ABSTRACT

Lake sturgeon (Acipenser fulvescens) were tracked daily using biotelemetry in Black Lake, Michigan, during the summers of 1985 and 1986 and for 2 weeks in October 1986 and January 1987. Sturgeon exhibited depth preferences of 10.3 ± 2.14 m (mean ± SD) in summer and 7.1 ± 0.76 m in winter. Muck was the preferred substrate, correlating with the preferred depth and preferred foods (crayfish and mayfly larvae). Lake sturgeon neither schooled nor aggregated, and diel activity rhythms were absent. The fish exhibited a wide range of daily movements from 18 to 6,877 m day $^{-1}$. They did not have a home range. The amount of linear movement was positively correlated with water temperature ($r = 0.9425$). Body length (L) and average daily linear movement (S) were best described by $L = 7731.8 - 101.05S + 0.38S^2$. No differences were noted in amount of linear movement based on sex of the fish.