

## **PERCHED SAND FAUNAS IN THE UPPER MIDWEST**

\*PHILIP A. COCHRAN, Biology Department, Saint Mary's University, 700 Terrace Heights, Winona, MN 55987, USA

*Abstract:* Isolated patches of open sand substrate, typically associated with rock outcrops and bluff prairies, occur on steep south and southwest bluff slopes. Sites from Minnesota and Wisconsin will be profiled. These areas are inhabited by at least some animals more commonly associated with sand prairies and other sandy habitats in lowland areas. Examples include reptiles, such as bullsnakes and six-lined racerunners, and arthropods, including antlions, burrowing wolf spiders, and digging wasps. Perched and lowland sand habitats may differ with respect to depth of substrate and accessibility of water and perhaps with respect to daily and seasonal fluctuations in temperature. Perched sand habitat is typically less extensive and more isolated than lowland sand habitat, and these traits, which contribute to the vulnerability of their faunas, may have been exaggerated during recent years by the effect of succession through invasion by woody plants. Studies of perched sand faunas should take into account the genetics, dispersal capabilities, and metapopulation dynamics of their component species. Management to preserve bluff prairies should favor the preservation of their embedded sand faunas.