Asian Waterbird Census 2009 (Malaysia) Country Report

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Participating Organisations:

PERSATUAN PENCINTA ALAM MALAYSIA • MALAYSIAN NATURE SOCIETY •

PERHILITAN

SARAWAK FORESTRY

PERBADANAN TAMAN NEGARA JOHOR

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Cover photo: A flock of Common Redshanks *Tringa totanus* in flight. (David Bakewell).

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EXECUTIVE SUMMARY

The AWC (Malaysia) is and continues to be the primary waterbird and wetland monitoring programme in Malaysia that is participated by many volunteers and several government agencies. Continuous monitoring since 1999 has resulted in many key findings and most startling is the decline in waterbirds nationally and continued degradation/destruction of our wetlands based on recent analysis by Wetland International. Similarly, surveys conducted during the AWC (Malaysia) 2009 period yielded several exciting discoveries. A snapshot of the overall survey results according to geographical locations and major waterbird groups [i.e. number of individuals and species (in parenthesis)] are presented below.

Waterbird Group	Peninsular Malaysia	East Malaysia
Herons and Egrets	9,535 (13)	342 (12)
Storks	19 (1)	1 (1)
Grebes	17 (1)	-
Geese and Ducks	40 (2)	3 (2)
Rails and Gallinules	366 (5)	69 (3)
Jacanas	2 (1)	-
Shorebirds	18,201 (32)	5,221 (30)
Gulls and Terns	1,513 (8)	358 (6)
TOTAL	**29,693 (63)**	**5,994 (54)**

Several interesting sightings also emerged from this nationwide survey, most notably;

- A single Pied Avocet *Recurvirostra avosetta* was seen in Kampung Buntal in Sarawak. This is a first country record for Malaysia as well as regional record for Borneo.
- Large congregations of Cattle Egrets *Bubulcus ibis* were reported from the Ulu Dedap/Sg Buaya ricefields (1,089 individuals) in Perak and Terengganu River (2,391).
- Sixty globally threatened Chinese Egrets *Egretta eulophotes* in Kampung Buntal in Sarawak.
- An individual Black Bittern *Ixobrychus flavicollis* recorded in Kinta Nature Park, Perak and Pulau Kukup National Park, Johor respectively.
- High concentration on Lesser Adjutants *Leptoptilos javanicus* (16 individuals) were reported from Parit Jawa and Sungai Balang ricefields, Johor.
- Bako-Buntal Bay supported more than 3,500 shorebirds which included globally threatened and near-threatened species such as Malaysian Plovers *Charadrius peronii*, Far Eastern Curlews *Numenius madagascariensis*, Nordmann's Greenshanks *Tringa guttifer* and Black-tailed Godwits *Limosa limosa*. Gull-billed *Gelochelidon nilotica* and Great Crested Terns *Sterna bergii* were also seen in large numbers here.
- Two Grey-tailed Tattlers *Heteroscelus brevipes* were recorded at Teluk Air Tawar-Kuala Muda coast, Penang and Kampung Masjid, Sarawak.
- Kapar Power Station hosted large concentrations of Gull-billed Terns.
- Two "White-faced" Plovers amongst a Kentish Plover *Charadrius alexandrinus* flock in Tanjung Tokong mudflats in Penang.
- In East Malaysia, Bako-Buntal Bay accounted for most of the terns recorded with high numbers coming from Gull-billed and Great Crested Terns.

Several species were notably absent during the 2009 AWC surveys in Peninsular Malaysia. The Milky Stork *Mycteria cinerea* population has declined critically in Malaysia. This species is now known to be found only in the Matang mangroves in Perak and number less than 10 individuals in the wild. The Malaysian Plover and Sanderling *Calidris alba* were also not recorded due to the poor coverage of the east coast sites in Peninsular Malaysia.

Continued significant decline in the waterbird numbers remains a major concern.

Despite this disheartening findings, AWC (Malaysia) needs to continue to generate information in order for it to improve protection and policy (species, site and habitat) measures for our waterbirds and wetlands. AWC (Malaysia) also continues to look forward to the participation of volunteers, who no doubt form the backbone of this annual survey. An initiative to increase the number of volunteers to cover the East Coast sites of the Peninsula as well as Sabah are needed to have as far as possible a complete coverage.

INTRODUCTION

The migration of waterbirds between the Northern and Southern Hemispheres occurs along well defined routes known as flyways. The flyway that brings these birds to our shore is the East Asia –Australasia Flyway (FIGURE 1).

Waterbirds are useful indicators of the conservation status and health of wetland habitats. The Asian Waterbird Census (AWC) is a coordinated international scheme for the collection and dissemination of information on waterbirds and wetlands. It forms a part of the International Waterfowl Census, a global effort coordinated by Wetlands International and conducted once a year, during the 2nd and 3rd week of January. Information is gathered on standardised forms by network of national/regional coordinators and volunteer participations.

FIGURE 1. Map showing the East Asia-Australasia Flyway and important waterbird sites on the Flyway. (Illustration: Maki Koyama © 2008 Partnership for EAAF)

The **major objectives** of the Asian Waterbird Census are (Lopez and Mundkur 1997):

1. **To obtain information on an annual basis of waterbird population at wetlands in the region during the non-breeding period of most species (January), as a basis for evaluation of sites and monitoring of populations;**
2. **To monitor on an annual basis the status and conditions of wetlands; and**
3. **To encourage greater popular interest in waterbirds and wetlands, and thereby promote their conservation.**

The results of the census and associated information are widely used to promote regional and national waterbird and wetland conservation initiatives. These include the identification of internationally important wetlands under the Ramsar Convention and as support for the development of draft agreement on the conservation of migratory waterbirds.

The involvement of the Malaysian Nature Society (MNS) in this programme as the Country Coordinator can be traced back to 1999, working in collaboration with Wetlands International (based in Kuala Lumpur). Through its participation over the years, the census has seen a moderate growth in terms of volunteer involvement and locations surveyed although in 2009 the

sites covered has somewhat been reduced and effort must be undertaken to continue to encourage and seek more volunteers to cover these affected sites . It is hoped that the AWC will be able to generate concern for waterbird and habitat conservation in Malaysia amongst Malaysians and government agencies leading to the achievements of the AWC objectives.

In January, a waterbird workshop was held in Kuching in collaboration with MNS Kuching Branch and hosted by the Sarawak Forestry Corporation. The participants were exposed to basic waterbird identification skills and applied their monitoring skills and knowledge by counting waterbirds at the Bako-Buntal Bay.

IMPORTANT BIRD AREAS (IBA) IN MALAYSIA

The IBA programme of BirdLife International aims to identify, monitor and protect a global network of IBAs for the conservation of the world's birds and other biodiversity. Important Bird Areas, in short, are places of international significance for the conservation of birds at the global, regional or sub-regional level chosen using standardized criteria.

As BirdLife Partner in Malaysia, MNS has identified national 55 IBAs according to the BirdLife's site selection criteria. Twenty-two of those IBAs are wetlands or wetland-related sites. These sites hold significant numbers of one or more globally threatened waterbird or/and have exceptionally large numbers of migratory or congregatory waterbirds. During the census, volunteers are encouraged to survey any of the 22 IBAs closest and convenient to him/her.

METHODS

Standardised survey forms were sent out to volunteers via electronically or snail mail from MNS Head Office in Kuala Lumpur. Volunteers were encouraged to cover as many sites as possible and also to survey previous sites. Completed forms were then returned to MNS for collation and preparation of a country report.

The official survey period for AWC annually is the 2nd and 3rd week of January. *However, an extension of the survey period was accepted in Malaysia to allow AWC volunteers greater flexibility in conducting surveys. Counts from the last week of December till the first week of February are thus accepted.*

RESULTS

Survey Locations

A total of 44 sites nationwide were surveyed during the AWC (Malaysia) period (TABLE 1). Notably missing were sites in Perlis, Kedah, Melaka, Negeri Sembilan and Sabah compared to previous years wherein these sites were part of the census. The Kuala Selangor Nature Park and its surrounding areas were also not covered in the 2009. Effort must be taken to continue to encourage and seek more volunteers to cover these sites.

TABLE 1. Breakdown of sites surveyed according to States during the AWC (Malaysia) 2009.

States	No. of sites surveyed
Perlis/Kedah	-
Pulau Pinang	4
Perak	7
Selangor	2
Melaka/Negeri Sembilan	-
Johor	3
Pahang	1
Terengganu	3
Sarawak	24
Sabah	-
TOTAL	**44**

A total of five Important Bird Areas (IBAs) in Malaysia were covered, three in Peninsular Malaysia and two in Sarawak.

Peninsular Malaysia
1. Teluk Air Tawar-Kuala Muda coast [MY03]
2. North-central Selangor coast [MY11]
3. South-west Johor coast [MY15]

Sarawak
4. Bako-Buntal Bay [MY37]
5. Loagan Bunut National Park [MY52]

Major Waterbird Groups

Eight major waterbird groups were counted with a total count of 35,687 individuals (70 species) nationwide. The overall count were dominated by three groups; the Shorebirds (23,422), Herons and Egrets (9,877) and Gulls and Terns (1,871). Lesser groups such as Rails and Gallinules (435), Geese and Ducks (43), Storks (20), Grebes (17), and Jacanas (2) were also reported.

The major three waterbird groups dominated the counts in both Peninsular and East Malaysia. However, significantly larger numbers were recorded in the Peninsular. This is could be due to exclusion of Sabah and generally lesser numbers were recorded for survey coverage of East Malaysia during the census period. The regional breakdown for the counts according to major waterbird groups are in detailed in **TABLE 2**.

TABLE 2. Breakdown of waterbird groups according to number of individuals and species (in parenthesis) in Peninsular and East Malaysia.

Waterbird Group	Peninsular Malaysia	East Malaysia
Herons and Egrets	9,535 (13)	342 (12)
Storks	19 (1)	1 (1)
Grebes	17 (1)	-
Geese and Ducks	40 (2)	3 (2)
Rails and Gallinules	366 (5)	69 (3)
Jacanas	2 (1)	-
Shorebirds	18,201 (32)	5,221 (30)
Gulls and Terns	1,513 (8)	358 (6)
TOTAL	**29,693 (63)**	**5,994 (54)**

Note: The number of species excludes unidentified species.

Herons and Egrets

A total of 9,535 individuals were counted in the Peninsular Malaysia. However, only 342 individuals were recorded in East Malaysia due to limited coverage. In Peninsular Malaysia, the overall counts for two species exceeded 1,000 individuals, namely; Cattle Egret (3,992) and Little Egret (2,052). More than 800 ardeids remained unidentified. In Peninsular Malaysia, large congregations of Cattle Egrets were reported from the the Ulu Dedap/Sg Buaya ricefields in Perak (1,089) and Terengganu River (2,391). Generally, ardeids were only seen in modest numbers across several sites in Sarawak.

Significant sightings include 60 globally threatened Chinese Egrets, 11 Pacific Reef Egret (nine recorded across Sarawak sites) and two Black Bitterns recorded in Ulu Dedap/Sg Buaya ricefields and Pulau Kukup National Park respectively.

Storks

Lesser Adjutant was the only species recorded. Nineteen individuals were counted at Ulu Dedap/Sg Buaya ricefields and the south-west Johor coast in the Peninsular Malaysia while a solitary one was recorded in Kuching Wetlands National Park in Sarawak. Unfortunately, no wild Milky Storks were recorded in the Matang area. (Note: Captive-released individuals by PERHILITAN are known to loiter around the Kuala Gula area.)

Grebes

A total of 17 Little Grebes were counted during the census period. All of them were recorded at the Perak sites. These wetlands are mainly former tin-mining lakes and pools.

Geese and Ducks

In Peninsular Malaysia, Lesser Treeducks dominated this group with 39 individuals. A large concentration occurred at Chikus, a former tin mining area. Surprisingly only two individuals were counted at Kinta Nature Park and none were recorded at Malim Nawar. These sites continue to hold a decent number but probably were not seen during the census period.

Only two Wandering Whistling–ducks and one Cotton Pygmy-goose were recorded in East Malaysia while only one Cotton Pygmy-goose was recorded in Chikus in Perak and this was disappointing to note.

Rails and Gallinules

White-breasted Waterhens, Common Moorhens and Purple Swamphens were the most common encountered rails in the Peninsula. Twenty-two Watercocks were counted across the sites in the Peninsular. Out of the 40 recorded White-browed Crake, 28 were seen in Sarawak and most were located at G-Kart Lakes, Pujut in Miri. Apart from this very few other rails and gallinules were recorded in East Malaysia.

Jacanas

Two Pheasant-tailed Jacanas were recorded at the Ulu-Dedap/Sg Buaya ricefields.

Shorebirds (Waders)

High concentration of shorebirds was recorded on the north-central Selangor coast in particular at the Kapar Power Station. This site has continued to depict a safe haven for waterbirds possibly due to ongoing destruction of mangroves and reclamation land projects for commercial use along the west coast of Peninsular Malaysia.

Several shorebird species emerged with high total counts in Peninsular Malaysia namely Eurasian Curlew (5,940 individuals), Common Redshank (2,560), Rufous-necked Stint (1,088), Terek Sandpiper (663), Bar-tailed Godwit (651), Whimbrel (627) and Common Greenshank (513). About 3,500 sand-plovers were unidentified primarily due to field constrains. Three globally threatened and near-threatened shorebirds were counted namely the Black-tailed Godwit (40), Far Eastern Curlew (two) and Nordmann's Greenshank (six).

Similarly in East Malaysia, the Bako-Buntal Bay supported more than 3,500 shorebirds including unidentified Sand-plovers (1,500), confirming the site as an important safe haven for shorebirds. Dominant species at the bay included Great Knot (500), Terek Sandpiper (400), Bar-tailed Godwit (380), Greater Sand-plover (246), Lesser Sand-plover (193), Rufous-necked Stint and Whimbrel (113). Bako Buntal Bay is one of Malaysia's 55 Important Bird Areas and this site has been identified as the most important wintering site for the western Sarawak coast.

Globally threatened and near-threatened shorebirds for East Malaysia included Nordmann's Greenshanks (12), Malaysian Plovers (16), Far Eastern Curlews (31), and Black-tailed Godwit (31).

Other interesting and notable sightings for Malaysia included:

- A solitary Pied Avocet was seen at the Bako Buntal Bay (FIGURE 2). The bird was somewhat shy and nervous and did not associate with other waders. A splendid and exciting discovery as it was a first sighting for East Malaysia.

FIGURE 2. The solitary Pied Avocet on the shore of Bako-Buntal Bay, Sarawak (David Bakewell)

- Two "White–faced" Plovers seen at Tanjung Tokong in Penang. A recent re-discovered taxon of which little is known. It breeds on the South China coast and spends non-breeding season in south-east Asia (Bakewell and Kennerley 2008).
- Two Grey-tailed Tattlers recorded at Teluk Air Tawar-Kuala Muda coast in Peninsular Malaysia and Kampung Masjid, Kuala Baram in East Malaysia respectively. The species is in decline and continued monitoring is essential as the world population is estimated to be in the range of 25,000-100,000.

- Kentish Plovers were seen in Tanjong Tokong (eight) and various sites across Sarawak with a large concentration at Bako-Buntal Bay (158). This species is a scarce visitor to Peninsular Malaysia that prefers the sandier coastal areas rather than mudflats.
- Grey Plovers an uncommon migrant is only recorded in significant numbers on the North-central coast of the Peninsula (394) and Bako-Buntal Bay in Sarawak accounted for fifty numbers.
- Notably absent in this year's count was the Asian Dowitcher and the Malaysian Plover in Peninsular Malaysia. The latter is usually found in the east coast sandier coastal areas but due to limited human resources these sites were not covered adequately.

Gulls and Terns
Gull-billed, Little and White-winged Terns dominated the counts with 1,049, 145 and 141 individuals respectively in Peninsular Malaysia and were mostly recorded at Kapar Power Station and Malim Nawar. In East Malaysia, Bako-Buntal Bay accounted for most of the terns and the most common ones seen were Gull-billed Terns (170) and Great Crested Terns (120). Seven Brown-headed Gulls were recorded at the Teluk Air Tawar–Kuala Muda coast. A solitary Common Black-headed Gull was seen at Kapar Power Station and two individuals were recorded at the Bako-Buntal Bay.

Globally Threatened and Near-Threatened Waterbirds

Three globally threatened and three near-threatened waterbirds were recorded namely: **VULNERABLE**: Chinese Egret, Lesser Adjutant, Nordmann's Greenshank; **NEAR-THREATENED**: Malaysian Plover, Far Eastern Curlew and Black-tailed Godwit.

Chinese Egret *Egretta eulophotes*
Sixty individuals were counted at the Bako-Buntal Bay (Kampung Buntal). The global population is estimated to be around 2,600-3,400 individuals (Wetlands International 2006)

Lesser Adjutant *Leptoptilos javanicus*
The global population of Lesser Adjutant currently stands at 5,000 individuals and is declining due to habitat loss, overhunting and human disturbance (Wetlands International 2006). In Peninsular Malaysia, Parit Jawa and Sungai Balang ricefields located along the south-west Johor coast accounted for most of the record this year (16). Only one was recorded at Kuching Wetlands National Park in Sarawak.

Nordmann's Greenshank *Tringa guttifer*
With a global population of around 500-1,000 individuals, Nordmann's Greenshank is one of the world's rarest and globally threatened sandpipers (Wetlands International 2006). In Peninsular Malaysia disappointing numbers were recorded at Air Tawar- Kuala Muda Coast (four) and at the ash ponds in Kapar Power Station (two). While in East Malaysia, Bako-Buntal Bay supported 12 individuals.

Malaysian Plover *Charadrius peronii*
In East Malaysia sightings were scattered across various sites namely Bako-Buntal Bay (six), Pulau Bawal, Kuala Baram (six) and Kampung Masjid (four). However it was disappointing to note that none was recorded in Peninsular Malaysia mainly due to poor coverage of east coast sites. The global population is estimated to be between 10,000-25,000 individuals (Wetlands International 2006).

Far Eastern Curlew *Numenius madagascariensis*
In western Sarawak, 20 individuals were counted in the vicinity of Sejingkat Power Station. The coastline of Bako-Buntal Bay (Kampung Buntal) supported 11 individuals. These counts continue to depict the importance of the western Sarawak coastline. In the Peninsula, only one individual

was seen at Teluk Air Tawar-Kuala Muda coast and Kapar Power Station respectively. The global population is estimated to be 38,000 individuals (Wetlands International 2006).

Black-tailed Godwit *Limosa Limosa*

BirdLife International has classified this species as Near Threatened due to significant decline in numbers noted over the last 15 years. The current global population is estimated to be around 160,000 individuals (Wetlands International 2006).

In Peninsular Malaysia, 40 individuals were counted at Kapar Power Station, located along the north-central Selangor coast. In East Malaysia, the importance of the western Sarawak coast is clearly visible with 30 individuals counted at the Bako-Buntal Bay. A solitary individual was seen at Sejingkat Power Station.

CONCLUSION

Data collected for Peninsular Malaysia during the AWC (Malaysia) in the 1980s, early 1990s and since 1999 have shown that the north-central Selangor coast is one of the most important waterbird sites for passage migrants and/or non-breeding winter visitors as well as coastal residents.

Similarly in East Malaysia, Bako-Buntal Bay supports a healthy concentration of shorebirds and has been identified as the most important wintering site for the western Sarawak coast.

The East Asian-Australasian Flyway that brings the waterbirds to our shore has over the years continued to face numerous challenges and pressures primarily due to damages from coastal development for infrastructure projects, agriculture, aquaculture and industry.

Birds are global travelers passing through many countries and unless there is a full cooperation between nations to preserve the staging posts, the unilateral uncoordinated actions of a single country can seriously affect the population of the world's migratory birds. An example of the habitat loss was the commercial development of the Saemungeum estuary in Korea in 2006. An important staging site which previously hosted globally critical populations of the Spoon-billed Sandpiper, Asian Dowitcher, Great Knot, Nordmann's Greenshank as well as other shorebirds.

The low count experience this year could be most likely in part due to the challenges explained above. Hence great effort must be undertaken by various environmental organizations and the respective governments to ensure a more balance and sustainable development of the world's coastal areas.

The AWC (Malaysia) annual survey provides valuable collection of data and its associated analysis thereof which provides as a basis of monitoring sites and population.

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ANNEXES

ANNEX 1. Survey locations during the AWC (Malaysia) 2009.

STATE & SURVEY SITES
PULAU PINANG (PENANG) Teluk Air Tawar-Kuala Muda coast, Batu Maung-Jelutong coast, Mak Mandin, Tanjung Tokong
PERAK Malim Nawar, Kamunting North and South, Kinta Nature Park, Chikus, Ulu Dedap/Sg Buaya ricefields and Tasik Taiping
SELANGOR North-central Selangor coast (Kapar Power Station) and Batang Berjuntai ex-mining area
JOHOR Sungai Balang ricefields and south-west Johor coast (Parit Jawa, Kukup Laut)
PAHANG Bukit Koman
TERENGGANU Kuala Ibai, KUSZA and Terengganu River
SARAWAK Bako-Buntal Bay (Kampung Buntal), Sejingkat Power Station, Sejingkat Landfill, Kuching Wetlands National Park, Bako Secondary School, Kg Chupak, Pasir Putih, Damai Beach, State Library, Kg Santubong Beach, Pasir Pandak, Kg Alit Coastal area, Yong Kong Field, Old Miri river(Reclaimed) Kuala Baram Lagoon, Kuala Baram peatswamp, Kg masjid, Miri Marina, Laogan Bunut National Park, G-Kart Lakes, Sg Miri and Pulau Bawai (Kuala Baram)

ANNEX 2. Summary of the Waterbirds and Wetland Sites Surveyed During the AWC (Malaysia) 2009. [In Microsoft Excel format]