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BEHAVIOR OF SANDHILL CRANES NEAR POWERLINES MARKED WITH YELLOW AVIATION BALLS

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Abstract: The principal known cause of mortality for wild whooping cranes (*Grus americana*) is collision with powerlines. Methods to minimize powerline collisions will contribute to the species' long term recovery. We studied the flight behavior of sandhill cranes (*G. canadensis*) near powerlines marked with yellow aviation balls near the Platte River, Nebraska, in 1988–90. An age ratio of 24 juveniles:76 adults of 84 carcasses found under powerlines was significantly different from typical population ratios of 12:88 for this species. Two-way contingency table analysis of crane flight behavior data indicated that cranes avoided markers ($P < 0.001$), reducing the potential for collision. Proximity of powerlines to habitats used by cranes ($P < 0.001$), wind speed ($P < 0.05$), and age of bird ($P < 0.001$) were important factors contributing to crane collisions with powerlines in Nebraska. Details are available in Wildl. Soc. Bull. 19(4):442-449.

Key words: behavior, collisions, *Grus canadensis*, line markers, powerlines, sandhill crane

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