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## **Birds of Coffee Lands**

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### **Abstract**

Shade coffee plantations may have similar or higher bird diversity than natural forest. However, coffee and forest differed in species composition. Shade coffee may be beneficial for generalist species, but poor for forest specialists. I studied the diversity and feeding ecology of birds in the valley of the Magdalena River (Cordillera Oriental, Colombia). The landscape is dominated by shade coffee plantations, but mixed crops, pastures, gardens, guadua bamboo forests and secondary forest are also present. I caught the birds with mist nets. In addition, observations along transects between 1998 and 2006 were recorded. I registered 110 bird species from 21 families. The families with greater numbers of species are Fringillidae, Thraupidae and Tyrannidae. Pastures and mixed crops are dominated by seedeaters, insectivores and omnivores. The zones with shade coffee and guadua bamboo forests have a high diversity of nectarivores, frugivores and migratory species. The secondary forest, guadua bamboo forests and gardens are important for nectarivore birds of the understory. Hermit hummingbirds follow routes along these habitats to foraging in the inflorescences of Heliconiaceae, Costaceae, Musaceae and Zingiberaceae. Other hummingbirds (mainly non Hermits) defend and maintain feeding territories from other nectarivores, including nectar robbers such as the Bananaquit. Shade coffee contributes to maintain the local biodiversity in agricultural regions by providing habitat for some forest species, acting as buffer areas for forest patches and limiting the expected loss of species due to deforestation. Given the large area devoted to coffee cultivation in the Neotropics, more studies are needed to understand and monitor the effects of these plantations on ecological and evolutionary processes at different scales.

**Keywords:** Bird diversity, neotropics, shade coffee plantations