

Distribution, including New State Records, of Fishflies in Kentucky (Megaloptera: Corydalidae)

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ABSTRACT

The fishflies *Chauliodes pectinicornis* and *Nigronia serricornis* are reported for the first time for Kentucky. Also, new county records are noted for *C. rastricornis*, *N. fasciatus*, and *Neohermes concolor*. Emergence data are presented for *N. concolor*.

INTRODUCTION

Several investigators, including Tarter et al. (1975), Watkins et al. (1975), Tarter and Watkins (1974), Peterson (1974, unpublished doctoral dissertation, Michigan State University, East Lansing, Michigan), Evans (1972, unpublished doctoral dissertation, Oregon State University, Corvallis, Oregon), Neunzig (1966), Cuyler (1965), and Davis (1903), have reported distributional, ecological, and taxonomical information of fishflies in North America.

Three eastern genera of fishflies, *Chauliodes*, *Neohermes*, and *Nigronia*, are in the subfamily Chauliodinae. Usually, the larvae of *Nigronia fasciatus* and *N. serricornis* are found under rocks in streams, whereas the larvae of *Chauliodes pectinicornis* and *C. rastricornis* are confined to logs in ponds and marshes. The larva of *Neohermes concolor* is unknown.

Hazard (1960, unpublished master's thesis, Ohio State University, Columbus, Ohio) in a revision of the genera *Chauliodes* and *Nigronia* in the Eastern United States, reported 1 record of *N. fasciatus* (Bluegrass Region) and 1 record of *C. rastricornis* (Pennyroyal Region) for Kentucky. Minshall (1968), in studying the community dynamics of the benthic fauna in a woodland springbrook, recorded *N. fasciatus* from Morgan's Creek, Meade County, Kentucky. One adult of *Neohermes concolor* was collected from Mammoth Cave National Park, Edmonson County, Kentucky

(Flint 1965). The primary objective of this paper was to report new state and county distributional records of fishflies for Kentucky.

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NEW STATE RECORDS

Chauliodes pectinicornis is reported for the first time for Kentucky. It was collected from the Appalachian Plateau and the Bluegrass Region (Fig. 1).

Boyd Co., Ashland Oil Refinery, 13 June and 29 August (1♂, 1♀; Watkins); Jefferson Co. (Covell, UL); Rowan Co. (Whiters, MSU).

Nigronia serricornis is recorded for the first time for Kentucky. The records are primarily for 5 counties in the Bluegrass Region (Fig. 1). However, a few records are from the Appalachian Plateau and the Pennyroyal Region.

Bullitt Co., Wilson Ck. (Canterbury,

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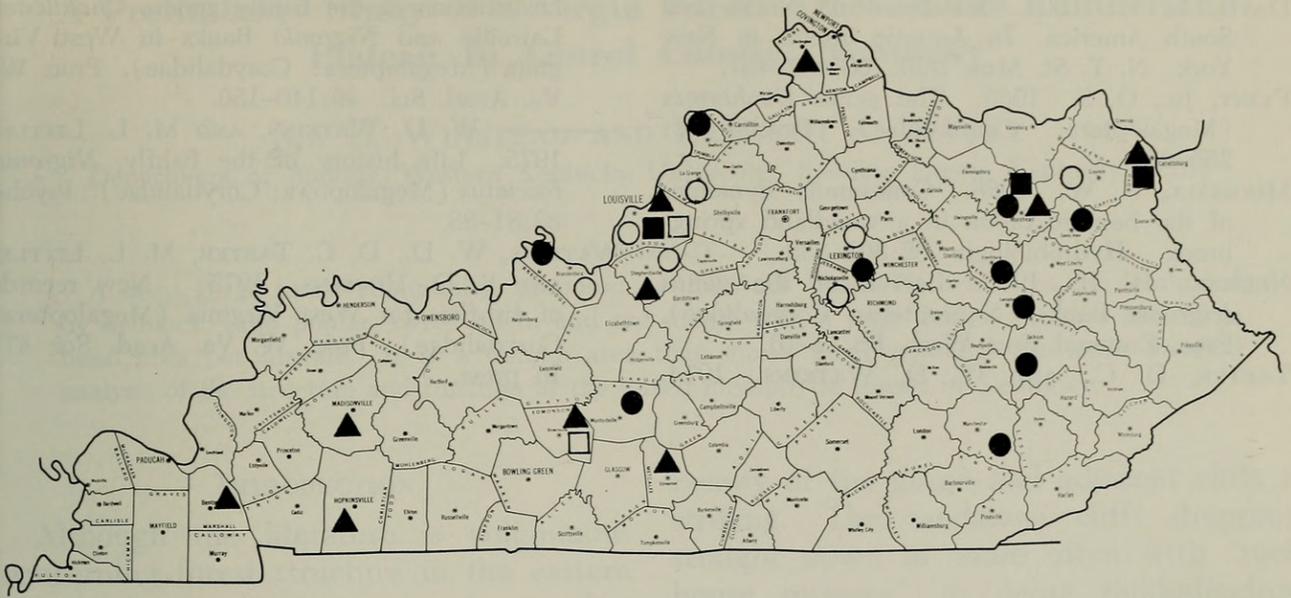


FIG. 1. Distribution of *Neohermes concolor* (triangle), *Nigronia fasciatus* (closed circle), *N. serri-cornis* (open circle), *Chauliodes pectinicornis* (closed square), and *C. rastricornis* (open square), within Kentucky.

UL); Carter Co., Tygarts Ck. (Evans, USACE); Fayette Co., Boone Ck. (Freytag, UK); Jefferson Co. (Page and Roberts, UL); Jessamine Co., Indian Falls (Freytag, UK); Meade Co., Doe Run (Rhines, UL); Oldham Co. (UL); Rockcastle Co., 23 May and 1 June (2♀♀; BRI).

NEW COUNTY RECORDS

One new record was found for *Chauliodes rastricornis*. Jefferson Co., Caperton Swamp (Canterbury, UL) (Fig. 1).

New records for *Nigronia fasciatus* are primarily from the Appalachian Plateau (6 counties) (Fig. 1). Also, records are available from Fayette and Trimble counties in the Bluegrass Region and Hart and Meade counties in the Pennyroyal Region.

Breathitt Co., Little Millseat Br. (Freytag, UK); Clay Co., Big Ck. (Early, UL); Elliott Co., Little Sandy River (Evans, USACE); Fayette Co., Bates Ck. (Freytag, UK); Hart Co., Bacon Ck. (Steele, UL); Menifee Co., Clifty Ck. (Freytag, UK) and Beaver Ck. (Hamlin, MSU); Rowan Co. (Blair, MSU); Trimble Co., Corn Ck. (Steele, UL); Wolfe Co., Swift Camp Ck. (Freytag and Young, UK) and Tight Hollow Ck., Mill Ck. (Batch, ECU).

Neohermes concolor is the most widely

distributed fishfly in Kentucky (Fig. 1). Adults are mainly from the Bluegrass and Pennyroyal regions. In addition, the fishfly occurs in the Appalachian Plateau, Western Coal Field, and East Gulf Coastal Plain.

Boone Co., Big Bone Lick Park, 29 June (6♀♀, 1♂; Freytag and Leppert, UK); Boyd Co., Ashland Oil Refinery, 12 June–16 July (44♀♀, 7♂♂; Watkins); Bullitt Co., Bernheim Forest, 18 June (1♀, 1♂; Canterbury, UL); Christian Co., 14 June (3♂♂; Moore, OSU); Hopkins Co., 25 May (1 adult; Scheibner, UK); Jefferson Co., Waverly Park, 15 June (1♀, 1♂; Brownell, UL); Marshall Co., Kenlake State Park, 22–23 June (2♀♀, 2♂♂; Freytag, UK); Metcalfe Co., 21 June (1♀; Park, UL); Rowan Co., 27 June (1♀; BRI).

Based on adult collections (55♀♀, 15♂♂) throughout Kentucky, emergence of *N. concolor* extended from 25 May to 16 July. In Boyd County, 13 collections of adults indicated that peak emergence occurred on 3 July (emergence period, 12 June–16 July).

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