ELISA THOMPSON, MAKAYLA ZOELLERS, Dept of Biological Sciences, West Liberty University, West Liberty, West Virginia 26074, HEIDI ROSS, El Valle De Anton, Cocle, Panama, & ZACHARY LOUGHMAN, Dept of Biological Sciences, West Liberty University, West Liberty, West Virginia 26074. Developing a new technique for tadpole measurements using a surrogate species.

Many neotropical frog species, including *Atelopus zeteki* (Panamanian Golden Frog) and *Atelopus varius* (Variable Harlequin Frog), are threatened in South and Central America. The El Valle Amphibian Conservation Center (EVACC) in El Valle de Anton, Panama is instrumental in the ex situ conservation of these species and plans monitored releases of A. zeteki following further research. The first step was to develop a research methodology using *Engystomops pustulosus* (Túngara frog) as a surrogate due to its similar range, tadpole size, and clutch size. Three *E. pustulosus* clutches were divided among six tanks (20 tadpoles per tank). Tanks A1, B1, and C1 were measured three times weekly for six weeks, while A2, B2, and C2 were measured only at the start and end of the experiment. Tadpole length was measured by photographing individuals in petri dishes and analyzing images in ImageJ. When the tadpoles metamorphosed, snout-urostyle length, forearm length, and forearm width were measured using the same method. One-way ANOVA showed no significant differences in total body length or in froglet morphometrics between tanks. These findings indicate that the methodology did not hinder tadpole development. With this validated approach, EVACC can now begin studies comparing indoor and outdoor rearing of *A. zeteki*, moving closer to successful reintroduction of the species to the wild. We would like to thank the EVACC foundation and Wetzel family for their support of this project.