Assimilation efficiency of nutrients in the three most prominent foods (shiners, earthworms, crickets) in the diet of juvenile largemouth bass (*Micropterus salmoides*)(2006)

Largemouth bass feed on a wide array of organisms, including small fishes, worms, crawfish, insects, and even small mammals. This experiment investigates assimilation efficiency of juvenile largemouth bass (*Micropterus salmoides*) when fed their of shiners, earthworms, and crickets, their three most common prey items.

I collected 24 bass and they were split up into six test groups/tanks, with two test groups for each type of food. There were four specimens of approximately equal size in each test group. Each tank was fed a continuous diet of their specified test food throughout the experiment. Fecal sample collection began one week into the experiment. The samples were rinsed with deionized water and put into the freezer until analyzed.

One-way ANOVA was used to detect for significant differences in total assimilation efficiency (TAE), protein assimilation efficiency (PAE), and carbohydrate assimilation efficiency (CAE) of the three test foods (shiner, worm, and cricket). Total assimilation efficiency of earthworms was greatest, while protein and carbohydrate assimilation efficiencies varied between diets.

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