

"Heterospecific Eavesdropping in Kirk's dik-dik (*Madoqua kirkii*)"

Scott Sapp, Knox College

ABSTRACT

It has been thought that the ability to hear a heterospecific alarm call requires developed social behavior in the species, but recent research involving Guenther's dik-dik (*Madoqua guentheri*) shows this prerequisite is not always present, as the dik-dik is non-social, monogamous, and territorial, but responded vigilantly to the threat of a predator in recordings of the alarm call of the white-bellied go-away bird (*C. leucogaster*). Because Guenther's dik-diks were not present at our study's site, Tarangire National Park, the research subject was Kirk's dik-dik (*Madoqua kirkii*), a sister species of *M. guentheri* that is very similar in morphology and especially behavior. Results showed more of a vigilant response to the alarm call of *C. leucogaster* than to recordings of vocalizations of other birds from the area, thus suggesting *Madoqua kirkii* has the same abilities as its sister species *M. guentheri* in heterospecific eavesdropping, or the ability to hear and correctly interpret communication from other species that is not intended for the dik-dik. However, there were some issues and concerns regarding data collection methods, equipment, and frequency of the birds in this study in Tarangire that could have affected the results.