GENERAL NOTES

BACHMAN'S SPARROW USE OF A GOPHER TORTOISE BURROW AS AN ESCAPE REFUGE — On 23 December 2013, while conducting a visual survey for Eastern Indigo Snakes (*Drymarchon couperi*) in Turkey Oak (*Quercus laevis*) sandhill habitat located near the Altamaha River in Long County, Georgia, I flushed an adult Bachman's Sparrow (*Peucaea aestivalis*) that flew directly into an adult Gopher Tortoise (*Gopherus polyphemus*) burrow. The bird remained in the open, partly lit, shaft of the burrow tunnel, at a distance of about 1.3 m from the mouth of the burrow and about 0.7 m deep (never going deeper), for 5 minutes while I photographed it (Fig. 1). A Bachman's Sparrow was again seen very near the burrow when I returned 2 weeks later. A dense ground cover dominated by Wiregrass (*Aristida stricta*) is present close to the burrow. In the past, I have observed the same behavior by Bachman's Sparrow in sandhill habitats on Fort Stewart, Georgia; and, a local naturalist, Alan Bailey, recently observed a Bachman's Sparrow in a gopher tortoise burrow on his property near the Canoochee River, Emanuel County, Georgia.

In one of the first accounts of this behavior, Pittman (1960) described a colleague capturing, by hand, a Bachman's Sparrow that took refuge in a tortoise burrow. Bachman's Sparrows hiding in tortoise burrows have also been reported in Jackson and Milstrey (1989), Dean and Vickery (2003), and Soehren and Treat (2010). Dean and Vickery (2003) mentioned that when flushed from grassy microhabitats, Bachman's Sparrows preferred to fly to Saw Palmetto clumps (*Serenoa repens*) that contained animal burrows rather than palmetto clumps lacking burrows. During field studies at the Tall Timbers Research Station in north Florida, researchers have occasionally observed pairs of Bachman's Sparrows entering tortoise burrows together, and these researchers regularly set up mist nets ca. 0.5-1 m in front of tortoise burrows to catch particularly evasive birds (Jim Cox, pers. comm., 2014).

Soehren and Trent (2010) provide an interesting account of this behavior in Alabama, including a thorough review of pertinent literature. Bachman's Sparrows apparently use tortoise burrows as a means to escape potential predators (with most observations confined to the cooler months of the year). This behavior has inherent risks because tortoise burrows are used by a variety of species that are predators of small passerines. However, Soehren and Trent (2010) concluded that the advantages of briefly sheltering in a tortoise burrow (to escape a predator) likely outweigh the potential risks of a Bachman's Sparrow encountering a burrow-inhabiting predator (when doing so).

13

Snakes commonly observed in gopher tortoise burrows in southern Georgia include 5 species that are known to occasionally or commonly eat birds (Eastern Indigo Snake, Eastern Diamondback Rattlesnake [Crotalus adamanteus], Eastern Coachwhip (Coluber flagellum), Corn Snake (Pantherophis guttatus), and Florida Pine Snake (Pituophis melanoleucus mugitus) (Jensen et al. 2008). Although Soehren and Trent (2010) mention that snakes are generally dormant or sluggish during the cooler seasons and pose little threat to hiding sparrows, I am aware of numerous instances of the above-mentioned snake species feeding during the winter months when mild weather conditions allow foraging, which may often take place in or near tortoise burrows (Stevenson 2003, Stevenson et al. 2010). In fact, an adult Indigo Snake found at a tortoise burrow in southern Georgia in February 2014 (during an especially cold winter) disgorged a small Corn Snake, which in turn was examined and found to have recently consumed a small passerine bird (D. Stevenson, pers. observ.).

Acknowledgments

I wish to thank Alan Bailey, Jim Cox, and Todd Schneider for their help with this note.

Literature Cited

- Dean, T.F., and P.D. Vickery. 2003. Bachman's Sparrows use burrows and palmetto clumps as escape refugia from predators. J. Field Ornithol. 74:26-30.
- Jackson, D.R., and E.G. Milstrey. 1989. The fauna of gopher tortoise burrows. In: J.E. Diemer, D.R. Jackson, J.L. Landers, J.N. Layne, and D.A. Wood, eds. Proceedings of the Gopher Tortoise relocation symposium. Florida Game and Fresh Water Fish Commission, Nongame Wildlife Program, Tech. Rep. No. 5, Tallahassee, FL. p. 86-98.
- Jensen, J.B., C.D. Camp, W. Gibbons, and M.J. Elliott (eds.). 2008. Amphibians and reptiles of Georgia. Univ. Georgia Press, Athens, GA. 575 p.
- Pittman, J.A., Jr. 1960. Bachman's Sparrow hiding in a burrow. Auk 77:80.
- Soehren, E.C., and J.A. Trent. 2010. Bachman's sparrow (*Aimophila aestivalis*) uses gopher tortoise (*Gopherus polyphemus*) burrow as a means of escape from a perceived threat. Alabama Birdlife 56:1-4.
- Stevenson, D.J. 2003. Natural history notes-winter feeding: Crotalus adamanteus (Eastern Diamondback Rattlesnake). Herpetological Rev. 34:372-373.
 - _, M.R. Bolt, D.J. Smith, K.M. Enge, N.L. Hyslop, T.M. Norton, and

K.J. Dyer. 2010. Prey records for the Eastern Indigo Snake (Drymarchon couperi). Southeastern Nat. 9:1-18.

Dirk J. Stevenson, The Orianne Society, 414 Club Drive, Hinesville, GA 31313



Figure 1. Bachman's Sparrow observed taking refuge in a Gopher Tortoise burrow in Long County, Georgia, on 23 December 2013. Photograph by Dirk J. Stevenson.

HOUSE WREN NESTING IN MACON — The House Wren (*Troglodytes aedon*) began expanding its breeding range southward in the eastern United States as land was cleared for agriculture, cities, homes, and other purposes (Johnson 1998). This species was first documented nesting in West Virginia in the late 1800s (Hall 1983), North Carolina in the 1920s (Pearson 1934), and South Carolina in the 1940s (Post and Gauthreaux 1989). Nesting was first documented in Georgia by Eugene Odum and David Johnston in 1950 on the University of Georgia campus in Athens (Odum and Johnston 1951). Soon after this a House Wren was found nesting in Habersham County (Nichols 1960) and by 1969 they had started nesting in Atlanta (Parks 1970).

Since that time this species has continued to expand its breeding range southward throughout much of the Georgia Piedmont. By the late 1990s it was