Photograph of Black-bellied and White-faced Whistling-Ducks from North Carolina, With Comments on Other Extralimital Waterfowl

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The staff of the Pine Island Hunt Club, a sanctuary of the National Audubon Society, provided me with a photograph of a Black-bellied Whistling-Duck (*Dendrocygna autumnalis*) and White-faced Whistling-Duck (*D. viduata*) taken in April 1998 on their property near Duck, Currituck County, North Carolina. The birds were free-flying, apparently traveling together, and remained in the vicinity of the club's waterfowl feeding area for several days. This photograph constitutes the second North Carolina State Museum record for a Black-bellied Whistling-Duck and the first of a White-faced Whistling-Duck from the state (NCSM photo collection No. 556). The origin of these ducks is unknown, but the long-range dispersal of waterfowl in the genus *Dendrocygna*, in particular, is well documented. Although the records reported herein have not been reviewed by the North Carolina Bird Records Committee, the origin of these birds, rather than their identification, is the issue.

The Black-bellied Whistling-Duck ranges through much of northern and eastern South America and most of Middle America north to southern Arizona, central and southeastern Texas, and southwestern Louisiana. This duck occurs casually in the Greater Antilles, the Lesser Antilles, and the Bahamas (A.O.U. 1998). There is a recent unpublished photograph from the Bahamas (27 September 1998, Hog Cay, Long Island; A. White, pers. comm.). The species has become well established in Cuba (Raffaele *et al.* 1998) and central and southern Florida (Roberson and Woolfenden 1992; Field Notes 52:49-50).

The only other North Carolina State Museum record for this species in North Carolina is of a bird collected by Eugene Pond on 15 February 1968. The specimen was shot in Core Sound, near Stacy, Carteret County (NCSM 2910; Lee 1981). At the time this was one of the few records of this duck from east of the Mississippi, and I then concluded that the individual in question was probably an escaped captive, although the specimen showed no sign of having been in captivity.

Numerous recent records from eastern North America indicate the species is showing up regularly as a naturally occurring vagrant, and it is likely that both this earlier record and the one reported here are of wild birds. The species' increase in occurrence in the East is probably a result of the expanding population in Cuba and Florida. This duck is partly migratory at the northern limits of its range, and the migratory behavior would appear to be responsible for its regular extralimital occurrence. The A.O.U. (1998) recognized reports from the southeastern and central Atlantic states to be those of natural occurrence, and other states in the Southeast are regarding birds encountered as being of wild origin.

The issue in eastern North Carolina is currently clouded because of local waterfowl breeders who raise, among other species, Black-bellied Whistling-Ducks. At least one person has a collection from which the ducks were not pinioned or banded and individuals had escaped. This escape apparently occurred after the April 1998 photograph cited above, but before the finding of a Black-bellied Whistling-Duck in the winter of 1998-99 at Wanchese, Dare County, NC. Because of this escape of waterfowl, both reports should be regarded with suspicion in regard to natural occurrence. This combination of facts available, however, is precisely what needs to be documented regarding the expanding population of free-ranging ducks and escaped captives of this species in the region. Considering the potential long-range movements of escaped captives, geographic proximity of sightings of free-ranging birds and points of escape are not necessarily related.

In this hemisphere the White-faced Whistling-Duck occurs primarily in South America and southern Central America (A.O.U. 1998). It was also recorded as occurring casually in the past from the Greater Antilles and the Lesser Antilles (Hispaniola, Cuba, and Barbados; Raffaele *et al.* 1998). I am aware of only one other report form North America: In 1912 the species was reported from Hackensack, New Jersey (Grinnell 1913). Whether the absence of other reports from North America represents a lack of occurrence, or a lack of reporting because of an assumption that these ducks are escaped captives, is unclear. As in the case of most extralimital records of waterfowl, escaped captives should not be ruled out as the source of this record, but the documented casual northward dispersal of White-faced Whistling-Ducks into the Greater Antilles suggests that the North Carolina bird could be of an individual of wild origin. This species is not recognized as occurring in North America by the A.O.U. (1998), and there is little point in advocating or refuting either North American record as being of a wild bird.

Other problematic species of waterfowl recorded from North Carolina include:

Barnacle Goose (*Branta leucopsis*): There are five historic records from North Carolina (Pearson *et al.* 1959). Two are from Currituck Sound (31 October 1870, 22 November 1992); two are from Pea Island, Dare County (24 November 1925, 6 November 1949); and one is from "Gaddy's Pond," near Ansonville, Anson County (28 December 1950 [original notes of Brimley say 6-13 November 1949, 20 and 28 November 1949, and 3 December 1949, Rhett Chamberlain]). Additionally an individual was present at Pea Island from 7-13 November 1970 (Am. Birds 25:563). Although it is quite likely that some of these reports represent escapes from captivity, there is little doubt that most North American reports represent wild birds that presumably originated in Greenland. Szantyr (1985) has shown that the seasonal timing and peak of occurrence of North American records are consistent with those of migrant and wintering individuals. The A.O.U. (1998) considered many records from the eastern United States to be of natural vagrants.

Baikal Teal (*Anas formosa*): Sykes (1962) provided an account and description (including the photograph of the specimen) of one of these teal killed at the Swan Island Club, in Currituck County, 9 December 1912. He presented reasons why he did not believe the bird to be an escaped individual. The A.O.U. (1998) noted that birds that had been reported from Colorado, Oklahoma, Ohio,

Pennsylvania, New Jersey, North Carolina, and Europe may be escaped individuals.

Green-winged (European) Teal (*Anas crecca crecca*): A specimen of an adult male shot on Currituck Sound on 7 December 1926 is in the Philadelphia Academy of Natural Sciences (Huber 1927). (The nominate taxon is the European race of our Green-winged Teal.) *Anas c. crecca* occurs regularly, although not commonly, on the Outer Banks of North Carolina (see Fussell 1994), and there are many records from elsewhere in the region (New England, Pennsylvania, New York, Virginia, and South Carolina). These individuals are considered to be naturally-occurring migrants (A.O.U. 1931, 1958).

Falcated Duck (*Anas falcata*): Platania (1978) reported a specimen taken from the Davis impoundment in the winter of December 1974-75 (NCSM 4503). The poor health of the bird makes a wild origin seem questionable, and there are few reports of individuals from North America. The A.O.U. (1998) considered birds reported from Virginia, North Carolina, and Europe almost certainly to be escaped captives.

Garganey (*Anas querquedula*): Gustafson (1957) reports a record of this teal from Hatteras, Dare County. At the time of the report it was the first for this hemisphere. It was present from 21 to 31 March 1957 (Chamberlain 1957). The A.O.U. (1998) considered the North Carolina record to be of a naturally occurring bird. This is based largely on a substantial number of regional records (primarily March-April) that have surfaced since the first, and as of early 1999 the only, North Carolina report.

Barrow's Goldeneye (*Bucephala islandica*): Simpson (1971) reviewed the five available records of this species from the state and concluded that three were invalid, one extant specimen lacked supporting details, and the remaining one, while probably valid, was not confirmed with a specimen. In view of this, the interpretation of records of Barrow's Goldeneye from North Carolina regarding the nature of their origin is irrelevant. The A.O.U. (1998), however, considered the western North Carolina report (of Cairns; see Simpson 1971), as well as one from South Carolina to be valid and of wild birds. The A.O.U. Checklist Committee was unaware of Simpson's (1971) review, and the inclusion of the North Carolina record as a wild bird is an oversight (J. V. Remsen, pers. comm.)

Ruddy Shelduck (*Tadorna ferruginea*): One of a flock of five was shot near Waterlily, Currituck County, in 1886, and another flock was seen some years later at the same location (Grinnell 1919). The A.O.U. (1983) considered this report to be erroneous. Eugene Pond (4 December 1967) stated in a letter that Major Couch of Cherry Point has a mounted specimen of one he killed in Hyde County, North Carolina. I have seen photographs of mounts of birds shot in coastal North Carolina in the 1980s, but no specific information as to their source was available. The A.O.U. (1998) placed this duck in an appendix of species with insufficient evidence for inclusion on the North American list, and North American records are considered probable escapes from captivity. It appears that a feral population is becoming established in Montana (Field Notes 52:80)

Common Shelduck (*Tadorna tadorna*): Two males were present from 2 to 5 July 1972 on the North Pond at Pea Island National Wildlife Refuge, Dare County (Am. Birds 26:845). All reports are included in an appendix of species

with insufficient evidence for occurrence in North America by the A.O.U. (1998), which state, "These reports likely pertain to escaped individuals."

Mandarin Duck (*Aix galericulata*): Holmes (1974) reported a drake Mandarin Duck shot on a small pond off the Trent River in Craven County, North Carolina. Holmes believed the bird to be a wild individual. Also one was killed by a duck hunter in Jones County on 7 January 1989 (Chat 54:22). These are the only reports from the state, and it seems highly unlikely that either was a wild bird. North American records are listed in the A.O.U. appendix (1998) as escapes from captivity.

Masked Duck (*Nomonyx dominica*): Carter and Carter (1982) provided a photograph of a Masked Duck from North Carolina. The bird was seen between 20 and 27 February 1982 on Lake Ellis, Craven County. To date it is the only report from the state. Based on other reports from the Southeast, this individual is assumed to be a wild individual. The A.O.U. (1998) considered the few reports from eastern North America to represent wild individuals.

Discussion

Evaluation of specific extralimital waterfowl reports is problematic, and the best approach remains a conservative one that assumes that for all such records escaped captives cannot be eliminated as the source. For several species, however, cumulative evidence compiled over time and from throughout the East and Southeast makes it advisable to have an open mind concerning these decisions. Good cases in point are the Black-bellied Whistling-Duck and the Barnacle Goose, for which records from central and eastern North America are now regarded, due to a pronounced seasonal and geographic pattern of occurrence, as those of wild stocks. Conversely, waterfowl with extralimital occurrences in North Carolina, but which breed elsewhere in North America, have all been considered as valid occurrences of wild birds (*i.e.*, Fulvous Whistling-Duck, *Dendrocygna bicolor*; Ross's Goose, *Chen rossii*; White-fronted Goose, *Chen albifrons*; Cinnamon Teal, *Anas cyanoptera*; Harlequin Duck, *Histrionicus histrionicus*; and Masked Duck. For species that occur in North Carolina but are represented by extralimital races (the Greenland race of White-fronted Goose, *C. a. flavirostris*; Black Brant, *Branta bernicla nigricans*; Hutchinson's Goose, *Branta canadensis hutchinsii*; and Common Teal), the races have been accepted by the ornithological community as natural occurrences, but for the most part these records have been ignored by the birding community. Since our indigenous waterfowl have exhibited major modifications in both breeding and wintering distributions during the last 50 to 100 years as a result of elimination and reintroduction of beavers, and due to the creation of coastal impoundments, farm ponds, and vast Piedmont reservoir systems in the region, it seem likely that many extralimital species likewise respond with changing distributions.

In truth, although many records of vagrant North American waterfowl are regarded to be of free-ranging individuals of wild stocks, any individual could always be of captive origin and thereby suspect. Additionally, there are problems concerning the consideration of evaluation in the strength of specimen and photographic records vs. sight reports. Current opinion on individual records and reports may or may not be correct, and it is difficult to establish consistent criteria for the status of occurrence for individual reports. In nearly every case, bands,

aberrant feather wear, and other indications of captivity have been lacking from reports. In fact, most authors directly state that such signs were not present.

The timing of occurrence compiled from many miscellaneous records for some species shows patterns of migration and wintering consistent with what is known about the species within the core of their ranges. That many of these same species are not being reported from seasons outside these periods, as would be expected if escaped captives were persistently present in the region, likewise suggests occurrence of free-ranging wild birds. The reports briefly summarized herein are good examples of a full spectrum of problematic occurrence of extralimital waterfowl. They range from certainty of escaped individuals to ones for which it would appear from supporting evidence are likely to be of wild origin. The Asian species in particular are ones that seem most likely to be of captive origin. Yet, in view of the number of avian taxa of West Coast and eastern Asian origin now showing up along the Atlantic coast, perhaps it is unwise to dismiss even these as simply escaped captives. The problems of interpretation are more complex than simply sorting out captives from wild free-ranging birds. For several species of waterfowl, feral and partly feral populations are now known that could be the source of, or could contribute to, regional occurrence.

It is interesting that national and state record committees are often willing to accept extralimital occurrence of North America waterfowl as ones of natural occurrence but are less likely to do so with those from other regions or continents. Yet, we have numerous examples of known wild waterfowl occurring well outside their normal range. The best examples come from oceanic islands, where escaped individuals from local sources can be entirely ruled out and long-distance vagrancy documented. Pratt *et al.* (1987) list 33 species of vagrant waterfowl (including two species of whistling-ducks) known to reach Hawaii and other remote tropical Pacific Islands. In Bermuda, 35 species (including two species of whistling-ducks) have been recorded (Amos 1991). Records of wild banded North American waterfowl reaching distant localities also illustrate the ability of individual birds to travel long distances which are unrelated to normal migratory patterns (*i.e.*, a Wood Duck, *Aix sponsa*, banded in Canada before it could fly and found the following December on Saba, Netherlands Antilles; [Titman and Seaman 1978]; and an American Black Duck, *Anas rubripes*, recovered in Korea [1998, J. V. Remsen pers. comm.]). In addition to many species being highly migratory or nomadic, some species of waterfowl move together in family units, imprint on other species, and travel in mixed-species flocks during migration, making them prime candidates for aberrant dispersal. Major weather systems are also capable of long-range displacement, and ducks and geese, because of their size, are more capable than many types of birds to survive such displacements. The dynamic nature of natural waterfowl populations and their migratory behavior makes it as irresponsible to dismiss all records of vagrants as escaped captives as it is to blindly add them to regional lists of naturally occurring fauna.

The latest American Ornithologist's Union Check-list (1998) provides a number of examples of descriptions of waterfowl distributions that suffer from a lack of reported observations. This lack of reporting results from the initial assumption that the birds in question were escaped captives. The issue of birds being of wild origin or if they can be counted on regional, state, or personal bird lists is secondary. The exclusion of them on a list is a reflection of criteria used to

develop such a list and not a lack of potential interest in the bird's occurrence. In some cases it appears that non-indigenous ducks and geese are becoming a part of our fauna, and regardless of their origin, several are becoming, or have the potential to become, increasingly important components of our wetland communities. These waterfowl interact in natural systems, in some cases displacing native species, in all cases competing with them, are the source of many hybrids, and perhaps also represent vectors of disease. They exhibit migratory patterns and variations in occurrence and abundance. For example, the Giant Canada Goose (*Branta canadensis maxima*), a subspecies on the verge of extinction earlier in the 1900s, now has a huge and growing population in the eastern Atlantic states. This population, which is independent of the migratory wintering Canada Geese of the Atlantic flyway, is growing at a rate of 17% a year (USFWS records). Their numbers are so large that they are responsible for the eutrofication of ponds and small lakes in the region. Yet, hardly a single published note concerning this invasion into the region, information on the timing of this population explosion, or its extent, is available. In North Carolina a similar situation exists for Mute Swans (*Cygnus olor*) in that we have almost no information on the invasion and reproduction of this exotic for the state. (The ability of even these swans to disperse is shown by a report from Bermuda [Amos 1991].) Because of this, learning about these birds and reporting this information should continue to be a primary activity of field workers. Observers and editors should be encouraged to report and publish extralimital records of problematic species and recognize the documentation of exotics to be an important contribution to our understanding of changes within regional avian communities.

Reporting of such records was a former policy of the CBC Bird Records Committee, and the guidelines outlined at that time seem to be sound (Chat 38:70). Field reports should be published independently of decisions of national or state records committees, and observers should not feel slighted if these records remain unaccepted. At the same time records committees should continue to make conservative decisions regarding these reports. It can be anticipated that decisions of committees will vacillate over time as more information becomes available. This process is a natural and healthy one, and, as has been documented for several species, the growing body of regional literature occasionally puts old reports in a new light, making it fundamental for these reports to be available for future evaluation.

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