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# INFLUENCE OF LANDSCAPE FEATURES OF WETLANDS ON NESTING PATTERNS OF SANDHILL CRANES IN CENTRAL WISCONSIN

SU LIYING

*International Crane Foundation*


ANNE E. LACY

*International Crane Foundation*

JEB A. BARZEN

*International Crane Foundation*

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## INFLUENCE OF LANDSCAPE FEATURES OF WETLANDS ON NESTING PATTERNS OF SANDHILL CRANES IN CENTRAL WISCONSIN

SU LIYING, International Crane Foundation, E-11376 Shady Lane Road, Baraboo, Wisconsin 53913, USA

ANNE E. LACY, International Crane Foundation, E-11376 Shady Lane Road, Baraboo, Wisconsin 53913, USA

JEB A. BARZEN, International Crane Foundation, E-11376 Shady Lane Road, Baraboo, WI 53913, USA

**Abstract:** We studied the relationship between landscape features and nesting patterns of greater sandhill cranes (*Grus canadensis tabida*) in central Wisconsin for 3 years. Our study covered 9,840 ha, including about 50% agricultural fields, 20% forest, and 20% wetlands. We analyzed landscape features and nesting patterns at the wetland complex level. Landscape features included size, shape, and type of cover for each wetland complex. Nesting patterns included nesting density and the spatial pattern of the nest locations in a wetland among years. Nest density varied among wetland complexes and years. Mean nest densities in wetlands surveyed were 0.037, 0.033, and 0.047 nests/ha in 2001, 2002, and 2003, respectively. Nest density in individual wetlands varied from year to year, from 0.00 to 11.24 nests/ha. Mid-sized wetlands (80-120 ha) had similar means, around 0.05 nests/ha, and had smaller variations in nest density among years in comparison with small wetlands. Spatial point pattern analysis showed that the spatial pattern of nest locations in the wetlands was not always clustered. Mean distance between the two closest nests within single wetlands within a year was 227 m (11-666 m, SD = 163 m). The distance was usually around 120 m for a mid-sized wetland.

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**Key words:** *Grus canadensis*, landscape, nesting pattern, sandhill crane, wetlands, Wisconsin.

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