Return of the Comb Duck (*Sarkidiornis melanotus*) to Sri Lanka

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Figure 1: The Group of Comb ducks at Wewegama tank

Introduction

The Comb duck, *Sarkidiornis melanotus* (Pennant, 1769) has the dubious distinction of being considered as the only resident bird species to have been extirpated from Sri Lanka (Legge, 1888; Henry,1955; Kotagama & Fernando, 1994; Harrison & Worfolk, 1999; BirdLife International, 2012), with its last record being an unconfirmed sighting in the 1960s (Henry, 1998). Sighting of a comb duck in the Yala National Park on June 21st 2012 was reported in the press (Island newspaper of 29/07/2012). Here we describe the observation of a group of five comb ducks at the Wewegama tank in the proposed Mattala Managed Elephant Range (MER) in July 2012 (Figure 1).

Figure 2: The prominent "Comb" in the male bird

Morphology

Sarkidiornis melanotus is one of the largest duck species, and shows marked sexual dimorphism in size with males 76 cm and females 66 cm in length (Harrison & Worfolk, 1999). The male is easily identified by the unique semicircular prominence ('comb') extending from the forehead over the beak (Figure 2), which is absent in females. The comb is fleshy and reduced in size for much of the year, but enlarges prior to the breeding season. The sexes are coloured alike, primarily black above and white below with a white head. The upper-neck is speckled with black with a black stripe extending from the nape to hind neck. The breast, underparts and undertail coverts are white. Wings are black with a metallic blue-green iridescence on coverts and tertials and bronze on greater coverts and secondaries. Lower-back grayish with black upper tail coverts and tail.

Taxonomy

The position of the monotypic genus *Sarkidiornis* within the Family Anatidae is not clear. It was initially placed in the Subfamily Anatinae, Tribe Cairinini, among perching ducks, characterized by tree perching, in a phylogeny based on behaviour (Johnsgard, 1961 &1978). Subsequent morphological assessment suggested the grouping Cairinini was paraphyletic and that *Sarkidiornis* was related to shelducks, and therefore it was placed in the subfamily Tadorninae or shelducks (Livezey, 1986). Based on genetic data, Sarkidiornis is now placed back in the subfamily Anatinae, of which it is considered a basal member (Sibley et al. 1988; Donne-Goussé et al, 2002). Two subspecies are recognized, *S. melanotus melanotus* in the Old World and *S. melanotus sylvicola* in the New World. The two subspecies were formerly considered full species but were later synonimized (Sibley & Monroe, 1990).

Distribution

The comb duck has a wide distribution including South and Central America, sub-Saharan Africa, Madagascar, and South and Southeast Asia (BirdLife International, 2012). With respect to Sri Lanka in the 19th century it was found in tanks situated in forested parts of the dry zone including the Northwest, Wanni, Anuradhapura, Trincomalee, Batticaloa and Hambantota areas (Legge 1880).

Behaviour

Comb Duck is known to associate in large flocks of over 100 birds to small groups consisting of a few individuals (BirdLife International, 2012). Same sex groups have been commonly observed. Pair bonds are thought to be practically absent with poorly developed simple courtship and copulatory displays (Johnsgard 1961). In India, comb ducks breed from July to September during the Southwest monsoon (Ali & Ripley 2002), congregating during dry periods and dispersing with the rains. In Sri Lanka it is thought to have bred during the Northeast monsoon from February to March (Legge, 1880). Radio telemetry studies in Africa has shown that comb ducks move up to 560 km within 27 months (Cappelle *et al*, 2011), and ringing studies found evidence of movements over 1000 km during the migratory season (Oatley & Prys-Jones, 1986).

Observations at Wewegama tank

The Wewegama tank is a small rain fed reservoir approximately 4.5 ha in extent and is surrounded by forest. It is situated on the border of the Mattala MER at N6.3075º/E81.0315º (Fig.3). The road from Wewegama to Usgala-Andarawewa and the electric fence located along the perimeter of the MER lies along the dam of the tank. The paddy fields irrigated from the tank lie downstream and are usually cultivated only in the “Maha” season. Wewgama is a fairly shallow tank with dense submerged aquatic vegetation and with little floating vegetation. The water recedes during the dry season, exposing the tank bed, which is covered with short grass and herbs. Elephants visit the tank seasonally, sometimes in herds of up to about 50. Lesser whistling teal, Black winged stilts, Pond herons, Egrets, Grey herons, Common kingfishers, Little cormorants, and Indian darters are commonly observed associated with this wetland.

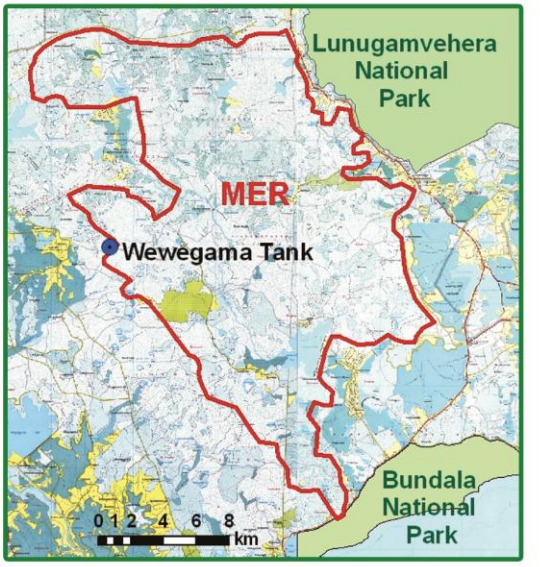

Figure.3 : Location map

A group of five comb ducks was initially spotted on 30th June 2012, sitting on a small mound in the middle of the tank. Subsequently they were observed from the 1st-3rd July. All five individuals spotted had ‘combs’ and therefore are males. The speckling on the head and neck and the size and shape of the combs were variable among individuals, enabling individuals to be identified separately (Figures 1 & 4). One of the individuals had noticeably heavier speckling on the head and neck that made it appear almost black.

On 1st evening and 2nd early morning they were seen resting at the edge of the tank, suggestive of having spent the night at the tank roosting on the ground. During the day they were observed feeding and resting in the tank at the edges and at a couple of mounds in the middle. They fed in the shallow areas by swimming fairly low in the water and submerging the head and neck for short periods, and displayed dabbling behaviour in deeper parts.

When swimming from one place to another they rode higher in the water. The group kept together and when feeding and resting took turns to be watchful. When disturbed by movement of people or cattle at the edges of the tank, they took off, circuited the tank and landed back in the tank in an area away from the disturbance. They were not noticeably shy and less spooked than black winged stilts and whistling teals. On 3rd July 2012 they were not observed at the tank at 6 am but flew in at about 9 am, most likely having spent the night somewhere else. They were last observed at Wewegama on the morning of 5th July. A subsequent survey of other tanks in the area failed to find any trace of them.

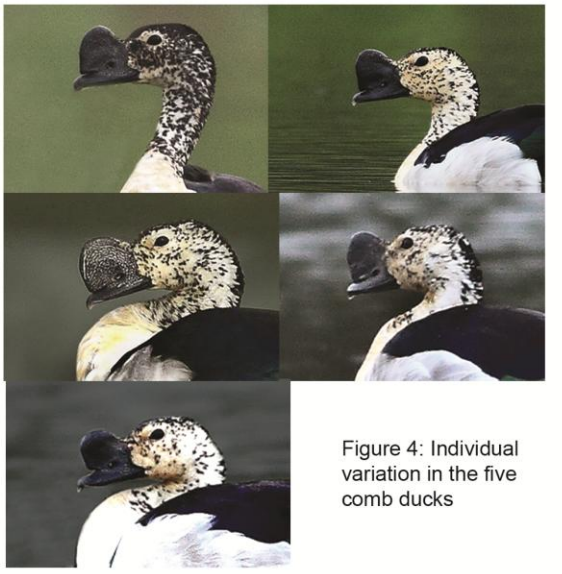

Figure 4: Individual variation in the five comb ducks

Conservation

In view of its distribution and its abundance throughout the tropical range, the comb duck has been placed in the 'Least Concern' category of the IUCN Redlist (BirdLife International, 2012). However, given its history in Sri Lanka, an active effort is needed to conserve the species in the island. The report from Yala and the current observations are the first confirmed sightings of the species in Sri Lanka after many decades. Given their ability to travel long distances, and that all individuals observed were males, it is probable that the observed comb ducks were visitors from India where it is listed as a resident species. While unlikely, a foray from a yet undiscovered resident population in Sri Lanka is also possible.

This observation also indicates the need to reassess the status of Comb duck in Sri Lanka that should be preceded by a detailed survey of Wewegama tank and other similar tanks in the Southern, northern and eastern parts of Sri Lanka for the presence of this species. During the observations at Wewegama, remains of two freshly killed and skinned spotted deer were found at the tank, indicating that regular poaching takes place in this area. The comb duck is also a potential target for such poachers and therefore, increasing awareness of the unique status of this species and enlisting local communities in its protection is important for its conservation in Sri Lanka.

Note from the editor

During 2012, number of other people have also reported sighting of this species. These include the observation made by Dr Thilak Jayaratna on 16th April 2012 in Vankali lagoon, while Asith Jayewardhane reported sighting of 13 individuals, possibly all males, at Magalle tank in Nikawaretiya on 21st July 2012, which is the largest number of ducks recorded from Sri Lanka in the recent history. 10 individuals were observed in Dembarawewa by H.K. Janaka on 3rd August 2012 and 3 females in Bundala on 15th September 2012 by H.K. Janaka and Dr. Prithiviraj Fernando.

These normally shy ducks are known to gather into flocks during the non-breeding dry season, sometimes in sexually segregated groups. The multiple sightings and especially the presence of females maybe an indication that the Comb ducks are back to stay in Sri Lanka for good. Therefore, FOGSL invites all birders to be vigilant and inform us if this bird species is seen, so that the national status of this bird could be reassessed and conservation messures can be taken. At present the Comb duck is listed under the category, "status unknown".

References

Ali, S & Ripley, S.D. (2001). Handbook of the Birds of India and Pakistan, Together with those of Bangladesh, Nepal, Bhutan and Sri Lanka, Vol. IV, Frogmouths to Pittas. Oxford University Press, New Delhi.

BirdLife International (2012). Sarkidiornis melanotos. In: IUCN 2012. IUCN Red List of Threatened Species. Version 2012.1. <www.iucnredlist.org>. Downloaded on 3. July 2012.

Cappelle, J., Iverson, S.A., Takekawa, J.Y., Newman, S.H., Dodman, T. & Gaidet, N. (2011). Implementing telemetry on new species in remote areas: recommendations from a large-scale satellite tracking study of African waterfowl. Ostrich 82: 17-26.

Donne-Goussé, C., Laudet, V. & Hänni, C. (2002). A molecular phylogeny of anseriformes based on mitochondrial DNA analysis. Mol. Phylogenet. Evol. 23: 339–356.

Harrison J. & Worfolk T. (1999). A Field Guide to the Birds of Sri Lanka. Oxford University Press.

Henry G.M. (1955). A Guide to the Birds of Ceylon. Oxford University Press.

Henry G.M. (1998). A Guide to the Birds of Sri Lanka. Third Edition. Revised and enlarged by T.W. Hoffmann, D. Warakagoda and U. Ekanayake. Oxford University Press.

Johnsgard, P.A. (1961). The taxonomy of the Anatidae - a behavioural analysis. Ibis 103A: 71-85.

Johnsgard, P.A. (1978). Ducks, Geese and Swans of the World. University of Nebraska Press, Lincoln.

Kotagama S.W. & Fernando P. (1994). A Field Guide to the Birds of Sri Lanka. Wildlife Heritage Trust of Sri Lanka.

Legge, W.V. (1880). A History of the Birds of Ceylon. Vol. IV. Tisara Prakasakayo Limited, Dehiwala, Sri Lanka (Second Edition 1983).

Livezey, B.C. (1986). A phylogenetic analysis of recent anseriform genera using morphological characters. Auk 103: 737–754.

Oatley, T.B. & Prys-Jones, R.P. (1986). A comparative analysis of movements of southern African waterfowl (Anatidae), based on ringing recoveries. South Afr. J. Wildlife Res. 16: 1-6.

Sibley, C.G. & Monroe, B.L. (1990). Distribution and Taxonomy of Birds of the World. Yale University Press, New Haven, USA.

Sibley, C.G., Ahlquist, J.E. & Monroe Jr., B.L. (1988). A classification of the living birds of the world based on DNA–DNA hybridization studies. Auk 105: 409-423.

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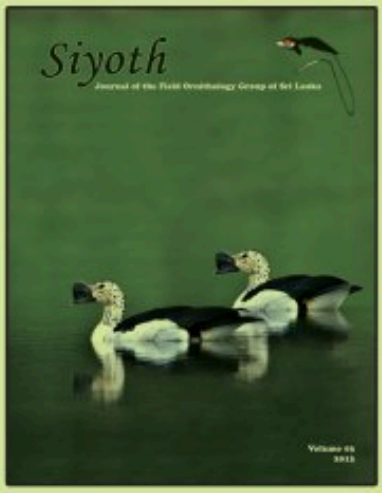

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