Life History and Observational Notes on *Cambarus robustus*.

Gregory A Myers, Emmy M Delekta, Matthew I McKinney, and Zachary J Loughman

 Department of Natural Sciences and Mathematics, West Liberty University, West Liberty, WV, 26074.

 Crayfishes are the third most imperiled taxa in North America and are valuable keystone species in freshwater ecosystems. *Cambarus veteranus* is a narrow endemic in West Virginia recently listed by the U.S. Fish and Wildlife service as endangered. *Cambarus robustus* is a common species of crayfish that’s closely related to *C. veteranus*, making it a suitable surrogate for investigations into the life history of *C. veteranus*. From June 2016 to July 2017, a collection of thirty individual *C. robustus* was made monthly. Gender, reproductive form, and life history observations were recorded for each individual, and morphometric data was taken (TCL, AbL, AbW, ChL, PaW). When ovigerous females were encountered they were placed in 80% EtOH and taken back to the lab where eggs were counted. A single ovigerous female was collected with a full load of eggs (n=94). Male *C. robustus* reached sexual maturity at 30.8mm TCL, and females reached sexual maturity at 37.3. Brooding females were always found in runs, beneath large slabs embedded in gravel. The results of this study will be useful for future life history studies of *Cambarus*, including imperiled taxa such as *C. veteranus.*