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## MULTIPLE SPATIAL SCALE ANALYSIS OF WHOOPING CRANE HABITAT IN NEBRASKA

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**Abstract:** Geographic Information System (GIS) and remote sensing technologies were used to evaluate whooping crane stopover habitat in Nebraska. The goal of the research was to investigate habitat selection at multiple spatial scales. The GIS database consisted of all confirmed whooping crane sightings reported in Nebraska from 1975–1996 and land cover information delineated from color infrared aerial photographs and Landsat Thematic Mapper data. Results suggest that whooping cranes select roost habitat by recognizing site-level and landscape-scale land cover composition. Wetland is the most strongly selected habitat type at all spatial scales examined. This presentation emphasizes methods used to analyze habitat selection and how the information can be applied in conservation.

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**Key words:** GIS, *Grus americana*, habitat analysis, whooping crane.

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