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Reverse mounting in the Black-throated Blue Warbler.—Reverse mountings (female mounting male) have been reported in 29 bird species (Nuechterlein and Storer 1989, Bowen et al. 1991), the majority (76%) of which are non-passerines. Only seven species (24%) of passerines have been observed reverse mounting. These include Zebra Finch (*Poephila guttata*, Morris 1954), European Starling (*Sturnus vulgaris*, Glick 1954), Rook (*Corvus frugilegus*, Coombs 1978), Painted Bunting (*Passerina ciris*, Thompson and Lanyon 1979), Northwestern Crow (*Corvus caurinus*, James 1983), American Redstart (*Setophaga ruticilla*, Ficken 1963), and Prairie Warbler (*Dendroica discolor*, Nolan 1978). Here, I report an observation of reverse mounting in another species (and the third wood-warbler), the Black-throated Blue Warbler (*D. caerulescens*).

On 20 May 1991, James Tucker and I observed a male and a female Black-throated Blue Warbler on and near to the ground beneath a hobblebush (*Viburnum alnifolium*) shrub. These birds had been defending this territory for over one week. The female was on top of a rotting log, and the male was approximately 10 cm below her on the ground. With his

body crouched and flattened to the ground, the male walked back and forth two or three times, approximately 20 cm each way, doing a "wing-quiver," a behavior generally used by females in many bird species to solicit a mount. This behavior is consistent with other reports of reverse mounting (Nuechterlein and Storer 1989). I have also observed this submissive "wing-quiver" behavior used by fledglings of this same species when begging for food from adults. The female then dropped on top of the male in the mounting position. The male then continued to walk back and forth two or three times with the female mounted on his back. This entire episode lasted approximately 6–8 sec. The female then dismounted the male and returned to the top of the log and began preening, at which time the male flew off. No vocalizations were heard before, during, or after the mounting.

This pair was subsequently color-banded. The male was banded on 22 May and identified as a second year male, and the female was banded on 12 June and identified as an after second year female (Pyle et al. 1987). The female laid the first of four eggs on either 23 or 24 May and eventually fledged all four young from the nest on 15 June.

Given the frequency and diversity of species that have been observed reverse mounting, many authors have concluded that this is not aberrant behavior, but instead a part of the courtship and mating ritual of birds (Nuechterlein and Storer 1989, Bowen et al. 1991). One proximate cause, first put forth by Morris (1955), proposes that reverse mounting is the result of submissive or subordinate behavior in males combined with aggressive and dominant behavior by females, a combination of behaviors likely to occur when younger males pair with older, and possibly more dominant, females. Although not hypothesized by Morris, the ultimate cause of this behavior might be to allow older females to provide extra "stimulation" to an inexperienced male to copulate. This may be the case for the Black-throated Blue Warblers I observed, because the male was a yearling, and the female was at least two years old. Pairing between older females and younger males occurred in two additional species of passerines in which reverse mountings have been reported (Painted Buntings, Thompson and Lanyon 1979, Northwestern Crow, James 1983). No mention of age was given for the other four species of passerines. In the studies of non-passerines, some observers found no correlation between reverse mounting and age (Bowen et al. 1991, MacRoberts and MacRoberts 1976), whereas others made no mention of age (Nuechterlein and Storer 1989, Ortega-Ruano and Graves 1991).

Reverse mountings have been reported most commonly in non-passerines (Nuechterlein and Storer 1989), particularly species of larger body size that breed in open habitats. The frequency of reverse mountings observed in non-passerines is probably biased by the ease of observing copulations. I know of only three observations of normal, male mounting female copulations in Black-throated Blue Warblers, two by myself in 1990 and one by Jenn Barq (pers. comm.) in 1992. All were similar. These copulations all occurred 3–8 m above the ground on horizontal branches. In the two copulations I witnessed the female was seen doing a wing-quiver prior to the mounting by the male. The male then mounted the female for 2–3 seconds and flew off. The female then began preening. Because observations like these of even "normal" copulations of forest passerines, especially parulids, are uncommon, it is not surprising that this is only the third species of warbler to be observed reverse mounting. If this is a regular phenomenon exhibited by passerine birds, then observations of reverse mounting will likely increase as more intensive research is conducted on the population dynamics of individual bird species.

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First autumnal report of birds from Rum Cay, Bahamas.—Recently, Buden (*Wilson Bull.* 102:451–468, 1990) provided a list of birds collected or encountered on Rum Cay, Bahamas, from January through July, 1886 to 1989. During the autumn of 1981, I also recorded birds at Rum Cay. My observations, made from Oct. 30 through Nov. 1, appear to be the only records of fall birds for the island. These records serve to expand our understanding of Neotropical migrants and residency of some indigenous birds of the Bahamas.

My methods were similar to those of Buden (walking existing roads and trails and recording species and numbers encountered) except that there were no replicates and no attempt was made to quantify abundance. In only a few hours ashore (<10 cumulative), I observed approximately 51% of the island's known avifauna (Table 1). On October 31, 1981, torrential rains associated with a late season tropical storm may have contributed to avian fallout, particularly for warblers ($N = 119$), which represent 35% of all species seen during this brief period and 58% of the total species list. Nomenclature and order follow the AOU (AOU 1983, Checklist of North American birds, 6th edition, A.O.U., Washington, D.C.) and supplements.