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Abstract

A study was conducted to evaluate the effectiveness of groundwire marking in reducing bird mortality through collision at a power transmission line in southwestern Spain. Monthly flight intensity observations and weekly searches for dead birds were carried out at four sectors of the line comprising 28.2 km, during two consecutive winters, 1989-90 and 1990-91, respectively before and after groundwire marking with coloured PVC spirals. Flight intensity and collision frequency decreased respectively by 61% and 60% at marked spans compared to the same spans prior to marking, while there was no significant change in collision frequency at spans left unmarked. After marking, the percentage of birds flying between the cables decreased and that flying above them increased. Our results suggest that many birds avoided flying across the marked spans of the line or climbed while approaching them, and therefore collided less frequently. The percentage decrease in mortality observed in our study falls within the range of results of other groundwire marking or removal studies.