

Bird-habitat relationships in a vegetational gradient in the andes of central Chile

Estades, Cristián F.

An unusual pattern has been described in Patagonian forests, where bird species diversity seems to be inversely correlated with vegetation complexity. To test the occurrence of this pattern in the northern Nothofagus forests of central Chile, a study was conducted at the Nuble National Reserve during the austral summers of 1994 and 1995. Twenty-nine plots were set along a vegetational gradient. In each plot, the density of all diurnal bird species was estimated, and the vegetation composition and structure were measured. The highest and the lowest bird species diversity were found in semideciduous scrub habitat and Poaceae steppes, respectively. In nongrassland sites, no vegetation variable explained bird, species richness or diversity. Total foliage volume and foliage height diversity were significantly correlated with bird species diversity in the nonforest sites but not in the forested areas. However, foliage height diversity significantly explained the variation of bird density and