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Funding Source: Louis Stokes Missouri Alliance for Minority Participation

The heritability of feeding propensity in *Hyla versicolor*

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In animals that do not provide parental care, it is optimal that the female chooses to mate with the male who possesses “good genes” to help ensure that her offspring will survive to adulthood. *Hyla versicolor*, commonly known as the gray tree frog, is a species that occurs in the state of Missouri. Female *H. versicolor* prefer to mate with males that produce longer calls, and male call length determines the fitness of offspring. The objective of this research is to determine whether feeding propensity in *H. versicolor* is a heritable trait and, if so, whether it is dependent upon the length of the father’s call. It is anticipated that the offspring of males with longer calls will have more voracious appetites and consume more food in a given span of time than the offspring of males with shorter calls. The frogs tested were one-year old juveniles. Each frog was given six crickets, feeding was observed for two hours, and the time each cricket was eaten was recorded. The results indicate that long calls do not appear to reflect “good genes” but, they do suggest that feeding rate is probably heritable. In addition, families with larger average body mass showed higher feeding rates, which indicates that there is a genetic correlation between these two traits.