

ABIOTIC AND BIOTIC ENVIRONMENTAL ASSOCIATIONS OF AT-RISK FISHES IN THE SANDHILLS ECOREGION

Researchers.

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Rationale. The Sandhills Ecoregion is the largest intact grassland systems in the Great Plains. The area is characterized by large, stabilized sand dunes. Streams and rivers of the Sandhills Ecoregion exhibit varied hydrological characteristics stemming from ground-water interactions, and temperature may also vary greatly depending on ground-water connections and location along the longitudinal gradient. The diversity of hydrologic and temperature patterns as well as variation in physical habitat (e.g., wet meadows, lakes, braided and meandering stream channels) of the Sandhills supports diverse fish assemblages. However, 10 of the 75 species of fish in the Sandhills Ecoregion are currently considered at-risk with common threats including introduced species, changes in stream geomorphology (e.g., ditching), and fragmentation. Limited ecological context exists regarding environmental associations of at-risk species at

multiple spatial scales to guide stream rehabilitation in the ecoregion. This study seeks to identify the environmental associations at multiple spatial scales of nine at-risk species in the Sandhills Ecoregion.

Species: multiple fishes
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