KALIE N. BURDETTE, KATHERINE M. TORRANCE, ZACKARY A. GRAHAM, & ZACHARY J. LOUGHMAN, Department of Biological Sciences, West Liberty University, West Liberty, West Virginia, USA. Color Vision Conditioning in *Cambarus monongalensis*

Cambarus monongalensis, the blue-bodied burrowing crayfish with orange claw tips, has no supported function of conspicuous coloration, unlike other animals that use their coloration for aposematic warnings or attracting a mate during courtship. Crayfish have two known photoreceptors, which are structures in the eyes that react to light at specific wavelengths, but there are no existing behavioral studies to determine what they can see. This study uses *C. monongalensis* as a study species to provide behavioral evidence for color vision. 48 individuals were conditioned to associate a colored tube with food. Half were conditioned to blue, and half were conditioned to orange. The crayfish were monitored after the conditioning period to determine if they continued to associate the color by spending more time in the color they were conditioned to. Results thus far indicate that, on average, individuals conditioned to orange showed random selection of tube usage when monitored after conditioning. Meanwhile, individuals conditioned to blue showed a slight but insignificant increase in blue usage. However, individuals show a wide variation of shelter usage patterns that don't always correlate with their conditioning.