CURRENT STATUS AND DISTRIBUTION OF THE BLACK-BELLIED WHISTLING DUCK (DENDROCYGNA AUTUMNALIS) IN GEORGIA

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Introduction

One hundred seventy-seven species were confirmed breeding in Georgia during the Breeding Bird Atlas project (Schneider et al. 2010). Since completion of the Atlas data collection in 2001, the Black-bellied Whistling Duck (BBWD; Dendrocygna autumnalis) has become a confirmed breeder in the state, and is expanding its range throughout the state. According to Giff Beaton (pers. comm. 2013), there were 3 "unsubstantiated" sightings of BBWD in Georgia before its official acceptance by the Georgia Ornithological Society Checklist and Records Committee as a wild sighting: in 1976, 2 BBWD were seen on Jekyll Island but were "unsubstantiated by details;" in 1991, a banded BBWD from a waterfowl breeder was seen on Lake Sinclair; and in the mid-1990s a BBWD was reported from a pond in Cobb County, but was considered an escapee. The first accepted report of a wild BBWD in Georgia occurred in June 1998 in Clayton County (E. Horn; http://www.gos.org/sightings/01-ducks/ bbwd.html). Following this sighting, there were scattered reports of BBWD seen in Georgia until 2006, when it was confirmed as a breeding species in Brooks County (Schneider et al. 2010). Breeding was also confirmed in McIntosh County in 2007 at the Altamaha Waterfowl Management Area, and since that time the number of BBWD seen at that site has increased dramatically (Georgia Department of Natural Resources, unpubl. data). In the last 6 years, sightings of BBWD in other Georgia locations have increased as well, especially in the Coastal Plain

Georgia's BBWD population appears to be a natural expansion of Florida's well-established BBWD population. In concert with this species' range expansion into Georgia, it was first detected in South Carolina in 1994 and has bred there since 2003 (Harrigal and Cely 2004). The current range expansion in the southeastern U.S. seems to be synonymous with its ongoing range expansion in the southwestern U.S. (James and Thompson 2001). This year (2013), sightings have occurred as far north in the U.S. as Delaware.

Methods

We compiled information on BBWD sightings and their nesting activities from 3 primary sources: the Georgia Birders Online listserv (GABO) website (http://www.gos.org/gabo.html); the eBird website (Cornell Lab of Ornithology 2013; http://ebird.org/content/ebird/); and direct reports to the Georgia Department of Natural Resources (GDNR). We searched the archives of GABO for any mention of "Black-bellied Whistling Duck" or "BBWD," and we searched the eBird database for BBWD in Georgia for all months of the year since 1998

For the purpose of this review, all listings and records that mentioned BBWD were investigated; however, only listings or records with photographic documentation of ducklings or of adults using nest boxes were considered to be confirmed breeding records. Location information reported for each sighting was used to determine the specific county where the sighting occurred.

Results

The archives of GABO (http://www.listserv.uga.edu/archives/gabo-l.html) included 55 postings relevant to BBWD, with only 6 of those occurring prior to 2006. The eBird dataset yielded 752 records of BBWD from 37 different sites in 17 different counties, with only 8 of those sightings occurring prior to 2006. There were 2 reports directly to GDNR of BBWD sightings that did not appear on either GABO or eBird. In sum, we reviewed 809 records relating to BBWD sightings in Georgia. As of 3 September 2013, BBWD sightings have been reported in 24 of Georgia's 159 counties and were documented breeding in 10 of those counties: Baker, Brooks, Bryan, Burke, Chatham, Lee, McIntosh, Richmond, Sumter, and Thomas (Fig. 1).

Discussion

Georgia's BBWD population is likely a result of the northern expansion of Florida's population, and naturally, the southern tier counties and the coastal areas were the first to be colonized. The earliest reports of breeding birds in Georgia came from Brooks and McIntosh counties. Black-bellied Whistling Ducks have spread northward along the coast and into the southwestern corner of the state, apparently using river systems, primarily the Flint River and the Savannah River, as their movement corridors into interior Georgia. With breeding in Baker, Lee, and Sumter counties, it appears that the Flint River drainage and its associated wetlands are serving as a core area for future expansion. On the opposite side of the state, breeding is occurring in Chatham, Burke, and Richmond counties, indicating that the Savannah River drainage and its associated wetlands may be corridors for expansion as well. It is easy to assume that BBWD are present in several other counties along the Florida border, and along the coast and the Savannah River, but simply have not yet been reported. Quite possibly, the entire Coastal Plain physiographic province may soon be included within the range of the BBWD.

In Georgia, BBWD have been reported to nest in natural cavities, Wood Duck (*Aix sponsa*) nest boxes, and in some cases, on the ground. As the BBWD population expands in Georgia, one potential area of concern is interspecific competition between Wood Ducks and BBWD for natural cavities and nest boxes. Black-bellied Whistling Ducks seem to prefer Wood Duck nest boxes with an entrance hole of at least 10 cm in diameter and possibly as large as 12.5 cm (Bolen 1967). The smaller 10 cm x 7.6 cm oval hole is too small for most BBWD to fit through; however, Campbell (1994) reported BBWD use of nest boxes with entrance holes measuring 10.8 cm x 8.9 cm. Future research may be needed to determine the extent of BBWD use of Wood Duck nest boxes, and the potential impact to local Wood Duck population productivity.

Acknowledgments

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Figure 1. Status and distribution of the Black-bellied Whistling Duck in Georgia, September 2013.