Identification Of Functional Corridors With Movement Characteristics Of Brown Bears On The Kenai Peninsula[TWS]

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We describe a technique to identify functional corridors using animal movement characteristics across a landscape. We use GPS locations from brown bears (*Ursus arctos*) on the Kenai Peninsula to illustrate the technique. We derived movement density, movement speed, and angular deviation of movement from paths drawn between locations and use a cluster analysis to classify the landscape into non-habitat, primary habitat, and corridors. We examined differences among landscape types with a classification tree. We assess the influence of frequency of locations and scale on the number and size of corridors identified. This corridor identification technique will help managers move beyond the theoretical discussion of corridors and linkage zones to management of landscape features to preserve connectivity.

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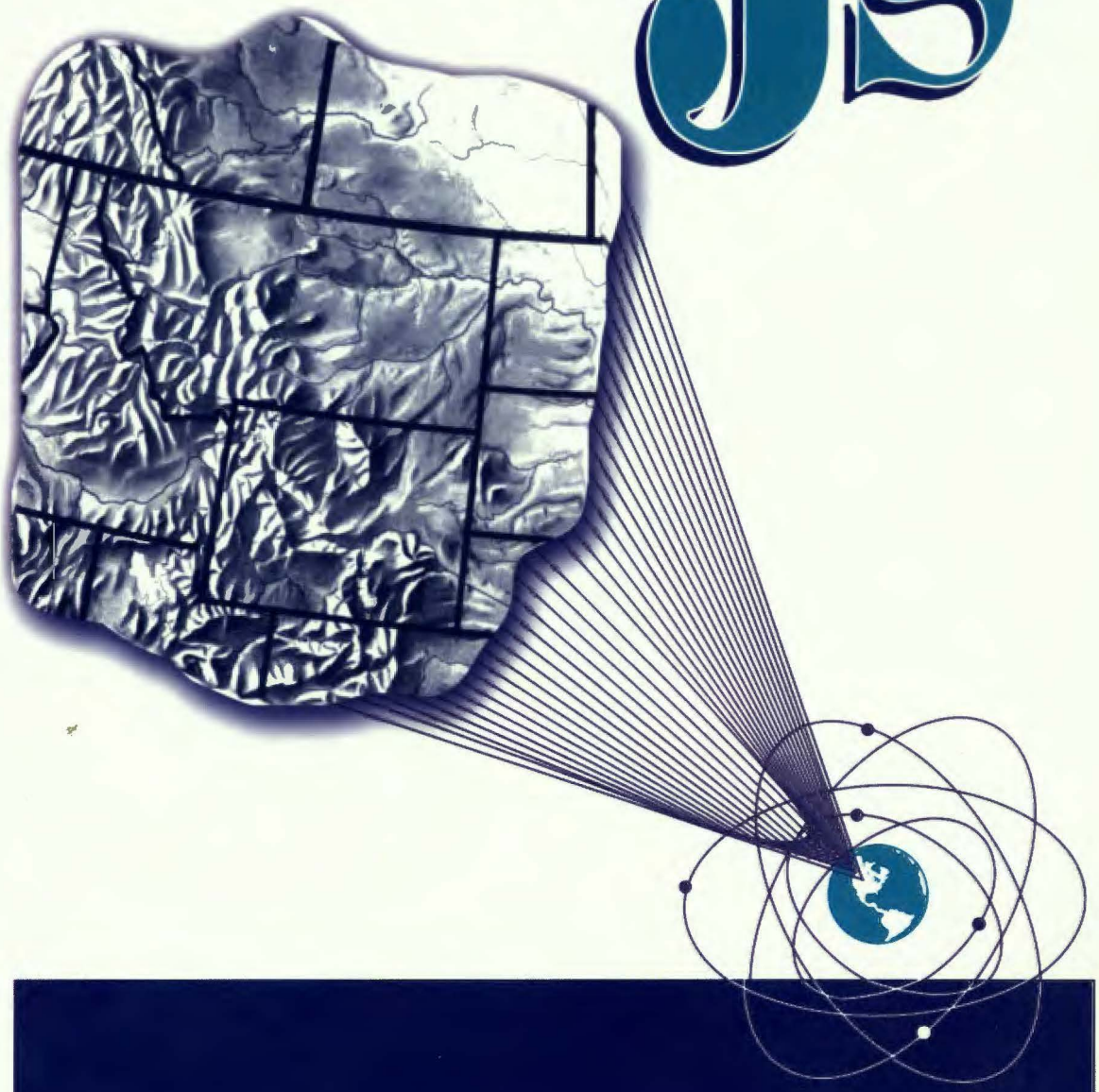
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