Ferruginous Duck Aythya nyroca, a new breeding species for Egypt in a temporary artificial wetland near Aswan

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On 24 April 2010 in the fishpond area near the High Dam, Aswan (Figure 1), southern Egypt, we observed 40 Purple Herons *Ardea purpurea*, passing both north and south. This is a high number as the only known colony of Purple Herons in Egypt is found on Bahrif island (Hoek 2007) 22 km north of these fishponds with an estimated 10–20 nests in 2010. This large number raised the suspicion of another, larger, colony in the area. About 10 days later we found a small artificial wetland with arriving and departing Purple Herons. On 7 May 2010 at the latter site there were various bird species present including Ferruginous Ducks *Aythya nyroca* with downy young.

This artificial wetland is situated 9 km south of Aswan city, near the international airport and High Dam and along the road to Abu Simbel. It has an area of *c*140 acres and consists largely of an almost inaccessible reed marsh though in the southern part of the site there are some shallow pools (Plate 1). It is largely surrounded by desert, but urban developments are taking place everywhere,

and it owes its existence to water from a sewage water treatment plant of nearby Sahary (Figure 1).

The dominant plant species is reed Phragmites australis with, especially along the edges, tamarisk Tamarix nilotica and some date palm trees Phoenix dactylifera. The central part of the reed marsh seemed to be rather undisturbed, but along the edges in some places the vegetation has been affected by fire and grazing. The water of the shallow pools is covered with a duckweed species. West of the reed marsh some concrete-lined ponds have been constructed but vegetation is absent along their banks. How long the reed marsh has been in existence is unknown and it is likely that in the short term it will be cultivated and trees planted.

RESULTS AND DISCUSSION.

Ferruginous Duck Aythya nyroca

Immediately after we entered the site on 7 May adult Ferruginous Ducks were flushed from the shallow pools. Four Ferruginous Ducks (Plates 2–4), but also some Mallards *Anas platyrhynchos*, continued to circle around us, some others landed in the centre of the reed marsh. We glimpsed



Figure 1. Locality of the artificial wetland near Aswan, southern Egypt. © *Dick Hoek*



Plate I. Southern part of the artificial wetland near Aswan, Egypt, with shallow pools where Ferruginous Ducks *Aythya nyroca* with downy young were observed (photo 11 May 2010). © *Haitham Ibrahim*



Plate 2. Adult Ferruginous Ducks *Aythya nyroca*, male (above) and female, 7 May 2010 at the artificial wetland, Aswan, Egypt. © *Dick Hoek*



Plate 4. Adult female Ferruginous Duck *Aythya nyroca* 7 May 2010 at the artificial wetland, Aswan, Egypt. © *Dick Hoek*

three ducklings disappearing in the dense vegetation on one of the pools. One was photographed confirming it was a young Ferruginous Duck duckling (Plate 5). A photo of another duckling of this species was taken on 11 May (Plate 6).

These are the first breeding records of Ferruginous Duck for Egypt. Goodman & Meininger (1989), for example, mentioned Ferruginous Duck in Egypt only as a "fairly common passage and winter visitor from (mid-August) late September to mid-April (mid-May)." The main breeding area of the species is southern and eastern Europe and southwestern Asia. In northern Africa it



Plate 3. Adult Ferruginous Ducks *Aythya nyroca*, male (above) and female, 7 May 2010 at the artificial wetland, Aswan, Egypt. © Dick Hoek



Plate 5. Downy young Ferruginous Duck Aythya nyroca 7 May 2010 at the artificial wetland, Aswan, Egypt. © Dick Hoek



Plate 6. Ferruginous Duck *Aythya nyroca* duckling II May 2010 at the artificial wetland, Aswan, Egypt. © *Ahmed Ebaid*

has bred in isolated areas from Morocco east to Libya, in Asia continuing eastwards to northeast Pakistan (del Hoyo *et al* 1992). Aswan fits with this pattern, but is probably the most southern breeding documented. Breeding range may fluctuate considerably from year to year as a result of variable water levels (BirdLife International 2010).





Plate 7. Adult male Mallard Anas platyrhynchos 7 May 2010 at the artificial wetland, Aswan, Egypt. © Dick Hoek

Plate 8. Adult Purple Heron Ardea purpurea 7 May 2010 at the artificial wetland, Aswan, Egypt. © Dick Hoek

Though the world population is estimated at 163 000–257 000 birds, Ferruginous Duck is listed as Near Threatened on the Red List of Threatened Species (IUCN 2010) due to its decline in most European countries. The situation of the larger populations in Asia is unclear.

Observations of other interesting species

This artificial wetland appears important for many other scarce or local breeding species of Egypt. Below are those records of ours at the site which supplement Goodman & Meininger (1989) and the recent 'Provisional Checklist of the Birds of Egypt' (Moldován & Blair 2010).

Mallard Anas platyrhynchos

Since 1989 it has become clear that Mallard is a regular breeding species in the Nile valley in Cairo and surroundings (Moldován & Blair 2010). On 7 May there were at least 10 birds, 6 males and 4 females, which suggests breeding at this very southern site of at least 6 pairs (Plate 7). On 29 May 4 males and 3 females and on 15 June 1 adult were seen and DH observed a pair 20 March in the fishpond area.

Little Grebe Tachybaptus ruficollis

An adult bird with a juvenile was recorded and photographed end of May. In the nearby First Cataract Islands protectorate the species has been regularly recorded as a breeding species (Moldován & Blair 2010).

Purple Heron Ardea purpurea

On 7 May during a 30 minute period in the morning, 39 Purple Herons left the reed marsh heading south in the direction of Lake Nasser and exactly 39 arrived from the south. All were adults (Plate 8). On 29 May, one hour before sunset, a maximum of *c*100 birds were recorded. This clearly suggests the presence of a larger breeding colony than that on Bahrif island.

Grey Heron Ardea cinerea

On 29 May, 6 adults were observed landing in the reed bed. Again, this suggests breeding. For Egypt there is only one documented nesting record—from 1918 in the Zoo in Giza, near Cairo (Goodman & Meininger 1989). Several potentially-breeding individuals have

been recorded from Aswan in various years, including 2010, in the period March–June, but a nest has never been found.

Other wetland species observed were: Egyptian Goose Alopochen aegyptiaca (pair with 5 young), Little Bittern Ixobrychus minutus (1 pair), Black-crowned Night Heron Nycticorax nycticorax (max 57), Squacco Heron Ardeola ralloides (max 11), Cattle Egret Bubulcus ibis (max 7), Little Egret Egretta garzetta (max 56), Osprey Pandion haliaetus (1), Common Moorhen Gallinula chloropus, African Swamphen Porphyrio madagascariensis, Senegal Thickknee Burhinus senegalensis, Spur-winged



Plate 9. Lake Nasser (near Crocodile island, Aswan), Egypt, with partly-drowned Tamarisks *Tamarix nilotica*, 11 December 2008. © *Dick Hoek*

Lapwing *Vanellus spinosus*, Little Stint *Calidris minuta*, Green Sandpiper *Tringa ochropus*, Western Marsh Harrier *Circus aeruginosus*, Yellow Wagtail *Motacilla flava sensu lato* and Clamorous Reed Warbler *Acrocephalus stentoreus*. The heron and egret species may well be breeding, aided by the relative absence of disturbance (no boats, centre nearly inaccessible), relatively stable water level (allows reeds to grow providing important shelter) and the presence of lake Nasser as a feeding ground.

In the Nile valley around Aswan small reed marshes are common, but disturbance is nearly always high, even in the small reed-rich protectorate of First Cataract Islands. In lake Nasser disturbance is less, but the distribution of reeds is limited probably as an effect of depth of floodwater, which can be above 10 m at high flood. Besides this, the dominance of tamarisk everywhere along the shores (Plate 9) may prevent the development of reed marshes (see Springuel & Ali pp366–367 in Fraser & Keddy 2005). Further small anthropogenic wetlands might exist and attract opportunistic breeders in the area but remain to be discovered.

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REFERENCES

BirdLife International. 2010. Species fact sheet: Aythya nyroca. www.birdlife.org (accessed 28 June 2010).

- Fraser, LH & PA Keddy. 2005. *The World's Largest Wetlands: Ecology and Conservation*. Cambridge University Press, UK.
- Goodman, SM & PL Meininger (eds). 1989. The Birds of Egypt. Oxford University Press, UK.
- Hoek, D. 2007. A small colony of Purple Heron *Ardea purpurea* on Bahrif Island, Nile valley, Aswan—a new breeding species for Egypt? *Sandgrouse* 29: 221–224.
- del Hoyo J, A Elliott & J Sargatal (eds). 1992. Handbook of the Birds of the World. Vol 1. Lynx Edicions, Barcelona.
- IUCN. 2010. *IUCN Red List of Threatened Species*. Version 2010.1. www.iucnredlist.org (accessed 28 June 2010).

Moldován I & MJ Blair. 2010. Provisional checklist of Birds in Egypt. www.birdinginegypt.com

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