

# A NEW SPECIES OF FLUKE, PARAMETORCHIS NOVEBORACENSIS, FROM THE CAT IN THE UNITED STATES

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The material upon which this paper is based was received by Dr. Maurice C. Hall, of the Bureau of Animal Industry, United States Department of Agriculture, from Ithaca, N. Y., and was turned over to me for study. The collection consists of three specimens of a fluke, unstained and mounted on slides in glycerine jelly. It has been necessary to demount, stain, and remount two of the specimens in order that certain portions of the internal anatomy might better be seen. Even so, owing to the masses of eggs in the uterus, it has been impossible for me to determine the exact position of the acetabulum and genital pore. I wish to thank Doctor Hall for the loan of the material and Dr. E. A. Chapin for kind assistance.

The new fluke is much like *Parametorchis complexus* (Stiles and Hassell). As the type specimen of *P. complexus* is available for study, I have made a careful comparison of the two forms and have noticed the following differences: The pharynx in the new species is wider than long, whereas in *P. complexus* it is longer than wide. In *P. complexus*, the intestinal branches are strongly flexuous, in the other nearly straight. The testes are nearly simple in the new species instead of being markedly lobulate. The vitellaria are connected at their anterior extremities across the dorsal aspect in *P. complexus*; in the new species there is no trace of such a commissure. Lastly, the eggs are larger in the new species than in *P. complexus*. Because of these differences I believe that these specimens represent a species new to science and I propose that it shall be called *Parametorchis noveboracensis*.

## PARAMETORCHIS NOVEBORACENSIS, new species

*Specific diagnosis*.—Length 6-6.3 mm.; breadth 2.2-2.6 mm.; body linguiform, anterior end pointed, posterior end round. Cuticle covered with spines. The preserved specimens are straw-color. The



oral sucker varies in width from  $232\mu$  to  $242\mu$ . The pharynx is immediately behind the oral sucker and is broader than long. Its width varies from  $281\mu$  to  $300\mu$ , its length from  $232\mu$  to  $242\mu$ . The

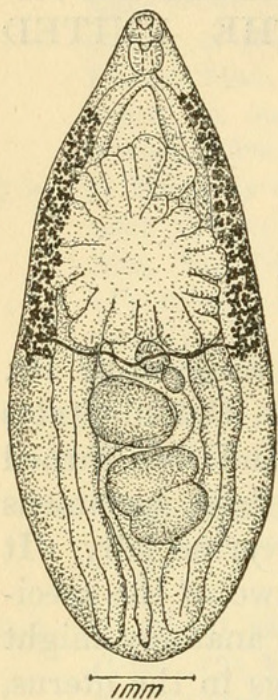


FIG. 1.—PARAMETORCHIS  
NOVEBORACENSIS

esophagus is very short. The intestinal branches extend to the posterior extremity of the body. The testes lie in the posterior half of the body, one in front of the other. The posterior testis is slightly lobate, while the anterior testis is nearly round. The ovary is composed of three or four lobules and is about  $400\mu$  long. Posterolateral to the ovary is situated the pyriform receptaculum seminis. The vitellaria are in the anterior half of the body only and lie almost entirely outside of the intestinal branches. The right gland is from 2.2 mm. to 2.3 mm. long. The left gland is a little shorter, about 2 mm. to 2.2 mm. long. The uterus is rosette-shaped, and is situated in the anterior half of the body. The excretory canal is a sigmoid lying between the testes and ending just back of the uterine complex. The eggs average  $28\mu$  to  $32\mu$  long by  $15\mu$  to  $18\mu$  wide.

*Type*.—U.S.N.M. Helminthological Collection, No. 26628, paratype No. 26629.

*Host*.—*Felis domestica*.

*Locality*.—New York (Ithaca).

*Location*.—Gall bladder.

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