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NEOSABELLIDES ALASKENSIS, A NEW SPECIES OF POLYCHAETOUS ANNELID FROM ALASKA

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Ampharetidae

NEOSABELLIDES HESSLE

Neosabellides alaskensis, new species

A single specimen labeled as collected at Nunivak Island, Alaska, by Captain W. Williams of the yacht "Stranger" on July 20, 1930, in eight to ten fathoms in association with ascidians. The specimen is about 18 mm. long, the greatest body width being 1 mm. The thorax and abdomen are of about equal length, the posterior end of the thorax being only a little narrower than the anterior. The anterior end of the abdomen is definitely narrower than the thorax, and it tapers to a very narrow point at the pygidium. Apparently there are normally two heavy anal cirri, but only one remains. This is about as long as the last three body somites.

The prostomium (Fig. 1) has three lobes, a median one which is sharp-pointed at the anterior end and is divided by a transverse fissure at about its middle. On either side of this is a marginal lobe narrower than the median and roughly quadrangular in outline but whose inner margin is prolonged nearly to the end of the median lobe. On a dorsal view the peristomium shows as a narrow lobe on either side, extending to a little short of the end of the prostomial lobe and slightly widening at the posterior end. Behind the prostomium is a rectangular area which I think is the dorsal peristomial surface. On a lateral view (Fig. 2) the peristomium appears as a rounded body, and ventrally (Fig. 3) it has a rectangular outline, the margins being slightly incurved. The tentacles may be entirely withdrawn into the buccal cavity. From the view drawn in Fig. 3, only one of these showed, but others are visible from a dorsal view. What I take to be Hessle's "tentacular membrane" is the lobed membrane shown in the figure. Since the tentacles are mostly withdrawn I cannot give details of their number or length. They are uniform in width and carry on either side a row of slender protrusions, each about as long as the tentacle diameter. These are rigid so that they are never bent but form a row of "spikes." This "gefedert" structure of the tentacles is one prominent characteristic of the genus *Neosabellides*.

On the ventral surface, the peristomium car-

ries a prominent crescent-shaped groove which is as definitely and sharply marked as is any intersomatic constriction (Fig. 3). It seems not impossible that there may be here a segmental abnormality and that this may represent the anterior border of somite 2 (see below). The first well-marked somite behind the peristomium carries dorsally the four pairs of gills. These are rather heavy and extend beyond the end of the prostomium. Unfortunately these were broken just before the study was finished, and only the stumps remain. Of these, six (three on a side) form a compact row in the form of a very flat inverted V (Fig. 4). The fourth pair is much smaller than the others and situated posterior to them.

The first parapodia (Fig. 4) appear on the somite behind the gills and are small, almost globular bodies. Those of the following somite are much larger but of about the same form. Toward the posterior end of the thorax the parapodia become longer but are never very prominent. There are no cirri. In the thorax are two types of setae, one slender and sharp-pointed, the other very much larger than these and with striated stalks. I was unable to find any entire specimens and can give no account of their structure. The uncini are in a short, oval torus situated ventroposteriorly to the seta tuft. Each uncinus (Fig. 5) is small, with four sharp, recurved teeth and a rounded base. Uncini similar to those in the thorax occur in the abdomen, there being no setae. The tori are at the ends of flattened parapodia, which extend to some distance straight from the body surface. In both thorax and abdomen the uncini are in a single, short row.

The type is No. 3265 in the collections of The American Museum of Natural History.

REMARKS: I have provisionally assigned this specimen to the genus *Neosabellides* because it agrees more closely with this than with the description of any other genus of the Ampharetidae which I have been able to find, and it seems unwise to name a new genus on the basis of one, possibly abnormal, specimen. According to diagnoses given by Hessle (1917, p. 90) and by Fauvel (1927, p. 226), there should

be three pairs of gills and no setae on the third somite. As noted above, the Alaska specimen has four pairs of gills and setae on somite 3. Hessle (*ibid.*, pp. 103-104)

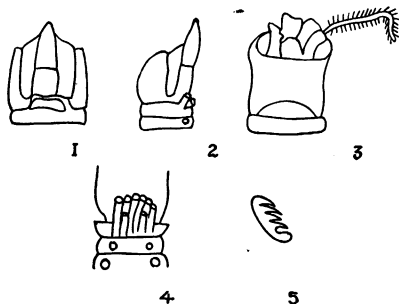


Fig. 1. Dorsal view of head showing the three-lobed prostomium ($\times 10$).

Fig. 2. Lateral view of head showing pro- and peristomium, with gill-stumps on somite 2 and parapodium on 3 ($\times 10$).

Fig. 3. Ventral view of head, showing the large peristomium with tentacle and tentacular membrane protruding from the mouth ($\times 10$).

Fig. 4. Dorsal view, showing stumps of gills on dorsal surface of somite 2 with first two pairs of parapodia on the two following somites ($\times 10$).

Fig. 5. An uncinus from the thorax ($\times 250$).

gives no figures for his new genus but evidently intends *Sabellides elongatus* Ehlers as his genotype and further suggests that *Sabellides oceanicus* Fauvel may belong in this new genus. In the original description of this latter species (1914, p. 288), Fauvel is very uncertain about the number of gills and thought it quite possible that a fourth pair occurs, but in a later reference (1927, p. 232) he transfers the species to *Neosabellides* without any mention of the gill number. I would venture to suggest that possibly a fourth pair of gills had been overlooked by both Hessle and Fauvel. According to Hessle (*ibid.*, p. 90) the presence of setae on the third somite puts a specimen in the genus *Glyphonostomum*, but that genus has smooth tentacles and hence my specimen does not fit there. The suggestion may be too fanciful to have any value, but it seems not impossible that the peculiar grooving on the ventral peristomial surface indicates the anterior margin of somite 2. If this should prove to be true, the specimen belongs where I have put it.

LITERATURE

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HESSLE, CHRISTIAN

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