

Puget Sound Polychaetes: Oeononidae



Family Oeononidae

General characters (from Hilbig, 1995)

- Superficially look like Lumbrineridae.
- Lumbrineridae have hooks in neurosetae, Oeononidae have no hooks, just simple limbate setae.
- Shape of prostomium is dorsoventrally flattened in Oeononidae; Lumbrinerids have conical or globular prostomia (Puget Sound lumbrinerids generally conical).
- Bodies of oeononids are stiff and wiry, skin often tough.
- If no setae and ambiguous prostomium, then must look at jaws to distinguish between the two families.

Genus *Drilonereis*

General characters (from Banse and Hobson, 1974)

- Parapodium with acicular seta.
- Maxilla I distally falcate, with or without teeth at base.
- Prostomium greatly flattened dorsoventrally.

General characters (from Hilbig, 1995)

- Notopodia absent or reduced to small papilla, sometimes with fascicle of delicate internal aciculae.
- Prostomium without appendages.
- Setae include limbate capillaries and thick, sometimes emergent, acicular spines, at least in middle and posterior parapodia.
- First maxilla falcate (hook-shaped, distally blunt and curved); small denticles, if present, restricted to basal part.

Drilonereis longa Webster, 1879

From Banse and Hobson, 1974

- Maxilla I with 3-5 teeth, maxilla II with 6-8 teeth, maxilla III and IV unidentate; mandibles present, small.
- Posterior parapodia with elongate pre- and postsetal lobes.

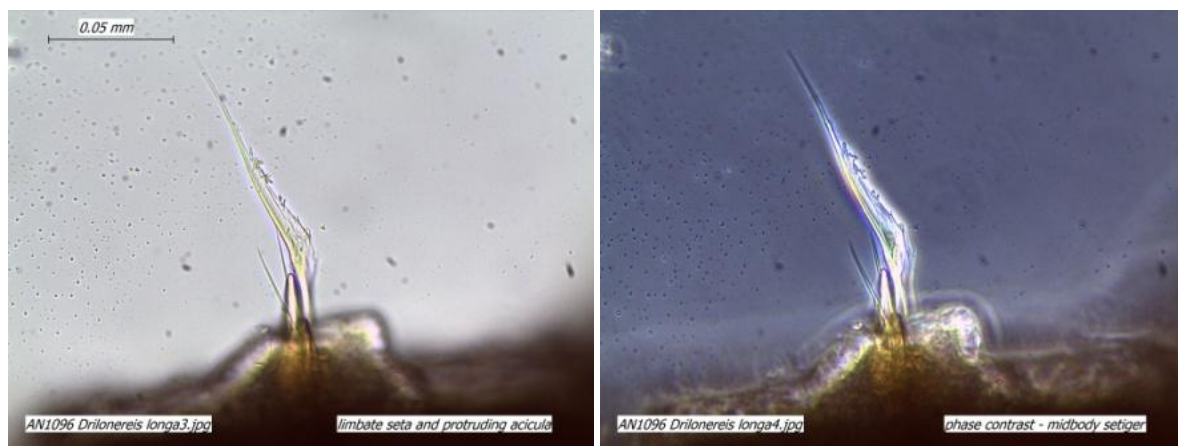
Family Oeononidae

From Hilbig, 1995

- Acicular spines present from setiger 1.
- Anterior parapodia minute, with short pre- and postsetal lobes.
- Postsetal lobes gradually turning digitiform in middle setigers.
- Presetal lobes turning digitiform in posterior setigers and becoming subequal to postsetal lobes.
- Parapodia thus distinctly bilobed in posterior third of body.
- MI with 1-5 basal teeth, MII with 3-5 teeth, MIII and MIV with 1 tooth and sometimes additional minute dentitions.



Whole body, lateral view (l); anterior and prostomium, lateral view (r)



Limbate capillary setae and protruding acicula; bright field (l), phase contrast (r)

Genus *Notocirrus*

General characters (from Banse and Hobson, 1974)

- Parapodium with acicular seta.
- Maxilla I with teeth throughout length.
- Prostomium not greatly flattened.

Notocirrus californiensis Hartman, 1944

From Hartman, Allan Hancock Pacific Expeditions, vol 10

- Prostomium with 4 eyespots.
- Maxilla II with 7 teeth on one side and 13 on the other.
- Parapodial aciculae clear yellow.

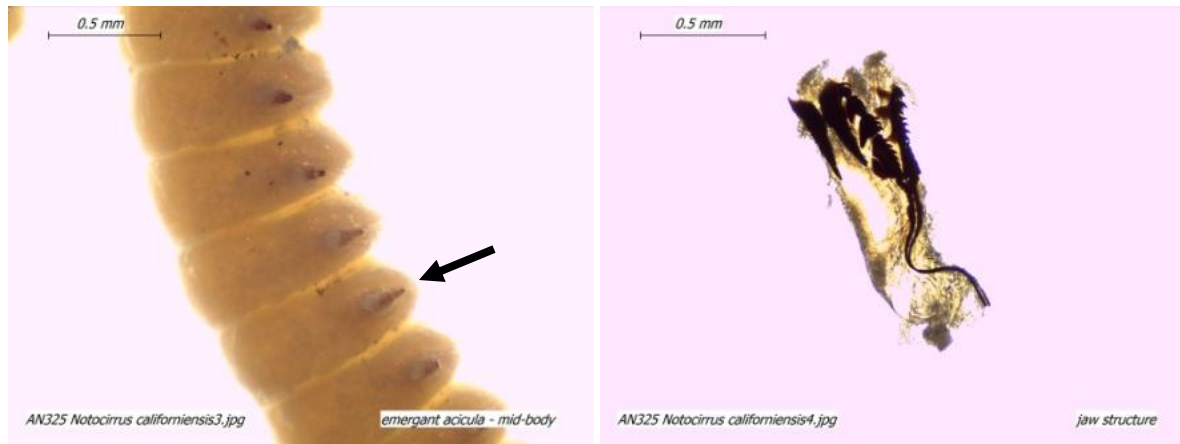
From Hilbig, 1995

- Notopodia absent or reduced to small papilla, sometimes with fascicle of delicate internal aciculae.
- Prostomium without appendages.
- Setae include limbate capillaries and thick acicular spines, at least in middle and posterior parapodia.
- First maxilla dentate along entire cutting edge.

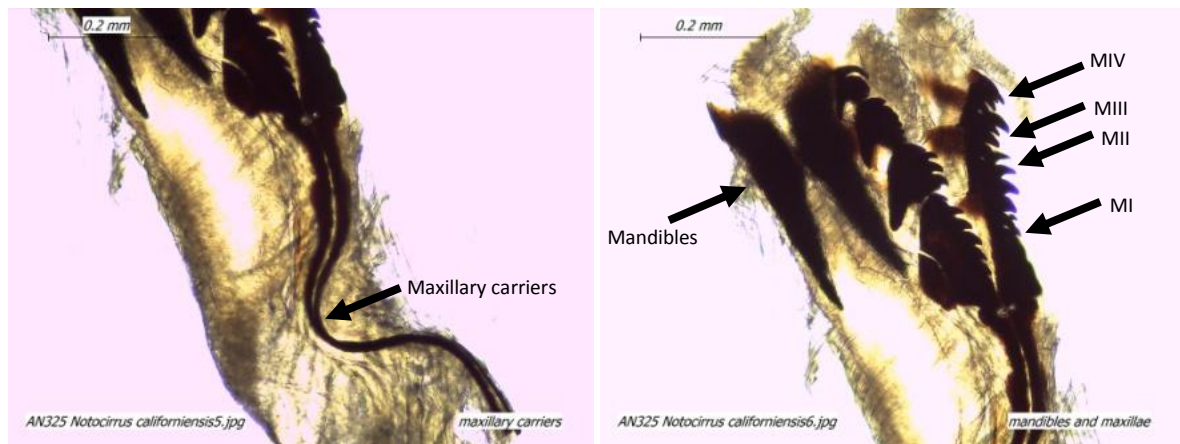


Prostomium, antero-lateral view, eyespots (l); whole body, including prostomium, pygidium (r)

Family Oeononidae



Emergent acicula, midbody lateral view (l); jaw structure removed from specimen (r)



Elongate maxillary carriers (l); mandibles, maxillae I-IV (r)

Additional species of Oeononidae found in Puget Sound

Drilonereis falcate

Drilonereis nuda

Family Oeononidae

Literature

Banse, K. & Hobson, K.D. 1974. Benthic errantiate polychaetes of British Columbia and Washington. Bull. Fish. Res. Board Can. 185, 111 pages.

Hilbig, B., 1995. Chapter 12, Family Oeononidae Malmgren, 1867, emended Orensanz, 1990. Pages 315-339. IN: Blake, J. A., B. Hilbig, and P.H. Valentich-Scott (editors). Taxonomic Atlas of the Benthic Fauna of the Santa Maria Basin and Western Santa Barbara Channel. Volume 5 - The Annelida Part 2. Polychaeta: Phyllodocida (Syllidae and scale-bearing families), Amphinomida, and Eunicida. Santa Barbara Museum of Natural History, Santa Barbara, California. ISBN 0-93649-10-7.

Hartman, O. 1944. Polychaetous Annelids Part V. Eunicea. Allan Hancock Pacific Expeditions 10:1-237.

More Information

More information about Puget Sound benthic invertebrates is available at:

<http://www.ecy.wa.gov/programs/eap/sediment/>

This document is available on the Department of Ecology's website at

<https://fortress.wa.gov/ecy/publications/SummaryPages/1403243.html>.

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These notes were compiled by Kathy Welch and Maggie Dutch after a polychaete workshop held on November 13, 2013 at the Department of Ecology.