

LIFE HISTORY OF SPELOTREMA NICOLLI

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Studies on the Life History of *Spelotrema nicolli* (Trematoda: Microphalidae) with the Description of a new Microphalid Cercaria. R. M. Cable and A. V. Hunninen. Oklahoma City.

ABSTRACT

Metacercariae occurring in the blue crab, *Callinectes sapidus*, were fed to six young herring gulls which were killed and examined 12 hours to 18 days later. Each bird yielded a large number of *Spelotrema nicolli* while six controls were negative for this species. Since very young metacercariae indicated clearly that the cercaria is of the Ubiquita type, an extensive search was made for such a larva in the mollusks occurring where infected crabs were abundant. After many unsuccessful attempts, a cercaria of the type sought was found in the snail, *Bittium alternatum*. This cercaria was found to enter the crab by way of the gills, passing with the circulation to strands of muscle-like tissue where encystment occurred. The morphology of various stages in the life history of *S. nicolli* has been studied in detail; the excretory formula of the cercaria is $2[(1+1)+(1+1)]$, of the metacercaria and adult, $2[(2+2)+(2+2)]$.