

Territory size, overlap, and population density of Golden-cheeked Warblers: implications for survey design and population estimation

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Conservation concern for the endangered Golden-cheeked Warbler has led to strong interest in reliable and accurate estimates of abundance at multiple spatial scales. In this study we assess the relationship between conspecific abundance, bias in N -mixture model estimates of abundance, and probability of detection—dependent on territory size, and territory overlap, in each of three years among natural populations of the GCWA. Our analyses allow us determine the degree to which survey stations are independent of one another.