

= Fulvous whistling duck =

The fulvous whistling duck or fulvous tree duck (*Dendrocygna bicolor*) is a whistling duck that breeds across the world 's tropical regions in much of Mexico and South America , the West Indies , the southern US , sub @-@ Saharan Africa and the Indian subcontinent . It has mainly reddish brown plumage , long legs and a long grey bill , and shows a distinctive white band across its black tail in flight . Like other members of its ancient lineage , it has a whistling call which is given in flight or on the ground . The preferred habitat is shallow lakes , paddy fields or other wetlands with plentiful vegetation .

The nest , built from plant material and unlined , is placed among dense vegetation or in a tree hole . The typical clutch is around ten whitish eggs . The breeding adults , which pair for life , take turns to incubate , and the eggs hatch in 24 ? 29 days . The downy grey ducklings leave the nest within a day or so of hatching , but the parents continue to protect them until they fledge around nine weeks later .

The fulvous whistling duck feeds in wetlands by day or night on seeds and other parts of plants . It is sometimes regarded as a pest of rice cultivation , and is also shot for food in parts of its range . Despite hunting , poisoning by pesticides and natural predation by mammals , birds and reptiles , the large numbers and huge range of this duck mean that it is classified as Least Concern by the International Union for Conservation of Nature (IUCN) .

= = Taxonomy = =

The whistling ducks , *Dendrocygna* , are a distinctive group of eight bird species within the duck , goose and swan family Anatidae , which are characterised by a hump @-@ backed , long @-@ necked appearance and the whistled flight calls that give them their English name . They were an early split from the main duck lineage , and were predominant in the Late Miocene before the subsequent extensive radiation of more modern forms in the Pliocene and later . The fulvous whistling duck forms a superspecies with the wandering whistling duck . It has no recognised subspecies , although the birds in northern Mexico and the southern US have in the past been assigned to *D. b. helva* , described as having paler and brighter underparts and a lighter crown than *D. b. bicolor* .

The duck was first described by Johann Friedrich Gmelin in 1789 and given the name *Anas fulva* but the name was " preoccupied , " or already used , by Friedrich Christian Meuschen in 1787 for another species . This led to the next available name proposed by French ornithologist Louis Jean Pierre Vieillot in 1816 from a Paraguayan specimen as *Anas bicolor* The whistling ducks were moved to their current genus , *Dendrocygna* , by British ornithologist William John Swainson in recognition of their differences from other ducks . The genus name is derived from the Ancient Greek *dendron* , " tree " , and Latin *cygnus* , " swan " , and *bicolor* is Latin for " two @-@ coloured " . " Fulvous " means reddish @-@ yellow , and is derived from the Latin equivalent *fulvus* . Old and regional names include large whistling teal , brown tree duck , Mexican duck , squealer and Spanish cavalier .

= = Description = =

The fulvous whistling duck is 45 ? 53 cm (18 ? 21 in) long ; the male weighs 748 ? 1 @, @ 050 g (26 @. @ 4 ? 37 @. @ 0 oz) , and the female averages marginally lighter at 712 ? 1 @, @ 000 g (25 @. @ 1 ? 35 @. @ 3 oz) . It is a long @-@ legged duck , mainly golden @-@ brown with a darker back and an obvious blackish line down the back of its neck . It has whitish stripes on its flanks , a long grey bill and grey legs . In flight , the wings are brown above and black below , with no white markings , and a white crescent on the rump contrasts with the black tail . All plumages are fairly similar , but the female is slightly smaller and duller @-@ plumaged than the male . The juvenile has paler underparts , and appears generally duller , especially on the flanks . There is a complete wing moult after breeding , and birds then seek the cover of dense wetland vegetation while they are

flightless . Body feathers may be moulted throughout the year , although each feather is replaced only once annually .

These are noisy birds with a clear whistling kee @-@ wee @-@ ooo call given on the ground or in flight . Quarrelling birds also have a harsh repeated kee . In flight , the beating wings produce a dull sound . The calls of males and females show differences in structure and an acoustic analysis on 59 captive birds demonstrated 100 % accuracy in sexing when compared with molecular methods .

Adult birds in Asia can be confused with the similar lesser whistling duck , although that species is smaller , has a blackish crown and lacks an obvious dark stripe down the back of the neck . Juvenile fulvous whistling ducks are very like young lesser whistling ducks , but the crown colour is still a distinction . Juvenile comb ducks are bulkier than whistling ducks and have a dark cap to the head . In South America and Africa , juvenile white @-@ faced whistling ducks are separable from fulvous by their dark crowns , barred flanks and chestnut breasts .

= = Distribution and habitat = =

The fulvous whistling duck has a very large range extending across four continents . It breeds in lowland South America from northern Argentina to Colombia and then up to the southern US and the West Indies . It is found in a broad belt across sub @-@ Saharan Africa and down the east of the continent to South Africa and Madagascar . The Indian subcontinent is the Asian stronghold .

It undertakes seasonal movements in response to the availability of water and food . African birds move southwards in the southern summer to breed and return north in the winter , and Asian populations are highly nomadic due to the variability of rainfall . This species has strong colonising tendencies , having expanded its range in Mexico , the US and the West Indies in recent decades . Wandering birds can turn up far beyond the normal range , sometimes staying to nest , as in Morocco , Peru and Hawaii .

The fulvous whistling duck is found in lowland marshes and swamps in open , flat country , and it avoids wooded areas . It is particularly attracted to wetlands with plenty of emergent vegetation , including rice fields . It is not normally a mountain species , breeding in Venezuela , for example , only up 300 m (980 ft) , but the single Peruvian breeding record was at 4 @,@ 080 m (13 @,@ 390 ft) .

= = Behaviour = =

This species is usually found in small groups , although substantial flocks can form at favoured sites . It walks well , without waddling , and although it normally feeds by upending , it can dive if necessary . It does not often perch in trees , unlike other whistling ducks . It flies at low altitude with slow wingbeats and trailing feet , in loose flocks rather than tight formation . It feeds during the day and at night in fairly large flocks , often with other whistling duck species , but rests or sleeps in smaller groups in the middle of the day . They are noisy and display their aggression towards other individuals by throwing back their heads . Before taking off in alarm , they often shake their head sideways .

A number of arthropod parasites have been recorded on this duck , including chewing mites of the families Philopteridae and Menoponidae , feather mites and skin mites . Internal helminth parasites include roundworms , tapeworms and flukes . In a survey in Florida , all 30 ducks tested carried at least two helminth species , although none had blood parasites . Only one duck had no mites or lice .

= = Breeding = =

Breeding coincides with the availability of water . In South America and South Africa , the main nesting period is December ? February , in Nigeria it is July ? December , and in North America mid @-@ May ? August . In India , the breeding season is from June to October but peaking in July and August . Fulvous whistling ducks show lifelong monogamy , although the courtship display is limited

to some mutual head @-@ dipping before mating and a short dance after copulation in which the birds raise their bodies side @-@ by @-@ side while treading water .

Pairs may breed alone or in loose groups . In South Africa , nests may be within 50 m (160 ft) of each other , and breeding densities of up to 13 @.@ 7 nests per square kilometre (35 @.@ 5 per square mile) have been found in Louisiana . The nest , 19 ? 26 cm (7 @.@ 5 ? 10 @.@ 2 in) across , is made from plant leaves and stems and has little or no soft lining . It is usually built in dense vegetation and close to water , but sometimes in tree holes . In India , the use of tree holes , and even the old nests of raptors or crows , is much more common than elsewhere . Eggs are laid at roughly 24- to 36 @-@ hour intervals , starting before the nest is complete , resulting in some losses from the clutch . They are whitish and on average measure 53 @.@ 4 mm × 40 @.@ 7 mm (2 @.@ 10 in × 1 @.@ 60 in) and weigh 50 @.@ 4 g (1 @.@ 78 oz) . The clutch is usually around ten eggs , but other females sometimes lay into the nest , so 20 or more may be found on occasion . Eggs may also be added to the nests of other species , like ruddy duck .

Both sexes incubate , changing over once a day , with the male often taking the greater share of this duty . The eggs hatch in about 24 ? 29 days , The downy ducklings are grey , with paler upperparts , and a white band on the neck , and weigh 22 ? 38 g (0 @.@ 78 ? 1 @.@ 34 oz) within a day of hatching . Like all ducklings , they are precocial and leave the nest after a day or so , but the parents protect them until they fledge around nine weeks later . Eggs and duckling may be preyed on by mammals , birds and reptiles , although one parent may try to distract a potential predator with a broken @-@ wing display while the other adult leads the ducklings away . Birds are sexually mature after one year , and the maximum known age is 6 @.@ 5 years .

In South Africa , a few records of hybridization with the white @-@ faced whistling duck have been noted in the wild , although in most parts of southern Africa , the two species breed at different times , bicolor during the dry season (April to September) and viduata during the rains (October to March) . Hybridization in captivity is more frequent but limited to other species in the genus *Dendrocygna* .

= = Feeding = =

The fulvous whistling duck feeds in wetlands by day or night , often in mixed flocks with relatives such as white @-@ faced or black @-@ bellied whistling ducks . Its food is generally plant material , including seeds , bulbs , grasses and stems , but females may include animal items such as aquatic worms , molluscs and insects as they prepare for egg @-@ laying , which may then comprise up to 4 % of their diet . Ducklings may also eat a few insects . Foraging is by picking plant items while walking or swimming , by upending , or occasionally by diving to a depth of up to 1 m (3 @.@ 3 ft) . Favoured plants include water snowflake , aquatic ragweeds , bourgou millet , shama grass , Cape blue water lily , waxy @-@ leaf nightshade , beakrush , flatsedge and polygonums . Rice is normally a small part of the diet , and a survey in Cuban rice fields found that the plants taken were mainly weeds growing with the crop . However , in a study in Louisiana , 25 % of the diet of incubating females consisted of the cereal .

= = Status = =

The International Union for Conservation of Nature (IUCN) estimates the population of the fulvous whistling duck to be from 1 @.@ 3 ? 1 @.@ 5 million individuals . This may be an underestimate since regional assessments suggest 1 million birds in the Americas , 1 @.@ 1 million in Africa and at least 20 @,@ 000 in South Asia . Although the population appear to be declining , the decrease is not rapid enough to trigger the vulnerability criteria . The large numbers and huge breeding range mean that this duck is classified by the IUCN as being of Least Concern . It is one of the species to which the Agreement on the Conservation of African @-@ Eurasian Migratory Waterbirds (AEWA) applies .

The fulvous whistling duck has expanded its range in the West Indies , and into the southern US . A series of invasions from South America and reaching the eastern US commenced around 1948 , fueled by rice cultivation , and breeding was recorded in Cuba in 1964 , and Florida in 1965 . Some

Florida birds still winter in Cuba . In Africa , it bred on the Cape Peninsula between 1940 and the 1960s . A survey of eighteen species which had colonised the area in recent decades found that most were wetland species that had used irrigated farmland as " stepping stones " across the arid country separating the peninsula from the breeding main range . However , the status of the two whistling duck species featured in the research is dubious since they are popular ornamental species , so their origin is unclear .

Outside North America it is subject to hunting for food or because of its liking for rice , and persecution means that it is now rare in Madagascar . Pesticides used on rice fields may also have an adverse impact , causing liver and breast muscle damage even at sub @-@ lethal levels .