## Dendrocygna bicolor (Fulvous Whistling Duck)

Family: Anatidae (Ducks and Geese) Order: Anseriformes (Waterfowl)

Class: Aves (Birds)



**Fig. 1.** Fulvous whistling duck, *Dendrocygna bicolor*.

 $[http://monacoeye.com/birds/pages/dendrocygna\_bicolor\_fulvous\_whistling\_duck\_003.html, downloaded 5~March~2017]$ 

**TRAITS.** The fulvous whistling duck *Dendrocygna bicolor* is between 45-53cm in length, with males weighing 748-1050g and females 712-1000g. Long-legged, golden-brown in colour with a darker back and blackish line down the back of its neck. They have white stripes on their sides, grey legs and long bluish-grey bills (Fig. 1). In flight, the wings are black below and brown above, with no white markings, and a white crescent on the rump with a black tail. Infants are duller in appearance (Fig. 2) (Wikipedia, 2016). *D. bicolor* gets its common name from the loud, high pitched whistling sound it makes.

**DISTRIBUTION.** Widespread across four continents (Fig. 3): lowland South America from northern Argentina, to Columbia to the southern United States and West Indies. Found in a broad belt across sub-Saharan Africa to South Africa, Madagascar and the Indian subcontinent (Wikipedia, 2016). Uncommon visitor to wetlands of Trinidad, not seen in Tobago in over 30 years (Kenefick et al., 2014).

**HABITAT AND ACTIVITY.** Both diurnal and nocturnal in activity, mainly foraging during the first two hours after dawn and last two hours before sunset (BirdLife International 2016).

Found in habitats containing brackish wetlands with tall grass or shallow freshwater (Johnsgard, 1965; Brown et al., 1982), including freshwater lakes, seasonal freshwater pools, swamps in open flat terrain, marshy areas, flooded grasslands and slow-flowing streams (Fig. 4). This species also frequents areas of wet rice cultivation and seeks densely vegetated wetlands during seasons of moulting, where it is flightless and prone to predation.

**FOOD AND FEEDING.** Almost entirely vegetarian. Feeds in wetlands in day or night. Diet mainly consists of aquatic seeds and fruits, grasses, buds, leaf shoots, bulbs and stems. Females occasionally feed on small aquatic insects, worms and molluscs in preparation for egg-laying. Ducklings also consume insects. The fulvous whistling duck shows preference toward cultivated rice grains, aquatic ragweeds, water lilies, waxy-leaf nightshade and polygonums. Foraging occurs by picking plant items by swimming, walking, upending or occasionally diving in shallow waters, up to depths of 1m (BirdLife International, 2016; Wikipedia, 2016).

**POPULATION ECOLOGY.** Usually found in small groups, forming large flocks when aggregated at favoured sites. Feeds in fairly large groups with other species of whistling ducks, such as *Dendrocygna eytoni*, *Dendrocygna viduata* and *Dendrocygna javanica*, sleeping in smaller groups during the middle of the day (Wikipedia, 2016; Wildlife Information Network, 2017).

**REPRODUCTION.** Reproduction usually depends upon the availability of water, with the breeding season varying in different parts of the world. In the neotropics, breeding often occurs at the end of the rainy season; in India, from June to October; in South America and South Africa, from December to February; in North America, mid-May to August; in Nigeria, from July to December (Wikipedia, 2016). Once copulation is complete, the female lays about 6-16 cream white eggs. The eggs are incubated for 24-28 days by both the male and female, with the male doing the greater share of duty. These ducks normally display life-long monogamy (Wikipedia, 2016; Wildlife International, 2017).

**BEHAVIOUR.** Fulvous ducks are aggressive and fairly noisy, whistling the signature 'wa-kew' sound typically while in flight. *D. bicolor*, like the lesser and wandering whistling ducks, shakes its head laterally as a pre-flight indicator. Their heads are tilted back or low and forward when in a threatening posture (Fig. 5) (Johnsgard, 1965). Their courting display consists of mutual head-dipping movements (while facing each other) before mating on the water. The male then mounts the female, going off to one side after a short time. This is followed by a dance after copulation where the ducks raise their bodies side by side treading water, while lifting their wings on the side opposite their partner (Johnsgard, 2010). The birds then slowly reassume their normal posture and swim to shore to bathe and preen (Johnsgard, 1965).

**APPLIED ECOLOGY.** The International Union for Conservation of Nature (IUCN) lists this species as Least Concern, as the population of fulvous duck is estimated to between 1.3-1.5 million individuals (BirdLife International, 2016; Wikipedia, 2016). Although the population is on the decline, this species has a very large range and does not decrease rapidly enough to reach the threshold for 'Vulnerable' status. *Dendrocygna bicolor* faces threats through hunting and trapping. This species is susceptible to lead poisoning when exposed to pesticides used on rice crops (Brown et al., 1982). Wetland degradation due to freshwater invasive plant species (e.g.

Eichornia crassipes), eutrophication and an increase in aquaculture activities threatens only a small portion of the species population. Susceptibility to avian botulism is also a threat to this species. *D. bicolor* is hunted for consumption and traded at traditional medicine markets in countries such as Malawi and Nigeria (BirdLife International, 2016). This species is abundant throughout its range, expanding in areas such as the Greater Antilles and Cuba, while retracting in places like Trinidad (Johnsgard, 2010).

## REFERENCES

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**Fig. 2.** *D. bicolor* duckling at one week old.

[https://www.pinterest.com/JDCHRISTIN/whistling-ducks/, downloaded 5 March 2017]

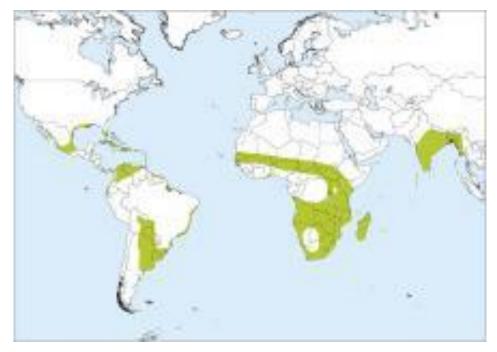


Fig. 3. Fulvous whistling duck geographic distribution.

[http://www.hbw.com/species/fulvous-whistling-duck-dendrocygna-bicolor, downloaded 5 March 2017]



Fig. 4. Two fulvous whistling ducks in their habitat.

 $[\underline{http://www.birds-of-north-america.net/Fulvous\_Whistling-Duck.html}, downloaded\ 5\ March\ 2017]$ 



**Fig. 5.** *D. bicolor* in defensive head-low-and-forward position. [http://www.alamy.com/stock-photo/widespread-duck.html, downloaded 5 March 2017]

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