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Abstracts

## FEATURE ARTICLES

### GEOGRAPHIC SONG VARIATION AND ITS CONSEQUENCES IN THE GOLDEN BOWERBIRD

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*Abstract.* Geographic variation in birdsong is known from a variety of taxa, but is especially common and most frequently reported in passerines with resource-based territorial mating systems. To date, relatively little data have been presented on patterns of song variation in species with lek and leklike mating systems. In this paper, we describe geographic song variation in the Golden Bowerbird (*Prionodura newtonia*) a species with a leklike mating system. We compared recordings of the species advertisement song, collected from five isolated forest blocks from across the species range in northeastern Australia. Golden Bowerbird advertisement song shows marked geographic variation in form. All males within a population sing a song similar to each other, but distinct from that of males from other locations. The song traits important in discriminating between the songs of the different populations were bandwidth, number of peaks, dominant frequency, fundamental frequency, internote interval, and pureness. Discriminant function analyses based on these traits were highly accurate in assigning songs to their population of origin. We then used playback experiments to test whether geographic song variation in Golden Bowerbirds is functional. In the playback experiments males responded more strongly to song from local dialects than from foreign dialects. We discuss our results in light of current hypotheses on the evolution of geographic song variation.

*Key words:* bowerbird, dialect, song variation, playback, *Prionodura newtonia*.