

FEATURE ARTICLES

BREEDING SUCCESS OF A SPECIALIST BROOD PARASITE, THE SCREAMING COWBIRD, PARASITIZING AN ALTERNATIVE HOST

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Abstract. The Screaming Cowbird (*Molothrus rufoaxillaris*) is a specialized brood parasite that primarily parasitizes the Bay-winged Cowbird, (*Agelaioides badius*; Screaming Cowbirds parasitize 80–100% of this species' nests). In contrast, the Shiny Cowbird (*M. bonariensis*) parasitizes more than 200 hosts. According to the differential reproductive success hypothesis, we expect that Screaming Cowbirds would have a lower reproductive success than Shiny Cowbirds when parasitizing other hosts. We assessed the breeding success of the Screaming Cowbird using an alternative host, the Brown-and-yellow Marshbird (*Pseudoleistes virescens*). This species is a common host of the Shiny Cowbird with 60–70 % of nests parasitized, and is also regularly parasitized by the Screaming Cowbird but with lower frequency (6–20% of the nests). We compared the breeding success of Screaming and Shiny Cowbirds parasitizing this host species. No differences were found in the number of fledglings produced per egg laid between cowbird species. About 8–10% of cowbird eggs produced fledglings. The daily survival rate of Screaming Cowbird eggs was higher than daily survival rates for Shiny Cowbird eggs, but no differences were detected in the nestling daily survival rates. Moreover, we could not detect any difference in the hatching success (nestlings per egg), fledging success (fledglings per nestling), or growth rates of the two parasitic cowbird chicks. Furthermore, breeding success and growth rates of Screaming Cowbird chicks were similar to those previously reported while parasitizing the Bay-winged Cowbird. Our results are not consistent with the differential reproductive success hypothesis proposed as an explanation for the specialized parasitism of Screaming Cowbirds.

Key words: breeding success, brood parasitism, Brown-and-yellow Marshbird, host specialization, Screaming Cowbird, Shiny Cowbird.