The contribution of bird communities to ecological services in agricultural lands surrounding Brigalow remnants

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Abstract

The majority of studies on bird communities in fragmented landscapes focus on the presence and community composition of birds recorded within vegetation patches. However, research presented here describes the effects of vegetation patch attributes on bird communities in a surrounding matrix of cultivation and grassland. Study sites were located in, and adjacent to small remnant patches of brigalow (*Acacia harpophylla*) / Belah (*Casuarina cristata*) vegetation in southern inland Queensland. Bird species richness in matrix sites of grassland and cultivation was significantly correlated with the area of adjacent brigalow remnants. Other vegetation attributes such as structural complexity did not significantly influence species richness of birds in the matrix. Division of birds into positive, neutral and negative service categories based on foraging behaviour enables inferences regarding the 'value' of vegetation remnants in terms of ecological services provided by native birds. These findings will be discussed in the context of a current research project on ecosystem services in agro-ecosystems of the southern Brigalow Belt.