Water Mites in the Diet of Largemouth Bass

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ABSTRACT

Water mites (Hydracarina) are not consumed by some fish because of their distastefulness or toxicity. We obtained evidence that some individual largemouth bass (Micropterus salmoides) specifically targeted mites as prey in a small unproductive and unexploited lake in Michigan's Upper Peninsula, USA. Bass stomachs that contained water mites tended to have high numbers of mites, with up to 780 mites in individual stomachs. Stronger evidence for foraging specialization was provided by repeated examination of stomach contents from recaptured bass; many bass contained water mites more often than would be expected by chance (one-sample t-test [H$_{0}$=0], t = 3.54, P <0.0001). Also, there was no correlation between bass density and the percentage of bass consuming mites (r = 0.0183) further suggesting that foraging on mites was an individual response rather than a population strategy.