
	Maroon-breasted Philentoma	<i>Philentoma velatum</i>	O
	Black naped Monarch	<i>Hypothymis azurea</i>	C
	Asian Paradise Flycatcher	<i>Terpsiphone paradisi</i>	O
	Pied Fantail	<i>Rhipidura javanica</i>	C
	Mangrove Whistler	<i>Pachycephala grisola</i>	R
	Great Tit	<i>Parus major</i>	C
	Velvet fronted Nuthatch	<i>Sitta frontalis</i>	U
	(Flowerpecker sp.)	<i>Prionochilus</i> sp.	R
	Thick-bifed Flowerpecker	<i>Dicaeum agile</i>	R
	Orange bellied Flowerpecker	<i>Dicaeum trigonostigma</i>	O
	Plain Flowerpecker	<i>Dicaeum concolor</i>	R
	Scarlet headed Flowerpecker	<i>Dicaeum trochileum</i>	O
	Brown throated Sunbird	<i>Anthreptes malacensis</i>	U
	Ruby cheeked Sunbird	<i>Anthreptes singalensis</i>	C
	Purple throated Sunbird	<i>Nectarinia sperata</i>	R
	Olive backed Sunbird	<i>Nectarinia jugularis</i>	C
	(Violet-tailed Sunbird)	<i>Aethyopyga mystacalis</i>	R
	Little Spiderhunter	<i>Arachnothera longirostra</i>	R
	Grey breasted Spiderhunter	<i>Arachnothera affinis</i>	O
	Javan Munia	<i>Lonchura leucogastroides</i>	U
	Scaly breasted Munia	<i>Lonchura punctulata</i>	C
	Java Sparrow	<i>Padda oryzivora</i>	R

	Tree Sparrow	<i>Passer montanus</i>	C
	Streaked Weaver	<i>Ploceus manyar</i>	O
	Short-tailed Starling	<i>Aplonis minor</i>	R
#	Asian Glossy Starling	<i>Aplonis panayensis</i>	R
#	Asian Pied Starling	<i>Sturnus contra</i>	R
	Black winged Starling	<i>Sturnus melanopterus</i>	O
	White vented Myna	<i>Acridotheres javanicus</i>	C
	Hill Myna	<i>Gracula religiosa</i>	R
#	Dark throated Oriole	<i>Oriolus xanthonotus</i>	R
	Black naped Oriole	<i>Oriolus chinensis</i>	O
	Black Drongo	<i>Dicrurus macrocerus</i>	C
	Ashy Drongo	<i>Dicrurus leucophaeus</i>	R
	Hair crested Drongo	<i>Dicrurus hottentottos</i>	U
	Greater Racquet tailed Drongo	<i>Dicrurus paradiseus</i>	C
	White breasted Wood swallow	<i>Artamus leucorhynchus</i>	C
	Racquet tailed Treepie	<i>Crypsirina temia</i>	U
	Slender billed Crow	<i>Corvus enca</i>	C
#	Large billed Crow	<i>Corvus macrorhynchus</i>	R