

DANIEL L. PITTS & ZACHARY J. LOUGHMAN, Dept of Biological Sciences, West Liberty University, West Liberty, WV, 26074. Ecology of the Western Ribbon Snake (*Thamnophis proximus proximus*) at an eastern Iowa sand prairie.

The Western Ribbon Snake (*Thamnophis proximus proximus*) is a gracile, semi-aquatic natricid snake that ranges from Wisconsin to New Mexico. Previous ecological studies have focused on southern populations, largely ignoring northern populations. These studies have focused on the reproductive and dietary ecology, with limited emphasis on activity or population ecology. This study aimed to investigate temporal movement patterns and population ecology of *T. p. proximus* in a northern population. Data was collected from 2018 to 2025 from a relict sand prairie ecosystem with adjacent wetlands and forests in eastern Iowa. Population estimates were generated using the Schnabel and Schumacher-Eschmeyer methods. Analyses indicate that air and ground temperature may be more significant drivers of activity among different age classes than other environmental conditions. The active air temperature differed between young-of-year and other age classes, reflecting the higher summer temperatures when *T. p. proximus* gives birth. Individuals of undetermined age class tended to be found at higher ground temperatures. However, a low sample size among some age classes may skew this data. The large number of unknown individuals likely influences the dataset, as individuals were not reliably sexed until 2025. *T. p. proximus* were found clustered near bodies of water and areas frequented by surveyors, suggesting that they use both wetlands and edge habitats. Temporal movement patterns of activity in *T. p. proximus* are still not fully understood, and continued research into the ecology of this species can assist in the planning of future conservation efforts.