COPEPODA
SUB-ORDER: CALANOIDA
Family: Eucalanidae
(By G. P. Farran†, revised by W. Vervoort)
1951.
1. Eucalanus elongatus (Atlantic form); 2, Eucalanus attenuatus; 3, Eucalanus crassus; 4, Rhincalanus nasutus; 5, Mecynocera clausii; 6, Rhincalanus cornutus.

a, ♀ dorsal; b, ♂ dorsal; c, ♀ head ventral; d, ♀ head dorsal; e, ♀ abdomen dorsal; f, ♀ 5th foot; g, ♂ 5th feet.

(Fig. 2a after Sewell; Figs. 3a, 4a, 5a, e, original; remainder after Giesbrecht).
Family EUCALANIDAE

Body elongate, more or less transparent. Cephalon with two filiform rostral appendages, fused with or separate from 1st thoracic somite. Abdomen 3-segmented or — in some species — 4-segmented; anal segment separate from or fused with furca. 1st feet with 2- or 3-jointed exopods and 1- or 2-jointed endopods. 2nd to 4th feet with both rami 3-jointed; 3rd joints of exopods each with 3 spines on outer edge and 5 setae on inner edge. Female with 5th feet absent or composed of a single ramus, found on each side, which may have as much as 5 joints. Males of some species with rudimentary endopods on 5th feet; usually these are uniramose.

Genus EUCALANUS Dana, 1855

Females with 3- or 4-segmented abdomen, last (anal) segment fused with furca. 1st feet each with 3-jointed exopod and 2-jointed endopod. 5th feet absent in female. Males with reduced oral parts; 5th feet uniramose, not natatory, sometimes present on one side of body only.

1. *E. elongatus* (Dana, 1849). Head triangular. Female with 5th thoracic segment terminating into blunt points (in Atlantic form!), genital segment longer than broad, abdomen 4-segmented. Oceanic, surface to deep water.

2. *E. attenuatus* (Dana, 1849). Body slender. Female with triangular head, constricted near the base of 1st antennae. Abdomen 3-segmented, genital segment as wide as long. Male with triangular or rounded head, with distinct constriction.

Genus RHINCALANUS Dana, 1855

Females with 3-segmented abdomen, anal segment fused with furca. Frontal part of cephalon much produced; cephalon fused with 1st thoracic somite. 1st feet each with 2-jointed exopod and endopod. 5th feet not natatory, uniramose on both sides, 3-jointed. Male with left 5th foot biramose, right 5th foot uniramose.

4. *R. nasutus* Giesbrecht, 1888. Female with much produced, triangular head, which completely hides the rostral filaments. Oceanic, surface to deep water.

R. corvus (Dana, 1849), is at once distinguished by the curious, anchor-shaped head in both sexes. It has not yet been recorded in the area under consideration, but may possibly occur (Fig. 6).

Genus MECYNOCERA I.C. Thompson, 1888

Cephalon separate from 1st thoracic somite. Females with short, 3-segmented abdomen, anal segment and furca separate. 1st feet each with 3-jointed exopod and 1-jointed endopod. 5th feet uniramose, 5-jointed on both sides. Males unknown.


<table>
<thead>
<tr>
<th>Species</th>
<th>Length in mm.</th>
<th>Head</th>
<th>Abdomen in female</th>
<th>Genital segment in female</th>
<th>Genital segment and furca in female</th>
<th>1st antennae</th>
<th>5th feet in male</th>
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</thead>
<tbody>
<tr>
<td><em>E. elongatus</em></td>
<td>♀ 4.4—6.5; ♂ 3.6—5.0</td>
<td>triangular</td>
<td>4-segmented</td>
<td>longer than wide</td>
<td>fused</td>
<td>as long as or slightly longer</td>
<td>both rami 4-jointed, right shorter than left</td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>than body</td>
<td>right 3-jointed, shorter than 4-jointed left</td>
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<tr>
<td><em>E. attenuatus</em></td>
<td>♀ 3.5—6.0; ♂ 3.0—4.3</td>
<td>triangular, constricted</td>
<td>3-segmented</td>
<td>as long as wide</td>
<td>fused</td>
<td>as long as or slightly longer</td>
<td>right absent, left 4-jointed</td>
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<tr>
<td><em>E. crassus</em></td>
<td>♀ 2.9—4.0; ♂ 2.7—3.5</td>
<td>rounded</td>
<td>3-segmented</td>
<td>wider than long, onion-shaped</td>
<td>fused</td>
<td>as long as body</td>
<td>right uniramose, 3-jointed; left 2-jointed endopod, longer than 1-jointed exopod</td>
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<tr>
<td><em>R. nasutus</em></td>
<td>♀ 3.8—5.4; ♂ 3.5—5.0</td>
<td>triangular</td>
<td>3-segmented</td>
<td>as wide as long</td>
<td>fused</td>
<td>as long as body</td>
<td>unknown</td>
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<tr>
<td><em>M. clausii</em></td>
<td>♀ 0.75—1.2; ♂ ?</td>
<td>rounded</td>
<td>3-segmented</td>
<td>as wide as long, globular</td>
<td>separate</td>
<td>over twice as long as long</td>
<td></td>
</tr>
</tbody>
</table>

References to Descriptions and Figures.

1. E. elongatus; Giesbrecht, 1892, Pl. 11, Figs. 2, 7, 12, 20, 25, 32, 36, Pl. 35, Figs. 1, 2, 13, 23, 24. T. Scott, 1894, Pl. 1, Figs. 15—23 (as E. spinipes). Giesbrecht & Schmeil, 1899. Wollenden, 1904, Pl. 9, Figs. 3, 4 (as E. atlanticus). Esterly, 1905, Fig. 6 (Pacific form!). Van Breemen, 1908, Figs. 10, 11 (as E. elongatus and E. atlanticus). With, 1915, Pl. 1, Fig. 5, Textfig. 9. Candeias, 1926, Pl. 2, Figs. 1, 2 (as E. atlanticus). Sewell, 1929, Fig. 13. Wilson, 1932, Fig. 15. Vervoort, 1946.
2. *E. attenuatus*: Giesbrecht, 1892, Pl. 3, Fig. 1, Pl. 11, Figs. 1, 5, 11, 13, 16, 18, 24, 27, 31, 40, Pl. 35, Figs. 3, 6, 17, 25, 34, 37. Giesbrecht & Schmel, 1898. Esterly, 1905, Fig. 7. Van Bremen, 1908, Fig. 12. Candeias, 1926, Pl. 2, Figs. 3–6 (as *Eucalanus* sp.?). Wilson, 1932, Fig. 16. Vervoort, 1946. Sewell, 1947, Figs. 6, 7.

3. *E. crassus*: Giesbrecht, 1892, Pl. 11, Figs. 8, 10, 15, 17, 21, 22, 29, 33, 35, 38, Pl. 35, Figs. 5, 8, 20, 26—29. Giesbrecht & Schmel, 1898. Esterly, 1905, Fig. 8. Van Bremen, 1908, Fig. 13. With, 1915, Pl. 1, Fig. 7. Text-fig. 11. Rose, 1953, Fig. 12. Vervoort, 1946.

4. *R. nasutus*: Giesbrecht, 1892, Pl. 2, Fig. 4; Pl. 9, Figs. 6, 14, Pl. 12, Figs. 9–12, 14, 16, 17, Pl. 35, Figs. 46, 47, 49. Giesbrecht & Schmel, 1898. Sars, 1901–03, Pls. 6, 7. Esterly, 1905, Fig. 10. Van Bremen, 1908, Figs. 11, 12. With, 1915, Pl. 1, Fig. 4. Schmaus & Lehnhofer, 1927, Figs. 3, 15–19, 21, 26. Sewell, 1929, Fig. 19a. Wilson, 1932, Fig. 18. Rose, 1933, Fig. 22. Gurney, 1934, Fig. 3, 1. Vervoort, 1946.


**References to Work on Biology.**


Cleve, P. T., 1900. The Seasonal Distribution of Atlantic Plankton Organisms.


— 1911. idem, Vol. 2.


Giesbrecht, W. & O. Schmel, 1898. Das Tierreich, Vol. 6, Copepoda, 1, Gymnoplea.

<table>
<thead>
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<th>Distribution Species</th>
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<tr>
<td>Gulf of Bothnia</td>
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<td>Gulf of Finland</td>
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<td>Baltic proper</td>
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<tr>
<td>Belt Sea</td>
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<tr>
<td>Kattegat</td>
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<tr>
<td>Skagerrak</td>
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<tr>
<td>Northern North Sea</td>
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<tr>
<td>Southern North Sea</td>
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<td>English Channel (eastern)</td>
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<td>English Channel (western)</td>
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<td>Bristol Channel and Irish Sea</td>
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<td>South and West Ireland</td>
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<td>Norwegian Sea</td>
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<tr>
<td>Faroe Shetland Area</td>
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<tr>
<td>Faroe Iceland Area</td>
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<td>Barents Sea</td>
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References.


