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217. Cave colonization by fish: the role of bat predation.  
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A population of the characid Astyanax fasciatus was found living at the outflow of a subterranean source of water. Field observations revealed differences in behavior when compared with river populations. Affinity of this fish for the subterranean cavity was evidenced by behavior and distribution of individuals. Fish almost always carried bait into the subterranean cavity prior to feeding. They also went into the cavity when fishing bats are active in the evening. If fish are experimentally attracted to the pool during this period, fishing-bat activity increases. Laboratory studies demonstrate that avoiding open areas in the evening is characteristic of these fish. Predation by fishing bats thus can be a selective pressure favoring cave dwelling, a hypothesis on the origin of cave colonization alternative to entrapment and directional evolution.

These observations also suggest that behavioral changes may precede morphological ones during initial stages of cave entry, and that behavioral adaptations may occur quite rapidly.