

ABSTRACT

THESIS PROJECT: Diel Variation in Substrate Preference of Cyprinid Fishes

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Diel substrate preferences were tested in artificial stream experiments for six cyprinids: redbfin shiner (*Lythrurus umbratilis*), silver shiner (*Notropis photogenis*), spotfin shiner (*Cyprinella spiloptera*), central stoneroller (*Campostoma anomalum*), striped shiner (*Luxilus chrysocephalus*), and bluntnose minnow (*Pimephales notatus*). We used experimental pools containing two of three substrate types (sand, cobble, and gravel) per trial to test if habitat preferences differed in day and night observations. Over 85% of specimens were observed over cobble substrate during the day, and all species switched substrate preferences at night for the tanks containing cobble. Our results suggest that day-night differences in habitat use may occur in other small-bodied species. Interpretations for habitat use of these species in the majority of studies that are based on daytime observations may need to be modified. Interpretations for habitat use by fish assemblages in the majority of studies that are based on daytime observations may need to be modified.