

NOTES

A recent record of the Bachman's Warbler in Florida.—From 0815 to 0930 on the morning of 30 March 1977, west of Melbourne, Brevard County, Florida, I observed and photographed a Bachman's Warbler (*Vermivora bachmanii*) foraging in a sparsely leafed willow (*Salix* sp.) and a Brazilian pepper-tree (*Schinus terebinthifolius*) next to a dike road (Fig. 1). The area was an extensively ditched part of the St. John's River flood plain. In the drier portions Brazilian pepper-tree predominated, whereas in the wetter areas extensive willow thickets were scattered within a large grassy savannah.

I was unable to identify the warbler in the field. The very plain-looking warbler had a faintly yellowish forehead, lores, and a diffuse yellowish eye-ring. The crown and hind-neck was gray; the upper back was olive; and the wings and tail were a darker olive-gray. The notched tail did not have noticeable tail-spot, and the wings showed no wing-bars. The throat appeared gray-white, shading to faintly yellow on the breast and gradually merging again to gray-white on the lower abdomen and under-tail coverts. The breast had slightly brighter yellow areas on both sides of the paler mid-line, which gradually merged with grayish on the breast in front of the wings. The upper mandible was dark and slightly decurved, the lower mandible was pale flesh at the base and slightly darker toward the tip. The tarsus and toes were brown-flesh. During my lengthy observation of this warbler, I had directly compared it with Orange-crowned Warbler (*Vermivora celata*), which was noticeably larger and more robust, Common Yellowthroat (*Geothlypis trichas*), which was similar in size, Northern Parula (*Parula americana*), which appeared slightly smaller, and Palm Warbler (*Dendroica palmarum*), which was much larger.

Later the same morning I notified Johnnie Johnson and Dan Heathcote of the location of this warbler. They also had an opportunity to study it but likewise could not offer an identification, nor could other local observers who later examined the photographs.

I had no idea what this warbler could be until approximately a year later. While leafing through Bond (1971), I found a brief description of the immature female Bachman's Warbler that matched the plumage of my warbler very closely. Having already eliminated all other species with which I was familiar, I began reading about the Bachman's Warbler and became convinced that this was the species I had seen.

In 1980, I read of a sighting of the female Bachman's Warbler in Cuba (Ripley and Moreno 1980). Consequently, I sent my photos to Mr. Ripley for his evaluation. I received a reply from Roger F. Pasquier of the National Museum of Natural History stating that he and Mr. Ripley had examined my photos and both had a strong impression that my bird was indeed Bachman's Warbler. However, it was not possible to absolutely rule out the possibility that it was a pale female Orange-crowned Warbler because in one overexposed photo it appeared gray and white. They also stated, in part ". . . The features that match Bachman's Warbler particularly closely are the curvature of the upper mandible, the eye-ring, and the irregular distribution of yellow on the forehead, lores, and otherwise whitish breast. The notched tail, typical *Vermivora* bill, and other features preclude it being a drab female Common Yellowthroat. The light rump eliminates Nashville



Figure 1. Immature female Bachman's Warbler at Melbourne, Brevard Co., Florida, 30 March 1977.

Warbler (*Vermivora ruficapilla*) in any plumage. The specimens your bird most closely resembles are Bachman's Warblers USNM 454258, a female collected at Guantanamo, Cuba, on 5 December 1912, and USNM 263254, a female collected at Bay St. Louis, Mississippi on 26 March 1902. The latter bird is labelled (sic) "immature"; I don't know whether this means anything biologically, since we have no information on whether palish, presumably first year, birds do not breed or in any other way not behave as adults. It does indicate, however that even in March some females resemble the bird in your photograph in that they have very little yellow on the undersurface . . ."

I replied that in direct comparison, the Orange-crowned Warbler was noticeably larger, and most importantly, its legs and bill were very dark. The Bachman's Warbler had very pallid legs and lower mandible.

Although it did appear that I had photographed a Bachman's Warbler, I wanted to satisfy myself that the bill on my bird was correct for that species. The bill on Bachman's is very distinctive, long and slightly decurved. My photos showed the curvature of the upper mandible well but none showed a perfect profile. In 1982 Dan Heathcote and I visited The Academy of Natural Sciences in Philadelphia to examine specimens of Bachman's Warblers and of any other species with which it could be confused. We found considerable variation in plumage of both sexes of Bachman's Warbler and also in bill length and depth at the base of the bill. One male specimen (Phila. 41449) had a bill matching that of the bird in my photos. We also examined many specimens of all species that remotely resembled a female Bachman's Warbler. No other specimens resembled the bird I photographed.

One diagnostic point we noted on the female Bachman's specimens and on my photos was the grayish area in front of the wings, which is actually an extension of the gray neck onto the sides of the breast. This plumage is mentioned by Hamel et al. (1982) and is well shown in his accompanying plates.

In February 1984 Henry M. Stevenson wrote me asking to have a set of my photos deposited at Tall Timbers Research Station, Tallahassee, Florida. I complied and received a reply stating in part, ". . . Barring the unlikely chance of some exotic species unfamiliar to me that somehow got to Florida, I fully concur that you saw Bachman's Warbler. The clincher for me was the pose just beside a rather large limb with the bird facing you but with its

head turned slightly to one side. Although I probably never saw one in this plumage (i.e. imm. female) I have seen enough females that come close to this appearance . . ." Stevenson has had considerable field experience with Bachman's Warbler in Alabama between 1936 and 1939.

Ned Johnson and Stephen F. Bailey examined the photos and both agreed that Virginia's Warbler (*Vermivora virginiae*) or Nashville was definitely not involved and Bailey stated that Bachman's could be a possibility.

Alternative species had been eliminated and the preponderance of evidence indicated that this was a Bachman's Warbler. The date of this sighting corresponded to the very early spring migration of the species. My seven years of research found nothing but positive evidence. Stevenson cataloged the photographs at Tall Timbers Research Station as Bachman's Warbler, TTRS numbers 377-381, and this sighting was accepted by the Florida Ornithological Society Records Committee.

Historically, the Bachman's Warbler passed through Florida as a migrant in spring along the Gulf coast, as summarized by Stevenson (1972). In Brevard County only three previous records (4 birds) have been noted by Cruickshank (1980), all between 1889 and 1905. In the past decade (1975-85), Bachman's Warblers have also been reported from four locations: Long County, Georgia, in August 1975 (Johnson and Landers 1982), probably a fall migrant, and in spring from the Louisiana coast (B. Newman in Imhoff, 1977); P'On Swamp, South Carolina (Shuler et al. 1978); and the previously mentioned female from Cuba as late as 1980.

ACKNOWLEDGMENTS

I am grateful for many helpful comments on the identification from S. F. Bailey, R. L. Crawford, S. Gauthreaux, F. Gill, P. Hamel, N. Johnson, R. F. Pasquier, S. D. Ripley, and H. M. Stevenson. F. Gill, and M. Robbins for assistance and access to collection at The Academy of Natural Sciences. H. P. Langridge and H. M. Stevenson made helpful suggestions on early drafts of this manuscript.

LITERATURE CITED

- BOND, J. 1971. Birds of the West Indies. Boston, Massachusetts: Houghton Mifflin Company.
- CRUICKSHANK, A. D. 1980. Birds of Brevard County. Orlando, Florida: Florida Press, Inc.
- HAMEL, P. B., AND S. A. GAUTHREAUX. 1982. The field identification of Bachman's Warbler. *Am. Birds* 36: 235-240.
- IMHOFF, T. A. 1977. Central southern region. *Am. Birds* 31: 1010.
- JOHNSON, A. S., AND J. L. LANDERS. 1982. Habitat relationships of summer resident birds in slash pine flatwoods. *J. Wildl. Manage.* 46: 421-428.
- RIPLEY, S. D. AND A. MORENO. 1980. A recent sighting of Bachman's Warbler in Cuba. *Birding* 12: 211-212.
- SHULER, J., P. NUGENT, J. TROCHET, AND J. VAN OS. 1978. Bachman's Warbler sightings continue in P'On Swamp. *Chat* 42: 23-24.
- STEVENSON, H. M. 1972. The recent history of Bachman's Warbler. *Wilson Bull.* 84: 344-345.
- Robert D. Barber, RD #2, Box 181, Millville, New Jersey, 08332.
Florida Field Naturalist 13: 64-66.