

RECENT COLLECTIONS OF *ANEPEORUS SIMPLEX* (WALSH)
(EPHEMEROPTERA: HEPTAGENIIDAE) FROM THE WABASH
RIVER, INDIANA¹

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ABSTRACT: Four nymphs of *Anepeorus simplex* (Walsh) were collected from the Wabash River, Indiana, during the summer of 1973. These specimens represent a new state record and are the only recorded collection of the species from the Wabash River in thirty-one years.

DESCRIPTORS: Ephemeroptera, Heptageniidae. *Anepeorus simplex* (Walsh) Wabash River, Indiana, state record, drifting macrobenthos..

Burks (1953) reported the collection of 22 adults of *Anepeorus simplex* (Walsh) and 3 nymphs, which he believed were conspecific, from Illinois. The nymphs were collected from the Wabash River, Illinois, in 1942. Since then, specimens have rarely been found in North America and Lehmkühl (1970) states that some authorities had considered the species to be extinct.

During June and July, 1973, four mature nymphs of *A. simplex* were taken during routine drift net collections at Public Service Indiana's Wabash Generating Station in Terre Haute, Vigo County, Indiana. The drifting macrobenthos of the Wabash River were comprehensively sampled at the intake flumes and discharge canal of the power plant during the spring, summer and fall 1973 (Mancini 1974). All of the nymphs were taken with a subsurface 570 micron mesh drift net and preserved in alcohol.

Three of the nymphs were collected at an intake flume immediately adjacent to the main body of the river. The first specimen was captured on June 12 at 2125 hrs.; the second on June 14 at 0438 hrs. and the third on June 22 at 2045 hrs. The fourth specimen was taken in the discharge canal on July 13 at 2155 hrs. Each drift net sample was of four minutes duration. The times given above represent the time of sample collection completion.

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At first glance the nymphs appear very similar to *Stenonema* spp. Closer inspection, however, reveals a much broader head, predaceous mouthparts and dense fringes of fine hairs at numerous body locations as described by Burks (1953).

Photographs of mouthparts, gills and a nymph are planned for a manuscript in preparation. In addition, plans are being made for rearing the nymphs in order to positively associate the immature with the adult.

The collection of these nymphs indicates that a population of *A. simplex* still inhabits the Wabash River and also represents a new state record.

One specimen, each, is deposited at the National Museum of Natural History, Smithsonian Institution, Washington, D.C. and the Laboratory of Aquatic Entomology, Florida A&M University, Tallahassee, Florida.

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