## SPOTTED BASS HABITAT STRUCTURE USE IN AN EXPERIMENTAL STREAMARS

Stan L. Proboszcz
Kansas Cooperative Fish and Wildlife Research Unit
205 Leasure Hall, Kansas State University, Manhattan, KS 66506
stanprob@ksu.edu

Christopher S. Guy
Montana Cooperative Fishery Research Unit
Department of Ecology, Montana State University
Bozeman, MT, 59717

A common method used to enhance salmonid populations is to improve lotic habitat by installing habitat structures. However, the effects of habitat-enhancement structures have not been evaluated for spotted bass (*Micropterus punctulatus*) populations. This study was conducted to evaluate use of habitat-enhancement structures (half-log, rootwad, and undercut bank), by age-0 spotted bass in an experimental stream. Three habitat structures and a no structure area were randomly arranged in an experimental stream. Fish were observed for two days after structure placement. Light intensities and current velocities were measured for each habitat arrangement. Laboratory results were similar to natural stream habitat use by adult spotted bass. For example, each habitat structure type was used significantly more (P < 0.05) than the no structure area. Half-log was used significantly more (P < 0.05) (30 %) than both undercut bank (17 %) and rootwad (11 %). Light intensity and current velocity were important variables influencing habitat use. For example, use of half-log structure was a function of low velocity and light intensity. These results suggest half-log structure may provide the most suitable cover for age-0 spotted bass.