

Station 28k. Jan. 4, 1914. Camden bay, inside Collinson point, shallow water under four feet of ice; water temperature 28°.5 F. (F.J.)

The following data are derived from Mr. Johansen's notes:

One adult *Clione* was 30 mm. long, the spread of the flippers 20 mm. when alive. The muscles of the tail were clearly visible through the transparent body. The purplish tint of the tail extended with decreasing intensity forward for about 5 mm. The oral tentacles were deep rose purple; the oesophagus rose colour, as also the edge of the body around the base of the parapodia; the intestinal mass was blackish brown. The rest of the body was pale and translucent. The protruded oral tentacles were about 3 mm. long, the hook bearing captacula when fully extended appeared longer.

When swimming, the parapodia were bent toward the ventral side, returning to a nearly horizontal position, and repeating.

The animal came up with the water in a hole cut through the ice and was caught swimming just below the surface film of new ice.

Placed in a bottle of sea water which began to freeze, the animal became immobile among the ice particles. Only after arrival at camp when the ice began melting did it begin to move again. The tail is much used by the animal as a kind of rudder when changing direction of movement. When moving up or down the tail is recurved dorsally or sometimes ventrally. At times the animal would revolve in one place with the tail curved against the side of the body and the fins continually moving. When swimming horizontally it always tried to keep the ventral side downward. When at rest it remained in a vertical position, head downward, or sank upon its ventral side to the bottom of the container. The resting periods were always shorter than those of activity. The fins if brought into contact with ice or the glass of the container, or when the animal is moribund, are folded up and held close to the body. They are subject to extreme contraction when placed in a preservative.

In the warmth of the laboratory the movements decreased and the animal became sluggish, but if the container was placed in a colder situation activity revived. From time to time the animal exuded mucus which seemed to embarrass its movements. On January 5, the container was put in a cool place and the water congealed during the night. When thawed the Pteropod was still alive, though less active and this was continued for a week. January 12, it died, having been kept for eight days without renewal of water or food.

Station 37r. Inner harbour at Bernard harbour, Dolphin and Union strait, Oct. 16, 1914. Under four inches of ice in about seven feet of water at a temperature of 30°.1 F. One adult *Clione*. (F.J.)

Station 43a. Off Cockburn point, Dolphin and Union strait, September 13, 1915. Water temperature 32° F. about fifty fathoms deep. One *Clione* obtained. (F.J.)

In view of the fact that so many good dissections have been published of this species, and that nearly all the specimens were immature and not in the best condition, it is not thought worth while to attempt anatomical work upon them.

It may be noted that young are more deeply tinted than the adults and one specimen of which Mr. Johansen has made a rough coloured sketch is quite noticeably red, while others are less so.