

2006. Spanjer, G. R.*, and M. L. Cipollini. Relationship between physiochemical parameters and distribution of stygobitic crayfishes. *Southeastern Naturalist* 5(1): 17-26.

Abstract: This study was conducted to determine the relationship between water chemistry and presence of stygobitic (cave-obligate) crayfishes (Cambaridae) in Tennessee, Alabama, and Georgia. We analyzed nine chemical factors in water samples from twenty caves, twelve of which contained stygobitic crayfish and eight in which none were found. A multiple analysis of variance using principal components scores suggested that absence of crayfish was associated with lower dissolved oxygen, higher ammonia, and higher water temperature. Caves with extremely originating streams supported no stygobitic crayfish, and the chemical factors of the water in these caves were more variable.

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