

ABSTRACTS FOR *CONDOR* 104(1) FEBRUARY 2002 C.E.

FEATURE ARTICLES

**CONSISTENCY OF MIST NETTING AND POINT COUNTS IN ASSESSING
LANDBIRD SPECIES RICHNESS AND RELATIVE ABUNDANCE DURING
MIGRATION**

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Abstract. We compared consistency of species richness and relative abundance data collected concurrently using mist netting and point counts during migration in riparian habitats along the middle Rio Grande of central New Mexico. Mist netting detected 74% and point counts detected 82% of the 197 species encountered during the study. Species that mist netting failed to capture were usually large, such as quails, raptors, owls, woodpeckers, jays, and crows, or those foraging on the wing, such as swallows and nighthawks; species that point counts failed to detect were usually small, such as sparrows, warblers, vireos, and wrens, or rare species. For the 110 species detected by both techniques, relative abundance was correlated ($r = 0.75$). However, point counts tended to provide lower estimates for species that were more likely to be captured by mist netting. The strength of the relationship of abundance estimates from the two methods varied by habitat type (cottonwood, agriculture, and willow). The discrepancy between the two techniques was similar in both magnitude and direction in willow and agriculture habitats but was less consistent between each of these two and cottonwood, probably because of canopy height and vegetation vertical structure. The discrepancy between the two techniques in estimating relative abundance was smaller in this study than in studies on breeding or wintering grounds. Less habitat specificity and more-active foraging by migrants during stopover might underlie the high consistency between mist netting and point counts in this study.

Key words: landbirds, migration, mist netting, point count, relative abundance, Rio Grande, species richness.

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