The Marine Fauna of the Cullercoats District

ARTHROPODA 3e8

CRUSTACEA; EUPHAUSIACEA

by

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Order EUPHAUSIACEA Boas

Euphausiidae Dana

Nyctiphanes couchii (Bell)

Adult: Holt & Tattersall 1905, p.104, pl.17; Einarsson 1945, p.43, fig.16. Juv.: Einarsson 1945, p.25, fig.9; Lebour 1925, p.816, pls.1-5; Lebour 1924, p.406, pls.1,2,3 and 6, figs.5-8.

In stomachs of 10 whiting caught in 25-40 fms. between Middlesbrough and Longstone (Carr 1909): A number of early calyptopis 3-7 miles E. Beadnell, Sep. 1921 (Jorgensen 1926): In plankton in area approx. 55° to 55°30'N and from coast to 0° long. 8-14 Jul. 1922 (Savage 1926): In moderate numbers in herring stomachs from area approx. 54°45' to 55°30'N and from coast to 0°30'W, May to Sep. 1922-3 (Hardy 1924): 7 at 55°10'N, 1°0'W over 52 fms. on 27 Sep. 1923 (Wimpenny 1933): Found in small numbers within area approx. 54°40' to 55°20'N and from coast to 0° long. 24-29 Jun. 1926; also occasionally in small numbers in herring stomachs from off Shields, summer 1926 (Savage 1931): In herring stomachs, Shields Ground, May-Sep. 1930-4 (Savage 1937): An average of 2-6 adults and 0.6-1.9 cyrtopias per 10 cub. m. in plankton recorder catches for 1948 from area approx. 55°30' to 55°50'N and 0° to 2°W (Glover 1952).


Meganyctiphanes norvegica (M. Sars)

Adult: Holt & Tattersall 1905, p.105, pl.16; and p.102, pl.24, figs.6-9 (as Euphausia lanei n. sp): Einarsson 1945, p.41, fig.15. Juv.: Einarsson 1945, p.21, fig.8; Lebour 1924, p.412, pls.4,6, figs.1-4; Lebour 1925, p.822, pls.6-9; MacDonald 1927, p.785, pl.1

In plankton hauls off Shields in area approx. 55° to 55°30'N and from coast to 0° long. 8-14 Jul. 1922 (Savage 1926): In moderate
numbers (large in Sept. 1923) in May-Sept. 1922-3 in adult herring stomachs from stations in area approx. 54°45' to 55°30'N and from coast to 0°30'W (Hardy 1924): Relatively abundant in herring stomachs from Shields area, summer 1926; in plankton, young stages, not numerous, 31 May to 4 Jun. 1926 in area approx. 54°40' to 55°40'N and from coast to 0° long., and young stages 24-29 Jun. 1926 in area approx. 54°40' to 55°20'N and from coast to 0° long. principally E. of Sunderland, and 100 specimens in haul at 55°33'N, 1°7'W on 4 Sep. 1926 (Savage 1931): In herring stomachs, Shields Ground, May-Sep. 1930-4 (Savage 1937):


**Thysanoessa longicaudata (Krøyer)**


One specimen in washed-up material at Redcar, 10-12 Feb. 1892 on which gulls had previously been feeding at sea (Norman 1892, Norman & Brady 1909): “... the fully grown adult ... has been taken recently in Cullercoats Bay” (Jorgensen 1926): Several hundred in midwater and bottom nets, May 1921, E. of Blyth and at Longstone, and a few in July 1921, E. of Blyth and off Newbiggin, also a few in Sep. E. of Beadnell (Jorgensen 1923, 1926): An average of more than 10 furcilia of *Th. longicaudata* and *Th. inermis* combined per 10 cub. m. in plankton recorder catches from 1948 from area approx. 55°30' to 55°50'N and 0° to 2°W (Glover 1952).

**Thysanoessa raschii** (M. Sars)

*Adult*: Einarsson 1945, p.51, fig.20; Zimmer 1909, p.11, figs.13,14 (as *Rhoda raschii*); Hansen 1911, p.42, (no figs.). *Juvi*: Einarsson 1945, p.54, fig.13; Mac Donald 1928, p.57, pl.1-7.

An average of 0.6-1.9 adults, 0.6-1.9 cypriotes and 0.1-0.5 furculae per 10 cub. m. in plankton recorder catches for 1948 in area approx. 55°30' to 55°50'N and 0° to 2°W (Glover 1952).

About 150 adults in coarse net haul at 20 fms. 5 miles E. Blyth lighthouse 14 Jan. 1952, with about the same number of *Th. inermis* (q.v.); 2 adults in coarse net haul at 15 fms. 1 mile E. Sow Buoy, on 6 Mar. 1952; adults fairly numerous and some late cypriotes in coarse net haul in Blyth Bay over 5 fms. on 24 Oct. 1952, together with *Nycitiphanes couchii*; furculae present in bottom sledge net hauls in summer 1950 in 5 fms. Blyth Bay and in 14 fms. N.E. Sow Buoy; at latter locality also in tow netting, Apr. 1952; one female in Hensen net haul off Farne Islands on 22 Apr. 1953 (J.B.): In stomachs of whiting caught by seine-net in 20-35 fms. 8-12 miles E. to N.E. Blyth Mar. to Dec. 1954 and May-Jul. 1955 (Goonewardene 1956).

**Thysanoessa inermis** (Krøyer)

*Adult*: Einarsson 1945, p.46, figs.18,19; Hansen 1911, p.8, (no figs.); Sars 1883, p.52, pl.1, figs.15-18 (as *Thysanoessa borealis* n.sp. and *Euphausia inermis* (Krøyer)). *Juvi*: Einarsson 1945, p.30, fig.12; Lebour 1924, p.415, pl.5, figs.3-6; pl.6, figs.9-12; Lebour 1926, p.1, pls.1-5.

"... young adults ... have been taken in the plankton only once" off Northumberland coast (Jorgensen 1926); relatively abundant in herring stomachs off Shields, summer 1926; young stages, not numerous, in plankton 31 May to 4 Jun. 1926 in area approx. 54°40' to 55°40'N and from coast to 0° long., and young stages 24-29 Jun. 1926 in area approx. 54°40' to 55°20'N and from coast to 0° long. principally E. of Sunderland, and 200 specimens in haul at 55°33'N 1°7'W on 4 Sep. 1926 (Savage 1931): An average of 2-6 adults and 0.1-0.5 cypriotes, and of 10.0 or more furculae of *Th. inermis* and *longicaudata* combined, all per 10 cub. m. in plankton recorder catches for 1948 in area approx. 55°30' to 55°50'N and 0° to 2°W (Glover 1952).

About 150 adults in coarse net haul at 20 fms. 5 miles E. Blyth lighthouse on 14 Jan. 1952, together with about the same number of *Th. raschii* (q.v.); 1 adult in coarse net haul at 12 fms. 1 mile E. Sow Buoy, Blyth on 6 Mar. 1952; furculae present in bottom sledge net hauls in 5 fms. Blyth Bay, summer, 1950 and in 14 fms. N.E. Sow Buoy
April. 1952; at latter locality also in tow netting at same period; one male in Hensen net haul off Farne Islands on 22 Apr. 1953 (J.B.): In stomachs of whiting caught by seine-net in 20-35 fms. 8-12 miles E. to N.E. Blyth Mar. 1954-Jan. 1955 and May-Jul. 1955 (Goonewardene 1956).

**Nematoscelis megalops** G. O. SARS


Several in washed-up material at Redcar on which gulls had previously been feeding at sea, 10-12 Feb. 1892 (Norman 1892, Norman & Brady 1909): Large numbers dead, Cullercoats Bay and Whitley Bay, 23-25 Mar. 1918 (Jorgensen 1918).

A few specimens amongst washed-up mass of *Themisto* on sand in Cullercoats Bay 17 Jan. 1935 (H.O.B. in Lab. coll.).

**EUPHAUSIACEA**

**REFERENCES**


JORGENSEN, O. M., 1926. Some crustacean larvae from the Northumberland plankton. Trans.nat.Hist.Soc.Northumb., n.s. 6(2); pp.157-166.


SAVAGE, R. E., 1926. The plankton of a herring ground. Fish.Invest.Lond. ser. II. 9(1); pp.1-35.

SAVAGE, R. E., 1931. The relation between the feeding of the herring off the east coast of England and the plankton of the surrounding waters. Fish.Invest. Lond. ser. II. 12(3); pp.1-88.


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INITIALS

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NOTE:—The presence of Euphausiacea in the area covered by the present fauna list, though without details as to species, is also reported in Jorgensen 1924, Wimpenny 1929, Savage 1931, and Bossanyi 1957, from net hauls and in Savage 1937 and Cheng 1941 from herring stomachs.