

First record of White-faced Whistling-Ducks *Dendrocygna viduata* (Linnaeus, 1766) (Aves Anatidae) in Libya

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ABSTRACT

In 24th May 2022, the presence of one adult specimen of White-faced Whistling-Duck *Dendrocygna viduata* (Linnaeus, 1766) (Aves Anatidae) was recorded in the sewage treatment lagoon of Al-Saket, in Misrata city about 200 km east to Tripoli (32°19'11.0"N 15°00'48.3"E), Libya. It was found swimming on water surface of the lagoon. *Dendrocygna viduata* breeds in sub-Saharan Africa and much of South America and is considered as gregarious and vagrant species. This is the first record of *D. viduata* in Libya that requires further confirmation as only one specimen has been observed and being a duck subject to human breeding.

KEY WORDS

White-faced whistling duck; Alsaket sewage treatment; Misrata; Libya.

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INTRODUCTION

Libya is a country with a dry and desert climate. It has many wetlands, most of which are represented in coastal saline Sabkhas with the presence of some lagoons. Inside there are many highly saline desert oases, and along the coast there are some estuaries that rely on rainfall, which has decreased significantly in recent years with the increase in urbanization and the accompanying destruction and pressure on natural environments such as forests and wetlands, the number of industrial and man-made wetlands such as reservoirs of the man-made river and sewage treatment plants has increased, with a proven role in attracting birds, especially aquatic birds (Algadry et al., 2022). In terms of numbers and types of birds,

Libya is considered poor compared to its neighboring countries in the region (Smart et al., 2006). In the year 2016, the last book on Libyan birds was published (Isenmann et al., 2016); it included 351 species of which about 100 species were mentioned as nesting in Libya. The total of Anatidae species reached 25, although this group need to be updated; for example: the white headed duck was seen only in 1965 in the Wadi Kaam area (Bundy, 1976).

Currently, most of the aquatic bird species that are counted in Libya are the results of the regular winter survey of waterbirds (IWC) that started from 2005 to 2022 (Azafzaf et al., 2005, 2006; Smart et al., 2006; Etayeb et al., 2007; EGA-RAC/SPA, 2012; Bourass et al., 2013; Etayeb et al., 2015a, b; Benyezza et al., 2017; Etayeb et al., 2020).

RESULTS AND DISCUSSION

A White-faced Whistling-Duck *Dendrocygna viduata* (Linnaeus, 1766) (Aves Anatidae) was recorded for the first time in Libya. This species was observed on 24 May 2022 in the sewage treatment lagoon of Al-Saket site in Misrata (32°19'11.0"N 15°00'48.3" E) about 200 km east to Tripoli (Fig. 1).

The only one specimen bird observed showed the typical appearance of this species with a black neck and head, a distinctive white face, and a long

grey bill; it swam on the surface of the lagoon and some photos were taken with the surrounding environment consisting mainly of reed plants (Figs. 2, 3).

The range of *D. viduata* is subsaharan Africa, including Madagascar and Comoro Island, and South America, from Costa Rica and Trinidad to northern Argentina and Uruguay (Johnsgard, 1965; del Hoyo et al. 1992; Dickinson et al., 2004; Arlott et al., 2021).

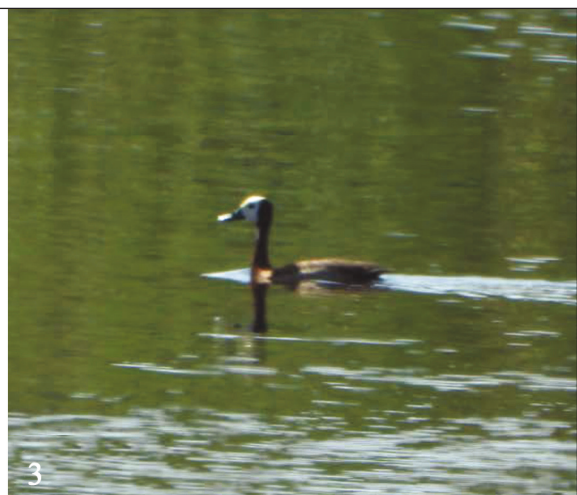
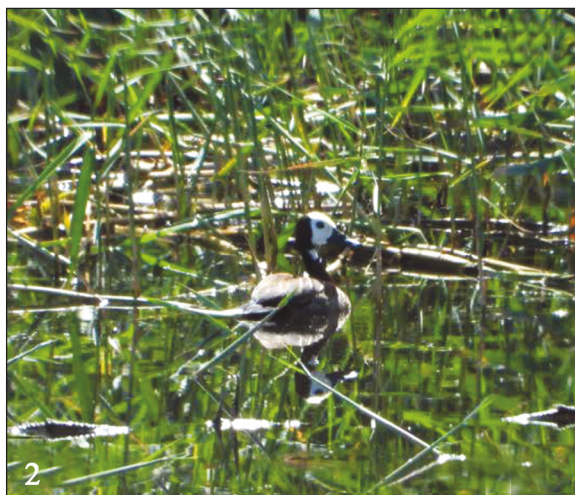
This species was listed by Robertson & Woolfenden (1992) as “*unestablished exotics*” in Florida. Successively, there have been multiple reports of *D. viduata* in Florida since the first in 1991 (Sullivan et al. 2009, Greenlaw et al. 2014, EDMapS 2018; O’Connell & McBride, 2019). The sighted birds were most likely released or escaped from captivity. Greenlaw et al. (2014) list the species in Florida as “*verifiable, potential natural vagrants*”. Other reports are reported for several other countries such as Spain and Seychelles (BirdLife International, 2016) and, more recently, Iraq (Salim et al., 2020) and Socotra in Yemen (Suleiman, 2020).

Based on biological and geonomic characteristics of *D. viduata*, our research will continue to better understand the presence of this species in Libya.

Dendrocygna viduata has most recently been assessed for the IUCN Red List of Threatened Species as Least Concern (BirdLife International, 2016).



Figure 1. The sewage treatment lagoon of Al-Saket site in Misrata about 200 km east to Tripoli (Libya).



Figures 2, 3. *Dendrocygna viduata* near reed plants (Fig. 2) and in the lagoon (Fig. 3).

REFERENCES

- Algadry A., Dorman E., Bourass E. & Etayeb K., 2022. The role of constructed wetlands in the conservation of biodiversity: a case study on birds diversity in Al-Hadba treatment plant, Tripoli, Libya. *Biodiversity Journal*, 13: 627–639.
<https://doi.org/10.31396/Biodiv.Jour.2022.13.3.627.639>
- Arlott N., van Perlo B., Mata J.R.R., Carrizo G., Chiappe A.A. & Huber L., 2021. *The Complete Birds of the World: Every Species Illustrated*. Princeton University Press, Princeton, New Jersey, 640 pp.
- Azafzaf H., Baccetti N., Defos du Rau P., Dlensi H., Essghaier M.F., Etayeb K., Hamza A. & Smart M., 2005. Report on an Ornithological Survey in Libya from 3 to 17 January 2005. Unpublished report to Regional Activities Centre/Special Protected Areas (MAP/UNEP), Tunis, Environment General Authority, Libya, and African-Eurasian Waterbird Agreement (UNEP/AEWA).
- Azafzaf H., Baccetti N., Defos du Rau P., Dlensi H., Essghaier M.F., Etayeb K., Hamza A. & Smart M., 2006. Report on an Ornithological Survey in Libya from 19 to 31 January 2006. Cyclostyled report to the Regional Activity Centre/Special protected Areas (MAP/UNEP), Environment General Agency, Libya and to the African-Eurasian Waterbird Agreement (UNEP/AEWA).
- Benyezza E., Shanan T., Berbash A. & Etayeb K., 2017. The diversity of aquatic birds and breeding of some species in Al-Mallaha, Tripoli. *Vogelwelt*, 137: 1–6.
- BirdLife International, 2016. “*Dendrocygna viduata*”. IUCN Red List of Threatened Species. 2016: e.T22679763A92829021.doi:10.2305/IUCN.UK.2016-3.RLTS.T22679763A92829021.en. Retrieved 12 November 2021.
- Bourass E., Baccetti N., Bashimam W., Berbash A., Bouzainen M., De Faveri A., Galidan A., Saied A.M., Yahia J. & Zenatello M., 2013. Results of the seventh winter waterbird census in Libya, January-February 2011. *Bulletin of the African Bird Club*, 20: 20–26.
- Bundy G., 1976. *The Birds of Libya*. British Ornithological Union check list. No. 1, B.O.U.
- Del Hoyo J., Elliott A. & Sargatal J., 1992. *Handbook of the Birds of the World*. Vol. 1. Ostrich to Ducks. Lynx Edicions, Barcelona, Spain.
- Dickinson E.C., Bahr N., Dowsett R., Pearson D., ReMsen R., Roselaar C.S. & Sghodde D., 2004. *The Howard and Moore Complete Checklist of Birds of the World*. Princeton University Press, Princeton, New Jersey, 1056 pp.
- EDDMapS, 2018. Early Detection & Distribution Mapping System. The University of Georgia - Center for Invasive Species and Ecosystem Health.
- EGA-RAC/SPA waterbird census team 2012. *Atlas of wintering waterbirds of Libya, 2005–2010*. Imprimerie COTIM, Tunisia.
- Etayeb K., Alswyeb A., Aljamel A., Albaour A., Abdulqader H., Glidan A., Deryaq S., Berbash A. & Saied A., 2020. Wintering waterbirds in wetlands in Misrata region, Libya. The fourth annual conference on the theories and applications of basic and biological sciences Sep. 2020. *Journal of Science*, the University of Misrata. Special volume: 148–157.
- Etayeb K.S., Berbash A., Bashimam W., Bouzainen M., Galidana A., Saied M., Yahia J. & Bourass E., 2015a. Results of the eighth winter waterbird census in Libya in January 2012. *Biodiversity Journal*, 6: 245–252.
- Etayeb K.S., Bourass E., Berbash A., Bashimam W. & Essghaier M.F.A., 2015b. Human disturbance affecting sensitive components (waterbirds) of wetlands; a case study on waterbirds in Libyan Ramsar sites. *Libyan Journal of Marine Sciences*, 14: 16–28.
- Etayeb K.S., Essghaier M.F., Hamza A., Smart M., Azafzaf H., Defos du Rau P. & Dlensi H., 2007. Report on an Ornithological Survey in Libya from 3 to 15 February 2007. EGA-AEWA-RAC/SPA-MAP-UNEP, 46 pp.
- Greenlaw J.S., Pranty B. & Bowman R., 2014. *The Robertson and Woolfenden Florida Bird Species: An Annotated List*. Special Publication Number 8, Florida Ornithological Society, Gainesville.
- Johnsgard P.A., 1965. *Handbook of Waterfowl Behavior: Tribe Dendrocygnini (Whistling Ducks)*, Biological Sciences, University of Nebraska - Lincoln.
<https://digitalcommons.unl.edu/bioscihandwaterfowl/10>.
- Isenmann P., Hering J., Brehme S., Essghaier M., Etayeb K., Bourass E. & Azafzaf H., 2016. *Oiseaux de Libye - Birds of Libya*. SEOF, 302 pp.
- O’Connell J.R. & McBride K.M., 2019. White-faced Whistling-Ducks (*Dendrocygna viduata*) captured, color-marked, and released in Broward County, Florida. *Florida Field Naturalist*, 47: 15–20.
- Robertson W.B. & Woolfenden G.E., 1992. *Florida Bird Species: An Annotated List*. Special Publication Number 6, Florida Ornithological Society, Gainesville.
- Salim M.A., Yassir W.S., Abed S.A., Porter R., Jabbar M.T., Abed L.A., Hadi H.A. & Harbi Z.S., 2020. Observations of White-faced Whistling Duck *Dendrocygna viduata* in Iraq. *Sandgrouse*, 42: 115–117.
- Suleiman A.S., 2020. White-faced Whistling Ducks *Dendrocygna viduata* and breeding Red-knobbed Coots *Fulica cristata* on Socotra - the first records for Yemen. *Sandgrouse*, 42: 282–285.

- Sullivan B.L., Wood C.L., Iliff M.J., Bonney R.E., Fink D. & Kelling S., 2009. eBird: A citizen-based bird observation network in the biological sciences. *Biological Conservation*, 142: 2282–2292.