



ABSTRACTS

Parasite communities in *Gambusia affinis* and *Cyprinella lutrensis*

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Parasite communities vary among hosts depending on the host's habitat. *Gambusia affinis* (western mosquitofish) and *Cyprinella lutrensis* (red shiner) are fishes native to Texas, however, they live in different microhabitats of streams and rivers. The purpose of this research was to examine the parasite communities of western mosquitofish and red shiners in the Texas Colorado River at Timberlake Biological Field Station. Parasites were examined in 20 mosquitofish and 17 red shiners. Three species of parasites were found in both fish: metacercariae of *Posthodiplostomum*, larval and adult *Rhabdochona canadensis*, and adult *Schyzocotyle acheilognathi*. An additional two other species were found in red shiners only: an adult anchor worm, *Lernaea cyprinacea*, and an unknown larval nematode. The prevalence for *R. canadensis* was greater in shiners than mosquitofish, 41.2% and 10.0%, respectively ($\chi^2 = 4.852$, $p = 0.034$). For all other parasite species, there was no significant difference in prevalence between hosts species ($p > 0.05$), and there was no significant difference between hosts in abundance of any parasite species ($p > 0.05$). Red shiners have the ability to adapt to a variety of microhabitats and mosquitofish are restricted to microhabitats with shallow waters. This may be why red shiners had a wider variety of parasites. This study contributes new information on the parasite community of red shiners and mosquitofish and is the first one to be completed on the Colorado River in Texas.