

# Diet overlap in a piscivore community

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**Abstract** – We examined prey selection of largemouth bass (*Micropterus salmoides*), smallmouth bass (*M. dolomieu*), and yellow perch (*Perca flavescens*) by comparing diet overlap in a small, unexploited lake in Michigan, USA from 1988 to 1990. Niche hypervolume principles were applied to diet data as a means of assessing diet space for each species and the community as a whole. Largemouth bass occupied the largest proportion of community diet space (70.2%), followed by smallmouth bass (44.2%), and yellow perch (21.7%). The majority of community diet space (58.8%) was occupied by a single species, and 41.2% was shared by  $\geq 2$  species. Diet overlap was assessed by measuring the amount of diet space of one species occupied by the other species. Our analyses demonstrated that diet partitioning in a three species piscivore community is reflected in different use of the prey resource by co-occurring species. Niche overlap of largemouth bass with smallmouth bass and yellow perch is strongly asymmetric, largely due to the ability of largemouth bass to effectively consume prey of terrestrial origin.

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**Un resumen en español se incluye detrás del texto principal de este artículo.**