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ABSTRACTS

**COMMENTARY**

**SOME CONSIDERATIONS ON THE USE OF ECOLOGICAL MODELS TO  
PREDICT SPECIES' GEOGRAPHIC DISTRIBUTIONS**

BRUCE G. PETERJOHN<sup>1</sup>

*U.S.G.S. Patuxent Wildlife Research Center, Laurel, MD 20708*

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<sup>1</sup>E-mail: [bruce\\_peterjohn@usgs.gov](mailto:bruce_peterjohn@usgs.gov)

*Abstract.* Peterson (2001) used Genetic Algorithm for Rule-set Prediction (GARP) models to predict distribution patterns from Breeding Bird Survey (BBS) data. Evaluations of these models' utility should consider inherent limitations of BBS data, namely (1) BBS methods may not sample species and habitats equally; (2) using BBS data for both model development and testing may overlook poor fit of some models; (3) BBS data may not provide the desired spatial resolution or capture temporal changes in species distribution. The predictive value of GARP models requires additional study, especially comparisons with distribution patterns from independent data sets. When employed at appropriate temporal and geographic scales, GARP models show considerable promise for conservation biology applications but provide limited inferences concerning processes responsible for the observed patterns.

*Key words:* avian distribution patterns, BBS, GARP models, North American Breeding Bird Survey, predictive distribution models, roadside surveys.