ZOOLOGY

Biology of the Cercaria of *Leuceruthrus micropteri* (Trematoda: Azygiidae) Recovered from the Snail, *Pleurocera semicarinata* (Gastropoda: Pleuroceridae) at North Elkhorn Creek, Kentucky. Chi Peng, Hanna Abe and Ron Rosen, Biology Department, Berea College, Berea, KY 40404

Little information is available regarding the biology of the cercarial stage of the digenetic trematode, *Leuceruthrus micropteri.* The present study was designed to provide quantitative data regarding the diurnal and long-term pattern of emergence of this worm from its snail intermediate host, precise location of rediae containing cercariae within the snail and the mechanism of retraction of the distome body into its cercarial tail stem. Infection of snails with *L. micropteri* was low at North Elkhorn Creek, Kentucky, with prevalences of 1.75% (7/400) and 0.93% (4/432) in 2004 and 2017, respectively. Most cercariae (96.1%) were released during the 12 h light cycle, and the average number of cercariae released/7 snails/day over 21 days ranged between 0-2.29. Individual snails most frequently shed between 0-2 cercariae per day. Histological analysis revealed rediae containing cercariae in the bottom whorl of the snail within the perintestinal sinus separated from the mantle cavity and gills by a thin mantle membrane. Retraction of the distome body into the tail stem *in vitro* was a rapid process requiring only a few minutes. The tail chamber evaginated with its lip moving forward over the body until the distome was completely enclosed. Mature cercariae have been frozen for future DNA analysis to confirm our identification of the North Elkhorn Creek worm as *L. micropteri*.