

From Kosciuch KL, Parker TH, Sandercock BK, 2006. Nest desertion by a cowbird host: an antiparasite behavior or a response to egg loss? *Behav Ecol* 16:10.1093/beheco/arl025:

Avian brood parasites such as cuckoos and cowbirds lay their eggs in the nests of other species, and these host species often suffer reduced reproductive success as a result. Some hosts eject parasitic eggs or desert parasitized nests. Egg ejection has been demonstrated to be a co-evolved response to parasitism in several host species. Although desertion of parasitized nests may be a co-evolved response, desertion is also a more general response that can be caused by multiple stimuli. For example, most birds will desert a nest when a sufficient portion of their clutch is removed. This behavior could lead to abandonment of parasitized nests because female cowbirds often remove a host egg the day before they parasitize a nest. With observational and experimental data from Bell's vireo, a host of the brown-headed cowbird, we tested whether desertion of parasitized nests is an evolved response to parasitism or a general response to egg loss. In unmanipulated nests, the number of vireo eggs that remained in a nest at the end of the laying period was the only strong predictor of desertion both within and among vireo pairs. Furthermore, vireos did not desert experimental nests in which we immediately exchanged cowbird eggs for vireo eggs, but deserted if we removed vireo eggs and replaced them with cowbird eggs the following morning. Thus, nest desertion by Bell's vireos is not a specific adaptation to cowbird parasitism, but a general response to egg removal.