# The Leech *Piscicolaria reducta* Parasitizing Some Percid Fishes

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#### ABSTRACT

New host records for the leech *Piscicolaria reducta* Meyer are established from the percid fishes *Percina maculata*, *P. evides*, and 5 species of *Etheostoma*: *E. zonale*, *E. caeruleum*, *E. stigmaeum*, *E. virgatum*, and *E. blennioides*. Additional records from *Percina caprodes* are presented.

## INTRODUCTION

No records of piscicolid leeches on percid fishes from Kentucky have been published in the open literature except for the recent publication of White and Crisp (1973) which listed *Piscicolaria reducta* from a single specimen of *Percina caprodes*. Meyer (1940) reported finding *Piscicolaria reducta* from *Percina phoxocephala* in Illi-

nois, in New Jersey from Lepomis macrochirus (Meyer 1946), and in Maine from Notemigonus crysoleucas (Meyer 1954). Harms (1959) reported it from Ictalurus melas and I. punctatus in Kansas, and Klemm (1972) listed it from some of Connecticut and Michigan fishes.

This study extends the known range of and increases the list of host species for

Table 1.—Numbers of Fishes Examined, Numbers and Location of Leeches on Each Fish and Location Where Fishes Were Captured. C = Caudal Fin;  $P_1 = Pectoral$  Fin;  $P_2 = Pelvic$  Fin

Host	Number of Fish Examined	Location Where Fish Captured	Number and Location of Leeches on Each Fish
Percina maculata	1	Rockcastle River: Hway 80 Crossing at Laurel-Pulaski County Line; 13 Oct 1973	1 C
P. maculata	1	Kentucky River: South Fork, Booneville, Owsley County; 17 Jul 1970	1 C
P. caprodes	1	Kentucky River: South Fork, 1 mile South of Clay-Owsley County Line; 1 Aug 1970	1 C
P. evides	1	Kentucky River: Middle Fork, Hway 30 Crossing, Breathitt County; 1 Jul 1972	2 C
Etheostoma zonale	1	Same as P. evides	1 C
E. virgatum	4	Rockcastle River: Hway 80 Crossing at	2 C
		Laurel-Pulaski County Line; 13 Oct 1973	3 C 1 C 2 P <sub>1</sub> ,P <sub>2</sub>
E. caeruleum	1	Rockcastle River: Hway 80 Crossing at Laurel-Pulaski County Line; 13 Oct 1973	2 C
E. stigmaeum	2	Same as E. caeruleum	4 C 2 C
E. zonale	1	Same as E. caeruleum	1 C
E. zonale	1	Licking River: Hway 11 Crossing, Fleming County; 10 Nov 1973	2 P <sub>1</sub>
E. blennioides	1	11	2 P <sub>1</sub>

Piscicolaria reducta. As far as we have been able to determine, this leech has never been reported from *Etheostoma*.

#### MATERIALS AND METHODS

The fishes were collected as part of a survey of the Kentucky, Dix, and Licking rivers by Drs. Branson and Batch of Eastern Kentucky University. The fishes were all taken with common-sense nylon minnow seines of 0.32-cm-square mesh. All fishes used in this study were collected from riffle areas composed mainly of coarse gravel and rubble. The leeches were originally preserved in 10 percent formalin, later changed to 50 percent isopropanol, and deposited in the collection of Dr. C. K. Mather, Department of Biology, Northern Illinois University, DeKalb, Illinois, who identified the specimens.

#### RESULTS

Table 1 lists the number of fishes examined, the numbers and locations of the leeches on each fish, and the location where

the fishes were captured. All leeches were attached externally, with 77.8% attached to the caudal fin, 18.5% on the pectorals, and 3.7% on the pelvic fins.

# LITERATURE CITED

- HARMS, C. E. 1959. Checklist of parasites from catfishes of northeastern Kansas. Trans. Kan. Acad. Sci. 62(4):262.
- KLEMM, D. J. 1972. Freshwater Leeches (Annelida: Hirudinia) of North America. Environmental Protection Agency, Project 18050 ELD. Washington, D.C. 53 pp.
- MEYER, M. C. 1940. A revision of the leeches (Piscicolidae) living on freshwater fishes of North America. Trans. Amer. Microsc. Soc. 59(3):354–376.
- . 1946. Further notes on the leeches (Piscicolidae) living on freshwater fishes of North America. Trans. Amer. Microsc. Soc. 65(3):237–249.
- (1954). 1962. The larger animal parasites of the freshwater fishes of North America.
  Maine Dept. Inland Fish Game, Fish. Res. Manage. Div. Bull. 1–88.
- WHITE, G. E., AND N. H. CRISP. 1973. The occurrence of four leeches (Hirudinea: Rhynchobdellida: Piscicolidae) on Kentucky River drainage fishes. Trans. Ky. Acad. Sci. 34(3, 4):47–48.



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