

AMERICAN MUSEUM NOVITATES

Number 338

Published by
THE AMERICAN MUSEUM OF NATURAL HISTORY
New York City

Jan. 4, 1929

59.51,7 L (79.7)

LUMBRINEREIS BICIRRATA, A NEW POLYCHÆTOUS ANNELID FROM PUGET SOUND

A. L. TREADWELL

The following is the description of a new species of *Lumbrinereis* collected in Puget Sound, State of Washington, by Dr. V. E. Shelford, and submitted to me for study.

Lumbrinereis bicirrata, new species

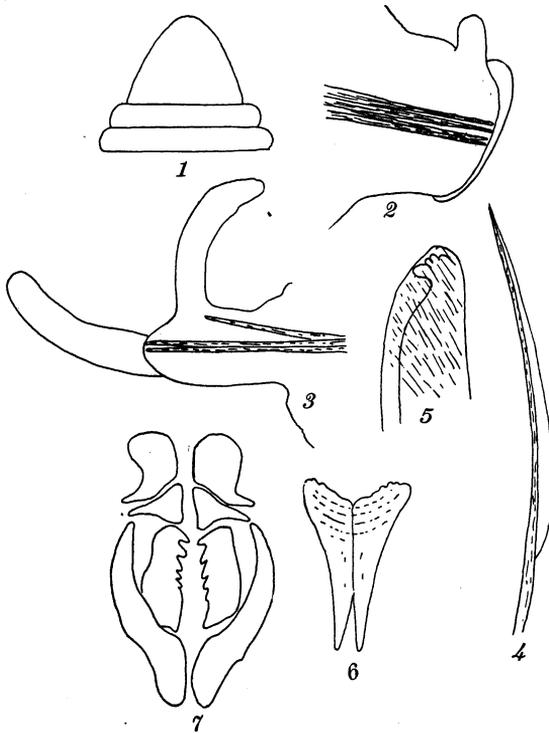
The size of the specimens varies considerably, but one of medium size and incomplete posteriorly, measured 195 mm. in length with a prostomial width of 3 mm. and a width at the 20th somite of 7 mm. This latter width was continued through the greater part of the body, but toward the posterior end there was a definite narrowing. None of the specimens was complete and no information is available concerning the structure of the pygidial region.

The prostomium (Fig. 1) is roughly triangular in outline with the anterior angle rounded. Its greatest length is a trifle more than the length of the three first somites. The peristomium is dorsally not more than one-quarter as long as the prostomium and is slightly shorter than somite 2. On the ventral surface somites 1 and 2 coalesce to form a swollen posterior lip to the mouth. Laterally, each end of this lip is continued into a smaller fleshy ridge which bends toward the median line and doubles back on itself, to merge laterally with the postero-lateral angles of the prostomium. These two ridges are in contact on the median line. Somites behind the second gradually increase in width up to the 20th, where the greatest body width occurs.

The first parapodium is on somite 3. This and later ones are similar in form but there is a regular increase in size relatively to the increase in body diameter. In each parapodium there is a fleshy anterior lip and a longer, thinner, posterior one. In the region of somite 25 (Fig. 2) the basal portion of the parapodium becomes longer, and the two terminal lips are of about equal length, the apex of the posterior one being the less pointed of the two. On the posterior lip is a cirrus-like outgrowth, extending dorso-laterally. Behind the general region of the 100th somite, each lip develops a cirrus-like process, that of the posterior lip extending dorsally, that of the anterior lip more nearly laterally. These processes progressively increase posteriorly until in the posterior somites they are equal in length to one-half the body diameter (Fig. 3). A somewhat similar condition was described by Moore in *Lumbrinereis erecta* (1904, Proc. Acad. Nat. Sci., Phil., p. 490), but while in that species the posterior lip bears such a process, it is not present on the anterior one. *L. erecta* differs, also, from *bicirrata* in the form of the jaw.

The 25th parapodium has 4 or 5 aciculæ. In later ones the number is reduced to 3, one of which (Fig. 3) bends toward the dorsal surface and is smaller than the others.

The anterior setæ are prominent, probably from 20 to 25 in a bundle, but so many are broken that it is difficult to get the correct number. The shafts are very slender (Fig. 4) but vary in length. The apical portion is about as long as the shaft and is slightly bent. There is a wing along the convex margin. In posterior somites this type of seta disappears and its place is taken by another (Fig. 5). These are very much stouter



- Fig. 1. Prostomium, $\times 27.5$.
 Fig. 2. Twenty-fifth parapodium, $\times 27.5$.
 Fig. 3. Posterior parapodium, $\times 27.5$.
 Fig. 4. Anterior seta, $\times 67.5$.
 Fig. 5. Posterior seta, $\times 250$.
 Fig. 6. Mandible, $\times 9$.
 Fig. 7. Maxilla, $\times 9$.

than those in anterior somites. They narrow abruptly toward the end and the apex carries several teeth, of which the ventralmost is the largest. The terminal portion is covered by a hood of the usual type, i.e., a flat plate on either side extending beyond the apex of the seta. In full-face, the end of the seta shows between the two plates. In profile, the end seems to be covered by a transparent hood. So many setæ were

broken that I was unable to determine the precise part of the body where the change from one of these types to the other occurs.

The mandibles (Fig. 6) are light brown in color, with very dark antero-lateral angles and concentric lines near the cutting edge. They are rather short and broad. The maxillæ (Fig. 7) are very black in color. The carriers and forceps are strong. The right paired plate has 4 obvious teeth with a small 5th which is hardly a true tooth, while the left one has 5. Terminally there is on either side a pair of plates of which the proximal one is slightly the smaller.

The type was collected at Diamond Point, Friday Harbor, and is in The American Museum of Natural History (Cat. No. A. M. N. H. 1692).

