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Abstracts

## FEATURE ARTICLES

### ENVIRONMENTAL CORRELATES OF SONG STRUCTURE IN FOREST GROSBEAKS AND SALTATORS

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*Abstract.* We compared the song structure of 19 species of forest grosbeaks and saltators based on the songs of 271 individuals recorded from Argentina to Canada, and analyzed their ecological correlates. On each spectrogram we measured eight temporal, frequency, and structural features of the song. Both a principal components analysis and a univariate analysis showed consistent differences in song structure between open and closed habitats. These differences were also found in an independent contrasts analysis, in which phylogenetic relationships between the species of the group were taken into account. In particular, the songs of species living in open habitats had wider bandwidths and higher maximum frequencies than those of species living in more closed habitats. In addition, the songs of open-habitat species had more notes, which were of shorter duration. These findings are compatible with predictions derived from the Acoustic Adaptation Hypothesis, according to which bird song structure is adapted to the habitat in which the signal is used.

*Key words:* *Acoustic Adaptation Hypothesis, Cardinalinae, forest grosbeaks, habitat, saltators, song.*