

# LOCALITY RECORDS OF SOME HYDRACARINA FROM ILLINOIS

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While engaged in field work in various localities in Illinois during the summer of 1940, the writer on a few occasions incidentally collected hydracarina from the shallow water areas of rivers, lakes, and ponds. A list of the species found in these collections with an indication of the localities is given in the present paper.

Although the number of species represented in the collections is exceedingly small and most of the forms reported are known to be cosmopolitan, the writer believes that the publication of this incomplete list is justified because several species, *Neumania extendens* Marshall, *Koenikea haldemani* Viets, *Unionicola crassipes* (Müller), *Lebertia distincta* Marshall, and perhaps *Mideopsis orbicularis* (Müller), are reported herein for the first time from Illinois. What is more important, perhaps, is the finding of species which are common in the lakes of Wisconsin and northern Illinois occurring abundantly in the more or less acid waters of southern Illinois. Some of the water mites listed here were collected from waters having a hydrogen ion concentration of 6.4 to 6.6. The data are too meager to give any indication of the effect, if any, of acidity as a limiting factor in the distribution of species of hydracarina.

When the water mites of southern Illinois become better known, it may be possible to point out certain differences between the hydracarina fauna of northern and southern Illinois. That there is some difference in the invertebrate fauna of the two parts of the state is already known with respect to a few groups. It has been found that certain species of ostracods are confined to the northern part and certain ones to the southern part of the state (Hoff, 1942). To some degree, the limitation of range in this group appears to be the result of availability of certain types of habitats. Ross (1941) reported that certain species of

insects are restricted to specific regions of Illinois as a result primarily of differences in vegetation. The effect of differences in vegetation upon the distribution of the aquatic invertebrates is poorly known. A detailed taxonomic and ecological study of the water mites of southern Illinois would make possible a comparison with the species of Wisconsin lakes as described by Marshall (1932, 1933, 1935, et al.).

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## LIST OF SPECIES WITH LOCALITY RECORDS

### *Hydrachna* sp.

- 1 male. Small stream, Will Co., Ill. June 30, 1940. Since the material consisted of a single male individual in which the dorsal plates could not be clearly recognized, it was not possible to determine the species.

### *Arrenurus marshallae* Piersig

- 1 male. Fox Lake, Lake Co., Ill. June 29, 1940.
- 1 male. Bottomland lake, Whiteside Co., Ill. July 6, 1940.
- 1 female. Mississippi River, Rock Island Co., Ill. July 6, 1940.

### *Arrenurus* spp.

- 1 female. Pistakee Bay, McHenry Co., Ill. June 29, 1940.
- 1 female. Lake, Vermillion Co., Ill. July 25, 1940.
- 1 female. Pond, Clay Co., Ill. August 15, 1940.
- 1 female. Pond, Massac Co., Ill. August 16, 1940.
- 2 females; 1 male. Pasture pond, Johnson Co., Ill. August 17, 1940.
- 1 female. Small lake, Lake Co., Ill. August 21, 1940. Several species are represented here but were not identified because of the lack of good male specimens.

### *Koenikea marshallae* Viets

- 1 female. Mississippi River, Carroll Co., Ill. July 6, 1940.
- 2 males. Pond, Carroll Co., Ill. July 6, 1940.
- 1 male. Pond, Massac Co., Ill. August 16, 1940.
- 1 female. Roadside ditch, Massac Co., Ill. August 16, 1940.
- 1 female. Horseshoe Lake, Alexander Co., Ill. August 16, 1940.

*Koenikea haldemani* Viets

- 1 male. Pool in stream bed, Hamilton Co., Ill. August 15, 1940.
- 1 female. Roadside ditch, Massac Co., Ill. August 16, 1940.

*Koenikea spinipes* (Wolcott)

- 1 female. Roadside ditch, Franklin Co., Ill. August 16, 1940.

*Mideopsis orbicularis* (Müller)

- 1 female. Loon Lake, Lake Co., Ill. August 7, 1940.

*Lebertia distincta* Marshall

- 1 adult, sex not determined. West Loon Lake, Lake Co., Ill. August 7, 1940. The single individual in the hands of the writer agrees with the original description (based on a single specimen) given by Marshall (1914) except for a slight and perhaps insignificant difference in the swimming hairs of the legs and the presence of two setae rather than one on the outer (extensor) margin of the second podomere of the palp.

*Limnesia fulgida* Koch

(= *L. histriónica* (Hermann))

- 2 nymphs. Bottomland lake, Whiteside Co., Ill. July 6, 1940.
- 1 nymph. Mississippi River, Carroll Co., Ill. July 6, 1940.
- 1 nymph; 1 male. Chautauqua Lake, Mason Co., Ill. July 19, 1940.
- 1 female; 1 male. Pasture pond, Massac Co., Ill. June 6, 1940.
- 1 female. Hasting's Lake, Lake Co., Ill. August 8, 1940.
- 1 female; 1 male. Pasture pond, Johnson Co., Ill. August 17, 1940.

*Neumania extendens* Marshall

- 1 female; 2 nymphs. Pasture pond, Johnson Co., Ill. August 17, 1940.
- 1 female. Hasting's Lake, Lake Co., Ill. August 8, 1940.

*Neumania* sp.

Several nymphs taken in Carroll, Whiteside, Johnson, and Henry Counties, Illinois.

*Unionicola crassipes* (Müller)

- 1 female. Illinois-Mississippi Canal, Henry Co., Ill. June 13, 1940.
- 1 nymph. Illinois-Mississippi Canal, Bureau Co., Ill. June 13, 1940.

*Piona reighardi* (Wolcott)

- 5 nymphs. Bottomland lake, Whiteside Co., Ill. July 6, 1940.
- 3 nymphs; 1 female. Ox-bow, Crawford Co., Ill. June 4, 1940.
- 5 females. Pasture pond, Massac Co., Ill. June 6, 1940.
- 1 female. Pasture pond, Johnson Co., Ill. August 17, 1940.
- 1 nymph. Illinois River, Peoria Co., Ill. August 30, 1940.
- 1 young male. Mississippi River, Carroll Co., Ill. July 6, 1940.

*Hygrobatas longipalpis* (Hermann)

- 1 male. Loon Lake, Lake Co., Ill. August 7, 1940.

## REFERENCES

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