

ABSTRACTS FOR *CONDOR* 103(2) MAY 2001

FEATURE ARTICLES

A HALF-CENTURY COMPARISON OF BREEDING BIRDS IN THE SOUTHERN APPALACHIANS¹

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Abstract. We evaluated long-term (~50-year) change in a bird community of an extensively forested region of the southern Appalachian mountains in North Carolina and Tennessee. A species accumulation curve for a 1996–1998 survey identified a core of 50 breeding species in upper elevations of the Unicoi Mountains. Since a 1944–1946 survey, dominant species have remained identical, no species have disappeared, and mean ranked abundance of both short and long-distance migrants has not changed. Permanent residents, however, had decreased in rank by the late 1990s. Three “new” disturbance-dependent species, American Crow (*Corvus brachyrhynchos*), Indigo Bunting (*Passerina cyanea*), and Song Sparrow (*Melospiza melodia*), expanded into interior forest along a recently constructed parkway. Largest apparent increases in ranked abundance of individual species occurred in eight Neotropical migrants that rely upon mature, forest-interior habitat, whereas largest apparent declines in ranked abundance occurred in land-use generalists, cavity nesters, and three other Neotropical migrants. Modifications to land-use were reasonable explanations for changes in most species. Little change in community structure, greater representation of many Neotropical migrants, and virtual absence of Brown-headed Cowbirds (*Molothrus ater*) suggest that this large, continuous forest retained and probably regained functional integrity for forest birds during the latter half of the twentieth century.

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