

Article

The Role of Habitat Heterogeneity in Structuring Mangrove Bird Assemblages

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Abstract: Mangrove habitats are under severe land use pressure throughout the world and Australia is no exception. Here we describe the heterogeneity of mangrove habitat and its relationship with mangrove bird diversity. We examined the role of mangrove habitat complexity in determining the richness of avian mangrove dependent species (MDS) and interior species, overall bird species richness and density. High species richness (overall and MDS) and density in the mangroves was associated with plant species richness, the density of the understory and food resource distribution. Furthermore, habitat heterogeneity rather than patch area *per se* was a more important predictor of species richness in the mangroves. These findings stress the importance of habitat diversity and quality to the diversity and density of birds in mangroves. Thus, habitat heterogeneity within mangroves is a crucial patch characteristic, independent of mangrove patch size, for maintaining diverse avian species assemblages.

Keywords: Avifauna; community ecology; habitat diversity
