

DAN T MEYER, ELIJAH J HENDERSON, and ZACHARY J LOUGHMAN. Department of Natural Sciences and Mathematics, West Liberty University, West Liberty, WV. Prey Selection in the Queen snake, *Regina septemvittata*, in Streams of the Northern Panhandle of West Virginia, U.S.A.

*Regina septemvittata* (Queen snake) is a semi-aquatic snake occurring throughout central and eastern North America that exhibits extreme dietary specialization, feeding almost exclusively on freshly molted crayfishes. Though it is known *R. septemvittata* forage on crayfishes, little is understood about prey preferences at the species and genus level. Because different crayfish species have varying life history patterns, and molting frequency is allied to life history attributes, it is not clear whether there is a preference based on crayfish species or prey availability based on molt state. To determine if *R. septemvittata* has preferences for species, we surveyed four streams in the northern panhandle of West Virginia for *R. septemvittata* and completed seasonal life history studies on crayfish species occurring in those streams from March through October 2018. Over the collecting season 101 Queen snakes were captured. From these, we recovered 24 prey samples that were subsequently identified using either polymerase chain reaction (PCR) or visual identification. Monthly crayfish sampling was used to determine molting frequency of the two available prey species in the study streams: *Cambarus carinirostris* and *Faxonius obscurus*. Preliminary results seem to indicate that freshly molted crayfish availability dictates foraging behavior in *R. septemvittata*, and a lack of specialization at the taxonomic level occurs in this species.