KIERSTEN LOWDERMILK Dept of Natural Sciences, Forensic Science Program, Fairmont State University, Fairmont, WV 26554 and KRISTY HENSON Dept of Natural Sciences, Forensic Science Program, Fairmont State University, Fairmont, WV 26554. Using Dermestid Beetles to Enhance Forensic Science Curriculum

In order to conduct accurate, expedient skeletal analysis, scientists rely upon dermestid beetles (Dermestidae). These flesh-eating beetles speed up the decomposition processing leaving behind only skeletal remains and ligamental connections. Dermestid beetles are common in museums and scientific research. These beetles perfectly clean the bones minimizing biohazard waste and damage caused by flensing or carrion-eating animals. For this project, I assisted in the colony creation, maintenance, and the incorporation of a dermestid beetle colony in the Fairmont State Forensic Science Program. Courses that regularly utilize dermestid beetle work include forensic anthropology, forensic biology, and forensic taphonomy. Beetles also aid students and faculty in conducting taphonomic research. To prepare specimens for use in forensic science courses I thaw, flense, and place the specimen in the beetle tank. When bones are finished removed from the specimen from the tank and degreased in a warm water and ammonia bath. After degreasing, I prepare the skeletons for the needs of the specific forensic science course. Skeletal prep has included inflicting trauma, whitening and articulating skeletons for morphological comparisons, cleaning up taphonomic projects, and prepping skeletal material for various undergraduate research projects. Dermestid beetles have advanced laboratory and individual research activities in the forensic science program.