

West Indian Whistling-Duck (*Dendrocygna arborea*) at the Great Dismal Swamp National Wildlife Refuge, Virginia

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ABSTRACT

This article documents the appearance of a West Indian Whistling-Duck (*Dendrocygna arborea*) of unknown provenance at the Great Dismal Swamp National Wildlife Refuge in the City of Suffolk, Virginia, on 29 April 2003, as well as summarizing the status of the species and reported occurrences on the United States mainland.

FIELD ENCOUNTERS

Suomala first located the West Indian Whistling-Duck while guiding Marjorie and Bill Israel of New Hampshire on a private tour of the Great Dismal Swamp. Notes on the encounter were taken as follows. "We had driven in on the Railroad Ditch with a day-pass from the headquarters. On our return trip from Lake Drummond, along the West Ditch, and near the intersection with the Railroad Ditch [at 36° 37.214' N, 76° 31.487' W] in the southwestern portion of the refuge in Virginia, we spotted a duck close to the road, swimming and dabbling in the shallow water. I drove closer to it at a very slow rate, and it watched us carefully but did not flush. I carefully picked up my camera and, by moving very slowly, was able

to shoot about a dozen pictures before it swam farther away and into the grasses and shrubs. It was about 1230 EST and a sunny day, so I had hopes that I would get good photographs. My first take on identification was Fulvous Whistling-Duck [*Dendrocygna bicolor*], but I knew that something wasn't quite right and was particularly puzzled by the black and white pattern on the flanks. I took out my National Geographic field guide but could find no match. Not being familiar with Caribbean ducks, I thought that perhaps this was another race of Fulvous Whistling-Duck that was not pictured. We headed on our way, it now being lunchtime. I stopped at the headquarters and checked other field guides, but no revelations were forthcoming. That evening I called my wife in New Hampshire to check other resources but still had no answers. The next day, we returned to the same area, hoping to relocate the bird. Along the Railroad Ditch, we encountered another birder on bicycle, and we stopped to chat. 'Did you see the duck?' he asked. 'What duck?' I asked. 'The West Indian Whistling-Duck!' he said emphatically. 'Oh yes, I photographed it yesterday,' I said happily, as I realized that the puzzle was solved. Shortly thereafter, I encountered Schwab and party, also searching for the duck, from whom I learned more about its rarity and its current common name. Unfortunately, it could not be relocated 30 April."

Schwab first encountered the West Indian Whistling-Duck while conducting field work to record voices of amphibians and to capture odonates for voucher specimens. Field notes from the first encounter with the duck follow. "1430 hrs. As I swung the net [to capture a *Tramea carolina*], I just about stepped into the ditch and in the process flushed a large bird that I first thought was a bittern (long legs and neck), when catching [sight of] it out of the corner of my eye. After placing the dragonfly in an envelope, I turned my attention back to the bittern, which turned out to be a whistling-duck. On general appearance, I thought that it was

a Fulvous Whistling-Duck, but something about it did not jive: the duck had speckles in the flanks with a dark band down the back of the neck, back and top of head were similar in color to the FUWD, maybe a bit darker. The bill was black [though in the first photos the bill appears light in color], legs dark gray, w/ dark eyes, cheeks, throat and sides of neck light gray. [After taking] some photographs (digital), [I] went to call Tom Gwynn. Cell phone was dead, so had to drive to point outside swamp to call. After talking with Tom, I went home, downloaded photos, and emailed everyone in my address book who might be interested. Immediate reply that this was a West Indian Whistling-Duck [*D. arborea*]. Went back to check on bird, which was roosting on a log in West Ditch just south of Railroad Ditch. The duck allowed relatively close approach 10–15 m. Took a few more digital images and using my scope looked for missing hind-toe (all toes present and accounted for), and there were no bands [on the legs]. Watched bird for a total of 1.5 hrs 1830 to 2000 using 8x binoculars and 32x scope."

Field-verifiable distinctions from the similar Spotted Whistling-Duck (*D. guttata*) of the East Indies and New Guinea include the larger size, pale lores, pale upperwing coverts, lack of ruddy tones in the soft parts, and lack of white in the uppertail coverts of the Dismal Swamp bird. The condition of plumage, as illustrated in Figures 1–4, shows possible slight wear in the coverts and flank feathers. It may not be possible to age this bird conclusively, inasmuch as breeding of the species occurs year-round, but the plumage of the Dismal Swamp bird is less richly colored and contrastingly marked in the head than is that of most breeding adults, which suggests a young bird (Madge and Burn 1988, Stattersfield and Capper 2000), but the flank pattern is well developed, more so than in a younger juvenile (Madge and Burn 1988). It may be safe to say only that this bird is probably under one year of age.

DISCUSSION

In researching the habits and habitats of West Indian Whistling-Duck, we find its appearance and behavior in the Dismal Swamp to be in keeping with habitat selection and behavior in core range (cf. Staus 1998a, 1998b). This species inhabits all manner of watercourses throughout its range, including lagoons, swamps, mangroves, rice fields, and palm savannas (Raffaele et al. 1998, Stattersfield and Capper 2000), in both freshwater, brackish, and salt environments. On Puerto Rico, even golf course developments and airport ponds attract small numbers (E. S. Brinkley, pers. comm.). The beaver pond at the intersection of Railroad and West Ditches is similar to the scirpaceous swamps in which this species is often found in its Caribbean range. The habitat where the duck was observed is a seasonally flooded open marsh. The dominant vegetative cover is herbaceous and includes Beggar Tick (*Torilis arvensis*), cattail (*Typha* sp.), Woolgrass (*Scirpus cyperinus*), panic-grasses (*Panicum* sp.), woody shrubs such as Buttonbush (*Cephalanthus occidentalis*) and willow (*Salix* sp.), and scattered sapling Bald Cypress (*Taxodium distichum*). The marsh is separated from West Ditch Road on the east side by ditch 7 m

across. The ditch varies in depth, but averages 1.3 m and in most years maintains open water. The marsh adjoins Railroad Ditch Road on the north side, with a mature forest of Red Maple (*Acer rubrum*)—Black Gum (*Nyssa sylvatica*) on the south and west boundaries of the marsh. Both Beaver (*Castor canadensis*) and Nutria (*Myocastor coypus*), along with prescribed burns, maintain this area as open wetlands.

West Indian Whistling-Ducks feed mostly at night and are most often observed at dusk when flying to foraging areas (Raffaele et al. 1998). Except where exceptionally approachable—as on Jamaica at the Upper Morass of the Black River near Elim, or as on Grand Cayman Island, where they attend feeding stations daily (on the famous Willie Ebanks hog farm), or on various military installations or retirement communities where hunting does not occur—these ducks usually pass the daylight hours concealed in the vegetation at variable distances from foraging areas. In areas where not regularly hunted, they can often be closely approached while on the day roost (A. Haynes Sutton, pers. comm.).

The breeding season appears to be quite variable across the range, as for many tropical species, and we can find no evidence of

pronounced post-breeding dispersal such as is often seen in Fulvous Whistling-Duck in the United States. Almost nothing is known about the species' dispersal or inter-island movements in the Caribbean. Stockton de Dod (1978) noted that in the Dominican Republic, the species occasionally "disappears," "usually only for short periods in January, February, or March." As for other species in the genus *Dendrocygna*, periodic dispersals away from typical range would be expected and are presumed to be driven in part by habitat shortages, as during droughts. The spring of 2003 saw a strong flight of Black-bellied Whistling-Ducks (*D. autumnalis*) north of typical range and a lesser flight of Fulvous Whistling-Ducks (Brinkley 2003).

Distribution, conservation, and extralimital records

The West Indian Whistling-Duck is distributed through most of the Caribbean islands from the Bahamas, Greater Antilles, and adjacent islands, as well as in many of the smaller archipelagos east to the Lesser Antilles (Leeward Islands only), specifically the Bahamas, Turks and Caicos Islands, Cuba, Cayman Islands, Jamaica, Haiti, Dominican Republic, Puerto Rico, Antigua,





Figures 1-4. West Indian Whistling-Duck at the Great Dismal Swamp National Wildlife Refuge, Suffolk, Virginia 29 April 2003. These images show clearly the distinctions from Fulvous Whistling-Duck, which would show much more rufous coloration overall and no spotting in the flanks, as well as from the more similar but smaller Spotted Whistling-Duck, which would show darker lores and ruddy tones in the bill. Photographs by Donald Schwab (Figure 1, upper left, and Frontispiece) and Mark Suomala (Figures 2, 3, 4).

and Barbuda, where the world population is conservatively estimated at between 10,000 and 12,000 birds (Stattersfield and Capper 2003). There are few recent confirmed reports from the British Virgin Islands, United States Virgin Islands, St. Croix, St. Kitts and Nevis, Dominica, Barbados, Martinique, or Guadeloupe, and the species may be considered casual or extirpated on these islands (Sorenson and Bradley 1999; L. G. Sorenson, pers. comm.). The nearest nesters to the United States are on Great Abaco Island, Bahamas (K. Rademaker, pers. comm.), which is less than 100 km from Florida. Some sources suggest that the Cuba population alone may be as high as 20,000 birds (Bradley 2000) and that Cubans refrain from hunting this whistling-duck because its call is interpreted as “¡Cuba libre!” (Raffaele et al. 1998). Because the species is known to be declining over some or most of the inhabited range, the West Indian Whistling-Duck Working Group was convened in 1997 to gather data on this species (Sorenson 1997, Staus 1997, Sorenson and Bradley 1999; <<http://www.whistlingduck.org>>, which is now listed as “Vulnerable” by Birdlife International (Stattersfield and Capper 2000). Data currently available do not permit a precise evaluation of its status, but researchers believe that populations on the Cayman Islands, Jamaica, and Cuba are stable and possibly increasing (Sorenson et al., in press). In other locations, the species is presumed to be declining owing to pressure from illegal hunting, egg-collection, capture for use as household pets, disturbance by introduced predators (mongooses, rats, cats, dogs, etc.), and loss of habitat for many reasons: intensive industrial development, expansion of agriculture, cutting of mangrove for charcoal, construction of landfills on former wetlands, and excessive drainage and the diversion of watercourses (Kear and Williams 1978, Stockton de Dod 1978, Scott and Carbonell 1986, Stattersfield and Capper 2000). The use of pesticides in agriculture is another factor that has caused massive mortality in this species, and application of fertilizers, insecticides, and herbicides has clearly contributed to the degradation of wetlands in the Caribbean (Garrido 1985, Scott and Carbonell 1986). Species in decline sometimes show extralimital wandering or “escape flights,” as birds search farther afield for appropriate habitat (e.g., Renfrow 2003), but in many cases, wanderers are just as likely to be from expanding populations (Veit 2000).

Previous appearances in the continental United States and on Bermuda

As is the case for many species of waterfowl, there is considerable uncertainty surrounding the number of West Indian Whistling-

Ducks recorded in the United States and their provenance. An unknown number of records of West Indian Whistling-Duck exists for Florida (Stevenson and Anderson 1994), and none of the records and reports of the species have been evaluated by the Florida Ornithological Society Records Committee (per B. Pranty). Free-flying single birds have been reported at Virginia Key 2 August 1969 (Ogden 1969) and at Duda Farms in the Belle Glade farming district southeast of Lake Okeechobee 27 July 1980 (Edscorn 1980). The latter record was in an area that held up to 830 Fulvous and two (then rare) Black-bellied Whistling-Ducks (P. W. Sykes, Jr., pers. comm.). Stevenson and Anderson (1994) note that the source of some of these birds could have been the Crandon Park Zoo on Key Biscayne in the 1960s and 1970s, which failed to pinion West Indian Whistling-Ducks "held captive" there. Their reference to a "Gold Coast" record of the species is apparently a misreading of Edscorn (1980). Owre (1973) suggests that a small feral population may have developed in Florida. Such a population would have been difficult to detect, given the retiring habits of this species and the extensive mangrove habitat available at that time in southern Florida.

Texas also has several records or reports for the species. Data on file in the Royal Ontario Museum, Ottawa, Canada credits J. H. Fleming for the remark on a specimen of West Indian Whistling-Duck: "original label lost, came with other *Dendrocygna* from Brownsville, Texas, that were taken from 1891–1894; this is an Armstrong skin and is no doubt a Texas record" (ROM electronic database, per N. Collar). An adult West Indian Whistling-Duck discovered in Austin, Travis County in April 1992 remained in the area until 1995; it was determined to have come from a local collection. This record was reviewed by the Texas Bird Records Committee and rejected on grounds of provenance (M. Lockwood, pers. comm.). In southern Corpus Christi, a West Indian Whistling-Duck of unknown provenance showed up in 1995, and another of unknown provenance was documented there on 4 February 2001. These records have not been reviewed by the Texas Bird Records Committee (G. Lasley, pers. comm.).

There is a specimen record of one West Indian Whistling-Duck from Bermuda in November 1907 (Bond 1956), which is strongly suggestive of natural vagrancy as far north as the latitude of the Carolinas. Moreover, November is the peak month for autumn irruptions of Fulvous Whistling-Duck in the eastern United States. Although there is no official list of Bermuda's avifauna, all published references maintain this bird as a wild vagrant to Bermuda, including the

American Ornithologists' Union in its *Check-list* (1998).

In an investigation of all zoos and collections known to keep West Indian Whistling-Ducks in 2003—involving 10 institutions and 42 whistling-ducks, most of which are held in Texas and Florida—we were able to ascertain that no registered collection reports having lost an individual. As Edscorn (1980) writes, "This is a 'nearby foreign' species able to fly over to Florida in two hours but one which, alas, is already here in collections from which escapes seem inevitable." The American Ornithologists' Union's *Check-List* (1998) allows that "sight reports from Florida may be of natural vagrants." Although the provenance of the Virginia individual cannot be determined at this time, we feel that this record, the first to be documented with physical evidence away from Bermuda and the Caribbean, should be considered at least as a potential wild vagrant in light of (1) the northward irruption of congeners in spring 2003, (2) the appearance, habitat selection, and behavior of the bird, and (3) the lack of evidence of escapes in North America in recent years. It is our hope that observers of this species will archive documentation on this species with respective records committees so that a clearer picture of this species' extralimital distribution might emerge in the future.

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