A PARASITE OF THE SWIM BLADDER OF BLACK CATFISH

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INTRODUCTION

During the summer of 1956, a study of the parasitic fauna of fishes in the Fox River, 18 miles north of Aurora, was undertaken. Initially, the emphasis was placed on the overall group of the Platyhelminthes and their general relationship to these fishes. However, because of the apparently high trematode population in certain fishes, this class of parasites became the focal point of the project.

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METHODS

The fishes used for study were obtained from shallow, muddy waters by seining and were examined shortly after being caught. Of the 40 fishes examined, 3 were small *Lepomis numilis,* 8 were *Cyprinus carpio* (3 to 4 inches in length) and 29 were *Ameiurus melas* of varying sizes.

RESULTS

The *Ameiurus* received our entire attention when it was determined that 83% of the fish examined harbored a small trematode, *Acetodextra amiuri* (Stafford, 1900; Pearse, 1924). Invariably, the worm was loosely attached to the inside of the swim bladder. None of the other kinds of fishes investigated was found to be host to such an organism. This is probably due to the difference in the accessibility of the swim bladder in the three types of fishes. Further, the parasite was not detected in any other organ of the catfish. This is not entirely consistent with the findings of other investigators, for Stafford (1900) discovered the worm in the liver of the catfish and Pearse (1924) located an encysted *Acetodextra* in the liver peritoneum of a *Schilbeodes gyrinus.*

No correlation could be made between the size of the fish and the number of parasites in the swim bladder, since all but two of the catfish examined were under five inches in length. It was noted, however, that a two-inch length was the lower limit in the size of the infected host. The number of worms present in the swim bladder varied from one to nine.

DISCUSSION

When a search of the literature concerning *Acetodextra aminuri* was undertaken, it was felt that specimens from the Fox River were vari-

ants of the species. This was concluded because the descriptions by Stafford (1900) and Pearse (1924) were somewhat incomplete and did not entirely agree with our findings. The parasites from the Fox River were much smaller than those of Pearse's account. Secondly, Pearse reported the ovary of the worm to be lobate and elongate. In contrast, the parasites considered in this study were noted as having a definite and consistently lobated, circular ovary. Upon further investigation, it was found that Van Cleave and Mueller (1931 and 1932), had made a more complete study of *Acetodextra amiuri* and that their accounts were more compatible with our observations. Therefore, the concept of a variant was discarded.

It is felt, however, that the results of this study are significant in two ways. First, the 83% infestation in the Fox River catfish was a great deal higher than the 15% recorded by Van Cleave and Mueller (1934). However, these investigators did not state the sizes of the fish examined and this factor may have some bearing on the difference in results.

The second pertinent facet of this study lies in the fact that this is the first known recording of *Acetodextra amiuri* in Illinois catfishes.

Literature Cited

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