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## A NEW NET-WINGED MIDGE FROM IDAHO (BLEPHAROCERIDAE, DIPTERA)

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An interesting undescribed species of net-winged midge belonging to the genus *Bibiocephala* Osten Sacken was taken in Idaho by my friend Mr. James Baker, of Baker, Oregon. I am very deeply indebted to the collector for many new and rare crane-flies taken during the past twenty-five years in several of the western states and provinces. The unique type is preserved in my personal collection.

### GENERAL ACCOUNT OF BIBIOCEPHALA

The genus *Bibiocephala* Osten Sacken (see Bibliography) now includes five nominal species, one occurring in Japan, the remaining four names pertaining to western Nearctic species. In attempting to clear the identities and synonymy of the American species I am reviewing briefly the series of circumstances under which the various names were proposed, the papers cited being included in the appended bibliography. Attention may be directed to two recent papers by the writer (1958, 1963) which include more detailed references to the family.

Osten Sacken (1874:564-566, figure, venation) proposed the genus *Bibiocephala*, based on the new species, *grandis*, taken at high altitudes in the mountains of Colorado, 8,000 to 10,000 feet, August 1873, represented by a single male specimen taken by Lieutenant W. L. Carpenter. Garrett (1922:91) described *Bibiocephala kelloggi* from a single female specimen taken in the city of Cranbrook, British Columbia, July 13, 1921, by Cecil B. D. Garrett. In defining the species Garrett recorded it as being a male but actually this type is a female. The specimen is in my personal collection having been acquired by purchase from Garrett. It still is uncertain whether this fly is distinct from *grandis*. Curran (1923) described *Bibiocephala grisea*, as type of a supposed new genus *Bibionus*, based on a single male taken at Nordegg, Alberta, June 26, 1921, by James Mc Dounough. This evidently is identical with *kelloggi* which is the prior name.

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In 1890 von Röder proposed the genus *Agathon*, for *A. elegantula* von Röder, of Nevada, based on the short vein  $R_3$  of the wings and the glabrous thoracic pleura. Kellogg (1903:192-195), in describing two new species from California with shortened vein  $R_3$ , referred these species to *Bibliocephala* as *B. comstocki* and *B. doanei*, not recognizing the distinctness of the two genera *Agathon* and *Bibliocephala*. This misinterpretation of the generic limits of *Bibliocephala* led to the further errors by Garrett and Curran, as mentioned. Walley (1927) recognized both genera and separated the various species correctly except for referring *Agathon comstocki* (Kellogg) to *Bibliocephala*.

The Japanese species was originally described by Matsumura (1916) as a species of *Liponeura*, under the name *Liponeura infuscata*. Kitakami (1950) again followed Kellogg's interpretation and considered that the Japanese species required a new generic name *Amika* (the Japanese name for these insects), thus creating a second synonym in *Bibliocephala*.

The presently known members of the genus are as follows:

*Bibliocephala grandis* Osten Sacken (1874); ♂.

*Bibliocephala kelloggi* Garrett (1922); ♀ (status in question).

synonym: *Bibliocephala grisea* (Curran, 1923); ♂.

*Bibliocephala nigripes* sp.n.; ♂.

*Bibliocephala infuscata* (Matsumura, 1916); ♂.

Generic synonymy:

*Bibliocephala* Osten Sacken (1874).

*Bibionus* Curran (1923).

*Amika* Kitakami (1950).

*Bibliocephala nigripes* sp.n.

MALE.— Length, about 11 mm.; wing 9x4 mm.; antenna, about 1.2 mm.

Head very large, especially the eyes which are broadly contiguous above; eyes with reduced lower section only about one-third to one-fourth the upper division. Antennae 14-segmented, short, black throughout; scape short, pruinose, pedicel much longer, dilated at apex; proximal two flagellar segments united, nearly equal in length to the succeeding three combined; eighth and succeeding segments transverse, broader than long, the penultimate about one-half broader than its length, terminal segment short-oval. Head gray.

Mesonotal praescutum light gray with two brown stripes, their anterior ends much widened; posterior sclerites and pleura generally gray. Halteres with stem light yellow, knob dark brown. Legs with coxae infuscated; trochanters yellowed, darkened apically beneath; femora yellowed on about the basal two-thirds, the tips and remaining segments intensely black; tibial spur formula 1 - 2 - 2. Wings very broad, especially on proximal portion, the anal region produced backward; wings rather strongly infuscated, the whitened secondary wing folding more conspicuous than in *grandis* but narrower and less evident than in *infuscata*.



Basal abdominal tergites broadly light gray on sides, narrower on posterior borders, the midregion more blackened, the subterminal segments more uniformly darkened; hypopygium yellowish brown.

HOLOTYPE, ♂, near Featherville, Elmore County, Idaho, in Sawtooth State Forest, 4,900 feet, July 13, 1964 (*James Baker*).

*Bibiocephala nigripes* is most readily distinguished from the previously described American species by the intensely blackened tibiae and tarsi which have suggested the specific name.

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