

**COLLECTION OF YELLOW-THROATED WARBLERS  
(*DENDROICA DOMINICA*) IN NORTHWEST ALABAMA  
WITH ABNORMAL PLUMAGE**

**Bailey D. McKay**

At around 0930 hours on the morning of 9 April 2006, Bruce Hitch and I were in the Bankhead National Forest in Lawrence County, Alabama, collecting Yellow-throated Warblers (*Dendroica dominica*) for my thesis research at Auburn University. I was using Yellow-throated Warbler song playback to lure the warblers down from the canopy, when I noticed a responsive individual that I could not immediately identify. Though it was clearly aggressive to my playback, had a mannerism suggestive of a Yellow-throated Warbler, and eventually sang a normal Yellow-throated Warbler song, the bird had a very dark throat. I thought of “Sutton’s” Warbler, a rare Yellow-throated Warbler/Northern Parula (*Parula americana*) hybrid described as having the burnt-orange throat, green back, and unstreaked flanks of a Northern Parula, but the tail and facial pattern of a Yellow-throated Warbler (C. W. Carlson, *Atlantic Naturalist* 34:1-11, 1981).

Thinking this would be an important specimen, I collected the bird and discovered upon closer inspection that the throat was not a burnt-orange but a charcoal black. Except for the throat, the bird had normal Yellow-throated Warbler plumage with black streaks on the flanks and no hint of green color on the back. Interestingly, however, the black formed a perfect ring across the throat (Fig. 1C) in very much the way the burnt-orange does in a Northern Parula. Later the same day in the same general location, I collected another Yellow-throated Warbler with the same throat pattern except that the black was less extensive and could be described as intermediate between the first abnormal bird I collected and a Yellow-throated Warbler with normal plumage (Fig. 1B). Whether or not this bird displayed the “ring” pattern that is evident in the first bird (Fig. 1C) can not be determined because several throat feathers were lost during collection (Fig. 1B).

During the spring of 2006, I observed nearly 300 Yellow-throated Warblers from 12 locations across the species’ range while collecting data for my thesis. It is interesting that the Bankhead National Forest was the only area that I observed this unusual plumage. Besides the well-documented “Sutton’s” Warbler, the only other report of an unusually plumaged Yellow-throated

Warbler is from Charles City County, VA (S.C. Rottenborn, Raven 64:32, 1993). In this report, the individual also had normal Yellow-throated Warbler plumage except for the throat, which had dark gray and reddish-orange bands along the throat that were nearly identical in coloration, size, and placement to the bands on the throat of a male Northern Parula. Rottenborn speculated on the possibility of a previously undescribed Yellow-throated Warbler/Northern Parula hybrid plumage. This seems possible for the birds I collected as well. I think it is also possible that this bird, and perhaps the birds I am reporting here, are second generation “Sutton’s” Warblers that have back-crossed with normal Yellow-throated Warblers.

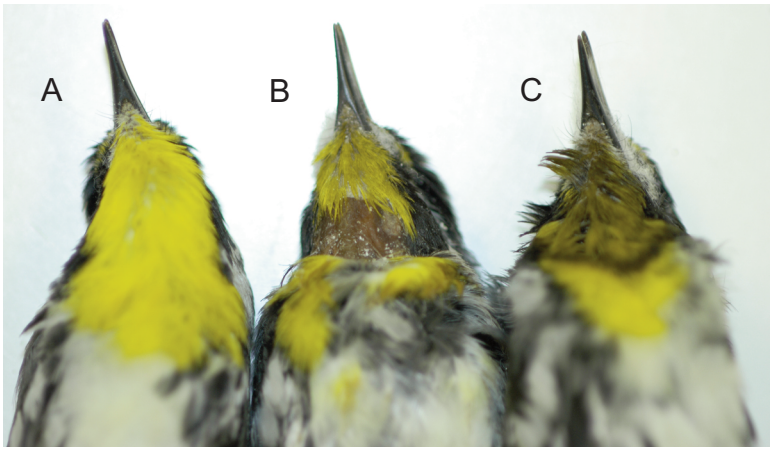


FIGURE 1. Yellow-throated Warblers collected in the Bankhead National Forest in Lawrence Co., AL on 9 April 2006. (A) Individual with a normally colored yellow throat. (B) Abnormal individual with some black color in the throat. The amount of black is intermediate between A and C. (Note that this individual is missing throat feathers as a result of the collection method.) (C) Abnormal individual with extensive black in throat. Note that the black forms a “ring” pattern.

Alternatively, it is conceivable that the abnormal birds I collected are Yellow-throated Warblers with a previously unreported mutation, possibly involving the melanin receptor gene. It may even be that the darker bird I found was homozygous for this mutation whereas the intermediate bird was a heterozygote. This scenario would not explain, however, why there such a high occurrence of this mutation in the Bankhead National Forest (2 of the 8 birds (25%) collected in the Bankhead had this dark throat) or why the black color forms a perfect ring against the normal yellow of the throat. Genetic

tests, both for evidence of hybridization and for anomalies in the melanin receptor gene, may help clarify this situation.

The research was conducted using Alabama state collecting permit 3507 and federal collecting permit MB120568-0. The project was funded with a Frank M. Chapman Grant from the American Museum of Natural History. I thank Bruce Hitch for assistance in the field.

**Bailey D. McKay**, 331 Funchess Hall, Auburn University, Auburn, AL 36830.