Scientific Name: Neascus brevicaudatus von Nordmann, 1832

Common Name: (digenean fluke)

Taxonomy: available through ITIS

Identification: This is a fluke that attaches to the eyes of its host fish. It does not form cysts. It has two main body regions; the anterior region of the body is shaped like a heart and narrows towards the posterior end. There is a relatively small acetabulum (ventral sucker) in comparison with the oral sucker. The mouth is also relatively small, whereas the oesophageal bulb is wide at the front and narrows toward the back (Dujardin 1845; Hughes 1928).

Size: *N. brevicaudatus* measures around 0.75 mm in length (Dujardin 1845).

Native Range: This is a native Eurasian fluke, typically found in eastern Europe, upper Asia, Siberia, and the Ponto-Caspian region (including the Caspian, Black, and Aral Seas) (Shulman 1961; U. S. Department of the Interior 1993).

Nonindigenous Occurrences: *N. brevicaudatus* was collected on introduced Eurasian ruffe (*Gymnocephalus cernuus*) for the first time in 1992 from the St. Louis River, a tributary of Lake Superior (U. S. Department of the Interior 1993).

Means of Introduction: *N. brevicaudatus* probably arrived in North America with Eurasian ruffe in ballast water (U. S. Department of the Interior 1993).

Status: Established.

Ecology: *N. brevicaudatus* occurred on eyes of ruffe from which it was collected in the St. Louis River (U. S. Department of the Interior 1993). It is considered a rare species and was originally reported from eyes of *Perca fluviatilis* (von Nordmann 1832; von Nordmann 1843) and *Lota vulgaris* (Zandt 1924) in Eurasia.

Impact of Introduction

A) Realized: None known.

B) Potential: It is unlikely that *N. brevicaudatus* can help regulate introduced populations of Eurasian ruffe (U. S. Department of the Interior 1993).

Remarks: This species is also synonymous with *Holostomum brevicaudatum*, *Diplostomum brevicaudatum*, and *Tetracotyle brevicaudata*.

Voucher Specimens:

References:

Dujardin, F. 1845. Histoire naturelle des Helminthes ou vers intestinaux. Paris. 654 pp.

Hughes, R. C. 1928. Studies on the trematode family Strigeidae (Holostomidae) no. IX. *Neascus van cleavei* (Agersborg). Transactions of the American Microscopical Society 47(3):320-341.

Shulman, S. S. 1961. Zoogeography of parasites of USSR freshwater fishes. Pp. 180 – 229 in Dogiel, V. A., G. K. Petrusheveski, and Y. I. Polyanski, eds. Parasitology of Fishes. Oliver and Boyd, Edinburgh and London.

U. S. Department of the Interior. 1993. Research Information Bulletin, U. S. Department of the Interior, National Biological Survey No. 97. 2 pp.

von Nordmann, A. 1832. Mikrographische Beitrage zur Naturgeschichte der wirbellosen Thiere. Berlin. I. 118 pp.

von Nordmann, A. 1843. Sur les Helminthes, dans l'œil des animaux supérieurs. Archives de Médecine Comparée 1: 67-113.

Zandt, F. 1924. Fischparasiten des Bodenses. Centralbi. f. Backt. u. Parasitenk. (I. Abt. Orig.) 92:225-271.

Other Resources:

Author: Rebekah M. Kipp

Revision Date: June 13, 2007

Citation for this Information: Rebekah M. Kipp. 2007. GLANSIS.

Group: Category not available – Invertebrate, trematode

Lake(s): Lake Superior Drainage

Genus: Neascus

Species: *brevicaudatus*

Common Name: (digenean) fluke, trematode

Status: Established

Freshwater/Marine: All

Pathway: Shipping (arrived with host species in ballast water)

Exotic/Transplant: Exotic