

A South Carolina Winter Banding Recovery of a Broad-winged Hawk (*Buteo platypterus*), and a Review of the Species' Regional Winter Status

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Introduction

The Broad-winged Hawk (*Buteo platypterus*) is a summer resident in South Carolina, North Carolina and Georgia, fairly common in the upper piedmont and mountains, rare in the lower piedmont, and casual on the coastal plain (Pearson et al. 1942, Post and Gauthreaux 1989, Beaton et al. 2003). It is a common to locally abundant autumnal migrant along the Blue Ridge Escarpment. Broad-winged Hawks winter primarily in central and northern South America, Mexico and Central America, but occasionally winter in small numbers in southern Florida (Stevenson and Anderson 1994). The reported increase of the species in the southern United States since the 1950s has not been confirmed (Goodrich et al. 1996). Several sightings indicate that it may be found in South Carolina in winter, but previously no material evidence was available. Here I report a January recovery of a banded Broad-winged Hawk in Georgetown County, SC. To place this record in context, I review the species' winter status in the region.

Results

On 24 January 2005 an individual (identity not reported) found a disabled Broad-winged Hawk in the Colonial Estates area of Georgetown (Georgetown County), South Carolina. The bird was taken to South Carolina Birds of Prey Center at Awendaw, SC, for rehabilitation. The hawk died, but its carcass was salvaged. It had a US Biological Survey band (1005-17027), which raptor center personnel removed and sent to the Bird Banding Laboratory. The hawk was identified as a hatching-year bird by Robert G. Thobaben Jr., who had banded it on 28 September 2004 at Montgomery, Ohio, a suburb of Cincinnati, 760 km northwest of Georgetown. The specimen was preserved as a standard study skin (WP933) and deposited in the Charleston Museum (ChM 2006.4.015). No bones were broken, but the muscles of the left shoulder were traumatized. The left testis measured 8 X 7 mm; the right testis was ruptured. The hawk weighed 242 g (normal range for male Broad-winged Hawks = 243–287 g; Goodrich et al. 1996) and had no visible fat deposits. Other measurements were: length of flattened wing: 24.7 cm; total length: 37.8 cm; wing span: 85.5 cm.

Discussion

The Broad-winged Hawk has been reported several times in winter in South Carolina, most often on winter (Christmas) bird counts, but no specimens, photographs, or even detailed reports are available, and, other than Wayne's missing 1889 specimen (see below), the latest reliable reports have been in late October (Post and Gauthreaux 1989, McNair and Post 1993).

Arthur T. Wayne reported collecting a Broad-winged Hawk on 15 January 1889 near Mt. Pleasant (Charleston County). The information is contained in his journal, under an entry for specimen number 2122 (Blue-headed Vireo, *Vireo solitarius*). Wayne noted that he "shot a Broad-winged Hawk in a muddy swamp—fine record". On that day (15 January), he was working in an area seven miles north of Charleston, near Porcher's Bluff, between "6-mile house" and "8-mile house". Wayne cites this record in *Birds of South Carolina* (1910), and it is later mentioned by Sprunt and Chamberlain (1949). However, Wayne's specimen catalog has no entry for a South Carolina Broad-wing, and no specimen can be found in any of the known repositories of Wayne's birds. (Wayne did collect several Broad-winged Hawks, but in Florida). Wayne was a meticulous scientist, who preserved all salvageable specimens that he collected, reporting unusual findings in *The Auk*. As Wayne did later mention the sighting (although without details), in *Birds of South Carolina* (1910), the record may be valid. However, Post and McNair (1990) believe the bird may have been a misidentified Red-shouldered Hawk that was destroyed or lost before Wayne could confirm its identification.

The second winter report was of a bird that Alexander Sprunt, Jr. saw on 19 January 1934 in St. Andrews Parish in Charleston. Other than a brief statement in Sprunt and Chamberlain (1949), no further details are available, and McNair and Post (1993) consider the report marginally acceptable. Sprunt and Chamberlain (1949) list two other winter sightings: one, Fairlawn Plantation (Charleston County), 26 December 1946 and one, 22 February 1947, Mt. Pleasant. Both reports lack details, and therefore seem questionable (Post and Gauthreaux 1989, McNair and Post 1993).

In Georgia, Beaton et al. (2003) list seven winter reports for the Broad-winged Hawk, two documented by specimens, and one by published details. I examined these two Georgia specimens. The first, which had been misidentified (Post and McNair 1990) as Red-shouldered Hawk when it was accessioned (Charleston Museum 52.117.942) was collected by E. C. Morris near the Savannah River at Augusta (Richmond County), 20 February [1901] (Murphey 1937). The collection year is not 1935 as given by Burleigh (1958) and subsequent authors (Haney et al. 1986, Beaton et al. 2003). The second Georgia winter specimen was collected at St. Marys, Camden Co. on 29 December 1902 (originally from the collection of I. F. Arnow, now at the University of Georgia [UGAMNH 553], see Johnston 1949). In addition, one was seen in Atlanta (DeKalb County) on 12 January 1968 (Fink 1969), apparently the only Georgia sighting supported by published details.

In North Carolina, A. Bryan photographed a juvenile at Cape Hatteras Point (Dare County), 27 December 1984. This appears to be the first verified winter occurrence of this species in that state (LeGrand 1985), although the location of the photograph has not been published. In addition, two reports by experienced observers may be valid: an adult at Buxton (Dare County), 30 Dec 1987 (P. Sykes and D. Hughes *in* LeGrand 1988) and a juvenile at Sneads Ferry (Onslow County) 17–19 January 1992 (G. Grant *in* LeGrand 1993). I have been unable to locate any winter specimens for North Carolina.

The winter status of the species in the Southeast remains unclear. The Carolinas have several sight reports from early to mid-December (Redshank Software 2006), but these probably pertain to late-departing birds. It is possible that Broad-wings, much of whose diet consists of arthropods, amphibians and reptiles (Goodrich et al. 1996), are able to survive in the Southeast only during mild winters. In South Carolina, temperatures in January 2005 were 4 °F above normal. It would be informative to examine the climatic conditions that existed at the time of earlier occurrences of the species. This species may now be classified as a casual winter vagrant in South Carolina and Georgia, and as an accidental winter visitor in North Carolina, and because of its rarity, state bird records committees should ask for detailed reports for mid-winter sightings.

Summary

A second-year male Broad-winged Hawk, which had been banded in September 2004 in southern Ohio, was found in January 2005 in Georgetown, SC, 760 km SE of the banding site. The bird died in captivity, but was salvaged as a specimen; this constitutes the first confirmed winter occurrence of the species in South Carolina. In addition, two winter specimens and one detailed report are known for Georgia; one has been photographed in North Carolina during winter. The species should be classified as a casual winter straggler in the Southeast, at least until additional documentation becomes available.

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