Knowledge of the composition of the bird community in Alto Balsas (southwestern Puebla, Central Mexico) is needed for management programs aiming at protection and conservation of bird species and their habitats. I studied sites with tropical deciduous forest. Data were obtained during 1666 hours of field work in 238 days from March 1998 to September 2000. Six permanent transect (3.5 km long and 100 m wide; 30 to 40 ha in each transect) were used to determine species richness in the study sites. The Shannon-Wiener diversity index was calculated for each site and Sorensens index was used to assess similarity between sites. One-way analysis of variance was used to test for differences between sites in species richness and diversity values. A total of 128 species were recorded, Tepexco (n = 75, H’ = 3.76) and Puente Márquez (n = 61, H’ = 3.62) were the sites that showed the greatest specific richness and diversity. However, species richness and diversity seasonally patterns were similar among sites (ANOVA p > 0.05), with highest diversity during the rainy season. Most species were resident; 42 were migrants. The avifauna was represented by 30 species associated with tropical deciduous forest and 12 from open habitats or heavily altered habitats. Insectivores were the best represented trophic category, followed by carnivores and omnivores. Rev. Biol. Trop. 55 (1): 287-300. Epub 2007 March. 31.

Keywords
avian diversity, richness, tropical deciduous forest, Alto Balsas, Mexico.