

harbour were uniformly pale orange, without any of the blue or purple colours of the other sex.

Four days later, August 10, 1915, I examined a very large pond or small lake inland at Bernard harbour. It has already been described (p. 8), under *Lepidurus arcticus*, which also occurred in the same lake, and it has been mentioned there how much the fairy-shrimps were appreciated as food by the other Phyllopods. The former were particularly found in the sheltered, plant-filled, shallow bights of the lake, where they were swimming briskly around, dodging away with great alertness, when I tried to catch them. Fourteen were secured (11-15 mm.), five of which were males. The former had very big claspers, well-developed genitalia, and were of a uniform pale brown colour, with intestine (food particles) orange, and the head bluish dorsally. Their colours were thus more like the males from August 4, 1915 (see above) than like the males from Martin point (p. 19). The females all had ripe light brown eggs in the ovisac and unripe, white eggs in the ovarium. In colour they had the same brilliant coloration as given above (August 4, 1915); but there was quite a variety in its intensity in the various females. Thus some of them had even the second pair of antennae, the dorsal side of the foliaceous legs and the back between these, besides the dorsal side of the body-trunk violet-brown (thus with similar colours to those of the females from Martin point (p. 19); while other females had the colours of those from August 4, 1915. The variation in colour of these females from August 10, 1915, is mainly given by the different extension and intensity of the purple (violet-brown) and deep blue pigmentation. The decided difference in colour between the males and females of this species has probably something to do with the lesser size, but greater numbers of the latter compared with the former ones; and perhaps also with the fact that the males seem to die off earlier in the fall than the females; and therefore it is of importance to the latter ones to attract the attention of the males in time to get their eggs fertilized. I kept several of these fairy-shrimps from August 10, 1915, alive, but in the course of a week they all died. I kept, however, some of the eggs all during the winter and three of them hatched next June (see p. 22).

On August 23, 1915, I secured 20 more fairy-shrimps of this species in a shallow pond situated on the north facing slope of a ridge at Bernard harbour, thus a place where the power of the sun to dry up the pond was somewhat curtailed. Five of these were males and had big claspers, and the rest were females with ripe eggs in the ovisac. In all the length was from 12 to 15 mm. I did not observe this species at Bernard harbour later in that year; and as the winter set in early (middle of September) it is possible they did not last long. Nor did I observe them at Bernard harbour in the fall of 1914, and at that time in 1916 we had left the Arctic.

OTHER MATERIAL

Rae's specimens from Cape Krusenstern, east of Bernard harbour¹ (see p. 16), recorded by Baird (1852), almost certainly belong to this species, as believed by Packard (1883, p. 337). It is extremely improbable that they could belong to the new species of *Artemiopsis*, seeing that it is very rare, found only in one pond at Bernard harbour during two years' stay, and does not seem to occur in ponds on the coastal lowland where Rae travelled, but only in certain elevated ponds inland.

The fairy-shrimps secured by the "Neptune" Expedition (see p. 16), were collected "in freshwater ponds, formed of melted snow, in the barrens at Fullerton," on the west side of Hudson bay (about lat. 63° N.). They were identified as *Branchinecta paludosa* by Prof. G. O. Sars and have been mentioned by Halkett (1905, p. 107).

¹ Not Cape Krusenstern, Alaska, as given by Murdoch (1885).