

# MEGALOPTERA (Fishflies and Alderflies)

This small holometabolous order has just two families. Only the larvae are aquatic, and they occur commonly in a variety of lotic and lentic habitats. There are normally 10 larval instars, and life cycles of most species are 2 or 3 years in Wisconsin, with emergence in late spring or early summer. Larvae of all species are carnivores; nothing is known about feeding habits of the short-lived adults.

**CORYDALIDAE** — Fishflies and Dobsonflies (3 genera, 5 species)

Species in this order are among our largest insects. *Nigronia* and *Corydalis* larvae are found statewide under rocks in well aerated streams of all sizes, with *Nigronia* often being abundant. *Chauliodes* larvae are most frequently encountered in weedy ponds, but also occur in marshes, lake margins, and even in streams.

**SIALIDAE** — Alderflies (1 genus, 11 species)

Larvae of *Sialis* occur in both lotic and lentic habitats, usually burrowing in deposits of silt. They are common in littoral zones of some lakes, and may be encountered occasionally a mile or more from shore.

## KEY TO GENERA OF MEGALOPTERA LARVAE IN WISCONSIN

- 1a. Last abdominal segment with a long median filament . . . . . SIALIDAE, *Sialis*
- 1b. Last abdominal segment without a median filament, but with a pair of lateral hooks . . . . . CORYDALIDAE 2
- 2a. A large tuft of filamentous gills at the base of each lateral process . . . . . *Corydalis*
- 2b. No filamentous gills at the base of each lateral process . . . . . 3

- 3a. Dorsal respiratory tubes on abdominal segment 8 short, not reaching past middle of abdominal segment 9 . . . . *Nigronia*
- 3b. Dorsal respiratory tubes on abdominal segment 8 long, reaching past end of abdomen . . . . . *Chauliodes*

## SPECIES LIKELY TO BE FOUND IN WISCONSIN AND MOST RECENT KEY TO SPECIES

CORYDALIDAE (Adult key Davis 1903)

*Chauliodes* — *pectinicornis*, *rastricornis* (Larval key Cuyler 1958)

*Corydalis* — *cornutus*

*Nigronia* — *fasciatus\**, *serricornis* (Larval key Neunzig 1966)

SIALIDAE (Adult key Ross 1937, descr. Flint 1964)

*Sialis* — *americana*, *contigua\**, *dreisbachi\**, *glabella\**, *hasta\**, *intumata*, *itasca*, *joppa*, *mohri*, *vagans*, *velata*

## LITERATURE CITED

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# AQUATIC NEUROPTERA (Spongilla Flies)

In this relatively large holometabolous order there is one family, Sisyridae, that has become adapted to an aquatic environment. Larvae of this family are parasitic on certain freshwater sponges, mostly in the genus *Spongilla* or *Ephydatia*. Larvae hatch from eggs laid above the water, drop into the water, and then drift or swim until they find a suitable host where they can complete their development. The third instar larva crawls from the water to pupate. Larvae of *Sisyra* and *Climacia* may be found in both lentic and lotic situations, anyplace where the host species of sponge is found.

## KEY TO GENERA OF AQUATIC NEUROPTERA LARVAE IN WISCONSIN

- 1a. Dorsal tubercles pronounced, with 2 or 3 minute spines at bases of setae . . . . . *Climacia*
- 1b. Dorsal tubercles short, without minute spines at bases of setae . . . . . *Sisyra*