

A Note on the Waterbirds of Pulupandan, Negros Occidental, Philippines

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Initial results of a survey on the waterbirds of Pulupandan, Negros Occidental conducted from July to October 2009 are presented. Thus far, 43 species are known, including one globally threatened species, the Philippine Duck *Anas luzonica* (Vulnerable). Majority of the species observed were migrants (31), others were residents (11), and only one endemic to the country.

KEYWORDS: ornithology, wetlands, waders, migrants, residents, endemic, Negros, conservation

INTRODUCTION

Very little work has been done on the avifauna of the Philippines (Kennedy, Gonzales, Dickinson, Miranda, & Fisher, 2000), especially with the waterbirds or waders (Magsalay & Kennedy, 2000), as forest birds received most attention from ornithologists and conservationists (Van Weerd & Der Ploeg, 2004).

Several sites in the Philippines are known as wintering grounds for migratory waterbirds, including the Olango Island in Mactan, Cebu, which is a wildlife sanctuary and a Ramsar Important Bird Area,

where thousands of birds were counted including the endangered Chinese Egret (Mapalo, 1994, 2001, 2002; see also Glick, 2005). Other important sites for wading birds are mentioned by Mapalo (1994, 2001), Custodio (2004) and Van Weerd and Der Ploeg (2004).

In the Western Visayas, the waterbirds are not well-studied although some studies have already been done. For example, M. Ebreo (1993) studied the biology of the Purple Heron *Ardea purpurea* in Samponong Bolo, emphasizing the significance of the site as the sanctuary of the species.

The significance of Negros Occidental as habitat for waterbirds was highlighted when the Department of Environment and Natural Resources (DENR) filed cases against hunters who are members of a shooting club who posted several photos of wild ducks in the web.

METHODS

Site description

The site is located in Sitio Cavan, Barangay Tapong in the municipality of Pulupandan, adjacent to the mouth of the Bago River. Dominant vegetations include mangroves (mainly *Avicennia marina*, *Prosopis vidaliana*, and *Nypa fruticans*), coconut groves, and extensive reeds growing on the edges of fishponds.

Field techniques

Two transects (ca. 1.5 km each) were regularly traversed during observations in the morning, noon, and late afternoon between August 28 to September 2 and September 26 to October 2, 2009. Birds were identified and counted with the aid of binoculars and field guides (Kennedy et al., 2000; Fisher & Hicks, 2001). Listing of species as well as counting was repeated and only the maximum counts are presented here (Van Weerd & Der Ploeg, 2004). Aggregating species (e.g. ducks) were counted at their roosting sites or when they formed congregations when feeding (Bibby, Jones, & Marsden, 1998).

Mist nets were also employed near thickets and reeds. Captured species were weighed, and biometrics taken then photographed prior to release. Conservation status (IUCN) of species follows BirdLife International (2008).

RESULTS

Little Grebe (*Tachybaptus ruficollis*)

Eight birds were observed during the second visit (September 26 to October 2, 2009) although none was seen when the group first visited the study area in August 2009. This resident species in the Philippines is known to migrate locally depending on availability of suitable habitat. In this study, majority of the individuals sighted were of breeding plumage.

Philippine Duck (*Anas luzonica*)

In August 2009, more or less 350 species were observed in the area but counts increased to about 540 in September 2009. These were seen in a flock of wild ducks, which contain Wandering Whistling Duck *Dendrocygna arcuata*. According to local informants, these ducks were already seen in large numbers as early as the 1970s and 1980s. However, the number greatly declined in the 1990s due to unregulated hunting activities. In early 2000, the number of these ducks increased in the area again when the local government, which aimed to be recognized for its environmental protection program, issued an ordinance prohibiting the hunting of waterbirds in all the wetlands of the municipality.

Great Egret (*Egretta alba*)

The highest count of egrets (6) was recorded on the first visit of the team in August 2009. However, only two were seen during the second visit in September 2009.

The distribution of the species given by Kennedy et al. (2000) does not include Negros Island. However, a distribution is expected, especially that this species is migrant. It was already seen by birdwatchers, including D. Baker (pers. comm.), in the 1990s in the fishponds of Tanjay and also recently (15 June 2009) by D. Baker and A. Bucol in the vicinity of Silliman University Marine Laboratory.

Javan Pond Heron (*Ardeola speciosa*)

At least 23 birds were counted in August and 35 birds were counted in the September-October survey in Cavan marsh and adjacent banks

of the Bago river. Both breeding and non-breeding plumage were observed. The only known *Ardeola* species in Negros and Panay is the *A. bacchus* (Kennedy et al., 2000). The highest count observed by the group was during the second visit with a total of 58 birds.

Chinese Pond Heron (*Ardeola bacchus*)

Two birds were seen on October 1, 2009 both in non-breeding plumage. All sightings of this species were all of immature birds and since it is quite difficult to separate this species from *A. speciosa*, this record is considered tentative and needs confirmation.

Wandering Whistling-Duck (*Dendrocygna arcuata*)

In August 2009, 250 birds were observed in the area while 634 were counted in September 2009. The species, on certain occasions, was observed together with Philippine Duck *Anas luzonica*.

Black-Crowned Night Heron (*Nycticorax nycticorax*)

The species probably breeds in the country (Kennedy et al., 2000) as both adult and immature plumages were observed. The researchers did not find nesting or juvenile birds although the locals reported that they nest in the area.

Rufous-Night Heron (*Nycticorax caledonicus*)

Eleven birds were sighted on September 29, 2009; some were perching on trees.

Purple Heron (*Ardea purpurea*)

Eleven birds were spotted on October 1, 2009 and consistently seen throughout the observation days. The species probably breed in the area as local guides were able to describe the nests and eggs of this heron. Ebreo (1993) studied the biology of this species in Samponong Bolo, Iloilo, Philippines.

Yellow bittern (*Ixobrychus sinensis*)

This species was spotted throughout the observation period, usually flying over reed beds and ponds.

Cinnamon Bittern (*Ixobrychus cinnamomeus*)

Six birds were seen on October 1, 2009 flying over reed beds and across fishponds.

Common Moorhen (*Gallinula chloropus*)

Five were seen on September 29, 2009. Both migrant and resident populations are found in the Philippines (Kennedy et al., 2000). With the aid of local hunters, the researchers were able to find two recent fledglings. Interestingly, neither of the two possessed orange-red flesh at the base of the upper mandible as illustrated by Kennedy et al. (2000).

DISCUSSION

Thus far, a total of 43 species of waterbirds are known in the study area (see Table 1), 31 of which are migrants and 11 are residents to the country while only one is endemic to the Philippines. The number of migrants is expected to increase as other migrants arrived in November during the southward migration and February-March during the northward migration (see Kennedy et al., 2000 for information of each species). The results of the subsequent surveys (February to May 2010) will be published in a subsequent report.

The Philippine Duck *Anas luzonica* (Vulnerable) is the only globally threatened species encountered during the survey. It was estimated that in a flock (ca 300) of ducks composed of this species and the Wandering Whistling Duck *D. arcuata*, about 80 were of *A. luzonica*. Van Weerd and Der Ploeg (2004) reported 1,320 birds in January 2002 in Malasi Lakes in Northern Luzon, Philippines. Although the counts reported herein are lower than those in Malasi Lakes and in Candaba Marsh in Luzon, it is suspected that the study site holds the highest population of the species in Negros Island. One of the researchers (A. Bucol) observed only 5-7 birds of this species in an abandoned mining pond in Basay, Negros Oriental, Philippines. This number indicates a significant decline due to hunting (P. Zante pers. comm.); at least a

thousand individuals existed in the area in the early 1990s (based on interviews with local hunters in the area). The total population of this species has been estimated at 2,500-10,000 individuals, and numbers are declining in most of its known areas (BirdLife International, 2008).

Using Kennedy et al.'s baseline (2000), the Javan Pond-Heron *A. speciosa* is a new record for Negros Island though it may have been recorded earlier by birdwatchers. Another possible reason is the presence of the migrant species *Ardeola bacchus*, since the immature forms of both species closely resemble.

The following species were not recorded during the survey but are expected to be found in the wetlands of Negros island (recorded by Kennedy et al., 2000): Black Bittern *Dupetor flavicollis*; Watercock *Gallinule cinnamomea*; Eurasian Coot *Fulica atra*; Greater-painted Snipe *Rostratula benghalensis*; and Green Sandpiper *Tringa ochropus*.

CONCLUSIONS AND RECOMMENDATIONS

The wetland in Cavan, Pulupandan is considerably rich in terms of waterbirds with at least 43 species, rivaling those of other wetlands such as the Candaba Marsh in Luzon Island in terms of species diversity. This could be attributed to its topographic location, being adjacent to the Bago River. Its vast reed beds and mangroves serve as the habitat for waterbirds while the presence of fishponds nearby may also provide a source of food.

Conservation plans for the waterbirds of Pulupandan is currently being integrated in the local government unit's environmental program. Although the municipal government has banned hunting, some residents are still practicing occasional trapping with the use of local snares. Thus, an educational campaign should be done alongside enforcement.

AUTHORS' NOTE

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Table 1.

Counts of waterbirds in Cavan, Pulupandan, Negros Occidental in late July to late August 2009 and late September to early October, 2009.

| English Name | Latin Name | Status | August | September |
|---------------------------|--------------------------------|--------|--------|-----------|
| Little Grebe | <i>Tachybaptus ruficollis</i> | R | 6 | 8 |
| Philippine Duck | <i>Anas luzonica</i> | PE, Vu | 230 | 540 |
| Wandering Whistling-Duck | <i>Dendrocygna arcuata</i> | R | 455 | 634 |
| Great Egret | <i>Egretta alba</i> | M | 6 | 2 |
| Intermediate Egret | <i>Egretta intermedia</i> | M | 11 | 15 |
| Little Egret | <i>Egretta garzetta</i> | M | 27 | 75 |
| Cattle Egret | <i>Bubulcus ibis</i> | M | 30 | 5 |
| Black-Crowned Night-Heron | <i>Nycticorax nycticorax</i> | M | 46 | 36 |
| Rufous-Night Heron | <i>Nycticorax caledonicus</i> | R | 2 | 11 |
| Little Heron | <i>Butorides striatus</i> | M | 24 | 8 |
| Javan Pond-Heron | <i>Ardeola speciosa</i> | R | 45 | 58 |
| Chinese Pond-Heron | <i>Ardeola bacchus</i> | M | 6 | 2 |
| Purple Heron | <i>Ardea purpurea</i> | R | 8 | 11 |
| Yellow Bittern | <i>Ixobrychus sinensis</i> | R | 11 | 18 |
| Cinnamon Bittern | <i>Ixobrychus cinnamomeus</i> | M | 8 | 6 |
| Barred Rail | <i>Gallirallus torquatus</i> | R | 15 | 22 |
| White-browed Crake | <i>Porzana cinerea</i> | R | 17 | 10 |
| White-breasted Waterhen | <i>Amaurornis phoenicurus</i> | R | 2 | 1 |
| Common Moorhen | <i>Gallinula chloropus</i> | R | 8 | 5 |
| Broad-billed Sandpiper | <i>Limicola falcinellus</i> | M | 2 | -- |
| Common Redshank | <i>Tringa totanus</i> | M | 8 | 5 |
| Common Greenshank | <i>Tringa nebularia</i> | M | 12 | 3 |
| Wood Sandpiper | <i>Tringa glareola</i> | M | 5 | -- |
| Curlew Sandpiper | <i>Calidris ferruginea</i> | M | 3 | 2 |
| Common Sandpiper | <i>Actitis hypoleucos</i> | M | 12 | 5 |
| Terek Sandpiper | <i>Xenus cinerea</i> | M | 2 | 4 |
| Oriental Pratincole | <i>Glareola maldivarum</i> | M | 2 | -- |
| Grey-tailed Tattler | <i>Heteroscelus brevipes</i> | M | 5 | 6 |
| Ruddy Turnstone | <i>Arenaria interpres</i> | M | 4 | 8 |
| Swinhoe's Snipe | <i>Gallinago megala</i> | M | -- | 1 |
| Little Ringed-Plover | <i>Charadrius dubius</i> | M/R | 2 | 1 |
| Kentish Plover | <i>Charadrius alexandrinus</i> | M | 2 | 4 |
| Gray Plover | <i>Pluvialis squatarola</i> | M | 25 | 17 |
| Asian Golden-Plover | <i>Pluvialis fulva</i> | M | 12 | 3 |
| Whimbrel | <i>Numenius phaeopus</i> | M | -- | 2 |
| Black-tailed Godwit | <i>Limosa limosa</i> | M | 1 | -- |
| Black-winged Stilt | <i>Himantopus himantopus</i> | M | 45 | 86 |
| Gull-billed Tern | <i>Gelochelidon nilotica</i> | M | 9 | 11 |
| Great Crested Tern | <i>Sterna bergii</i> | M | 5 | 9 |
| Common Tern | <i>Sterna hirundo</i> | M | 23 | 14 |
| Whiskered Tern | <i>Chlidonias hybridus</i> | M | 21 | 10 |
| Common Kingfisher | <i>Alcedo atthis</i> | M | 2 | 5 |
| White-collared Kingfisher | <i>Halcyon chloris</i> | R | 12 | 10 |
| Total Number of Species | | 43 | 30 | 28 |

Note: PE—Philippine endemic; M—Migrant; R—Resident; Vu—Vulnerable (IUCN status based on BirdLife International 2008).