

***Tipula arctica* Curtis.**

Tipula arctica Curtis; Description of the insects brought home by Commander J. Clark Ross. Appendix to Ross's Voyage to the Arctic regions, p. lxxvii, Plate A, fig. 15; 1831.

MALE.—Length, 13–17 mm.; wing, 13.5–17.5 mm.

FEMALE.—Length, 20–21.5 mm.; wing, 16–17 mm.

Palpi dark brown. Frontal prolongation of the head rather elongate, blue-grey; nasus stout. Antennae (Pl. II, fig. 17) deeply serrate, each segment of the flagellum deeply incised beneath, the apical enlargement being only a little smaller than the basal swelling but not provided with verticils. Head blue-grey.

Mesonotal praescutum dull grey with three broad blue-grey stripes, the median one often narrowly split by a vitta of the ground-colour; these stripes are sometimes narrowly margined with brown; the thoracic interspaces with numerous black setigerous punctures; remainder of the thorax blue-grey including the coxae of the legs. Halteres brown, the knobs darker. Legs with the femora reddish yellow broadly tipped with dark brown; tarsi dark brown. Wings subhyaline with conspicuous brown and grey markings, cells *C* and *Sc* a little more yellowish; a small brown spot at the origin of *Rs*; stigma large, sending a cloud down the cord to cell *first M*₂; greyish brown clouds in the anal cells, at the base of cell *Cu*, at midlength and at the end of *M*₂ and in the apex of the wings; venation (Pl. I, fig. 10).

Abdominal tergites in the male with segment one, black; two to four, reddish yellow with broad sublateral stripes and an indistinct median stripe brownish grey; remaining segments dark brownish grey; sternites two to four, reddish yellow, broadly darkened laterally; terminal sternites brownish grey; the segments of the abdomen are very narrowly and indistinctly margined with paler. Male hypopygium with the ninth tergite (Pl. III, fig. 35) small with a deep and broad rounded caudal notch, the dorsum rounded into a saucer, the lateral lobes with four or five blunt teeth. The inner pleural appendage is illustrated (Plate III, fig. 37).

The female is similar to the male in most respects, but the abdomen is differently coloured being dull grey with a broad, dark brown, interrupted, dorso-median stripe; the basal tergites a little brightened on either side of the dorso-median line; abdomen not excessively elongated as in the related *T. longiventris*; dorsal shield jet-black, shiny; tergal valves of the ovipositor brownish black. The ovipositor (Pl. III, fig. 43) has the dorsal shield elongate, a little longer than the tergal valves of the ovipositor; these tergal valves have about fifteen teeth along the outer lateral margin; the sternal valves are very reduced as in this group of species, acicular, the pair forming a sublyriform organ (Pl. III, fig. 40).

This was the most abundantly represented species in the collection including nearly one-half of the material, as follows:—

Localities: West of Konganevik, Camden bay, Alaska, July 4, 1914 (F. Johansen). Four ♂'s, Nos. 196–199. Port Epworth, mouth of Tree river, Coronation gulf, Arctic Canada, July 16, 1915 (J. J. O'Neill). Two ♂'s, Nos. 102 and 104; one ♀, No. 103. Bernard harbour, Northwest Territories, June 21, 1915, one ♂, No. 1328; July 4, 1915, one ♀, No. 1076; July 7, 1915, one ♂, one ♀, Nos. 1233, 1234; July 12, 1915, two ♀, Nos. 756, 789, one ♂, No. 757; July 19, 1915, ♂, ♀, Nos. 1266, 1267; July 22, 1915, ♂, ♀, Nos. 1062, 1063; July–August, 1915, six ♂, ♀, Nos. 829–834; July 1–14, 1916, seven ♂, ♀, Nos. 420, 421, 424, 426, 427, 428, and 430.

Unless stated otherwise the material was taken by Mr. Johansen. Pupae are pinned with Nos. 197, 199, and 834.

The immature stages of this interesting crane-fly will be considered on pages 18 and 19, under the second part of the report, on the immature stages.