

The Marine Fauna of the Cullercoats District

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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 $55^{\circ}30'N$ and from coast to 0° long. 8-14 Jul. 1922 (Savage 1926) : In moderate numbers in herring stomachs from area approx. $54^{\circ}45'$ to $55^{\circ}30'N$ and from coast to $0^{\circ}30'W$, May to Sep. 1922-3 (Hardy 1924) : 7 at $55^{\circ}10'N$, $1^{\circ}0'W$ over 52 fms. on 27 Sep. 1923 (Wimpenny 1933) : Found in small numbers within area approx. $54^{\circ}40'$ to $55^{\circ}20'N$ 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. $55^{\circ}30'$ to $55^{\circ}50'N$ and 0° to $2^{\circ}W$ (Glover 1952).

58 coll. S.J.A.B. 12 miles S.E. by S. of Tyne, surface, 9-10.45 p.m. 28 Mar. 1936 (Lab.coll.) ; 1 adult in coarse plankton net fished from rowing boat just outside Cullercoats Bay entrance 20 Feb. 1951 ; several adults in coarse net off Blyth 16 Mar. 1951 ; one adult in coarse net haul 20 fms. 5 miles E. Blyth lighthouse on 14 Jan. 1952 together with large numbers of *Thysanoessa* spp. ; 20 adults in coarse net haul at 12 fms. 1 mile E. Sow Buoy, Blyth, on 6 Mar. 1952 ; many adults and late cyrtopias in coarse net haul over 5 fms. Blyth Bay 24 Oct. 1952, together with *Thysanoessa* sp. Furcilia stages present, sometimes commonly, in bottom sledge-net hauls in 5 fms. Blyth Bay and in 14 fms. Cambois Bay N.E. from Sow Buoy summer 1950 and Apr. 1952 ; also in tow netting at latter locality Apr. 1952 ; 5 adult specimens in Hensen net haul off Farne Islands 22 Apr. 1953 (J.B.).

Meganctiphanes 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 $55^{\circ}30'N$ 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. $54^{\circ}45'$ to $55^{\circ}30'N$ and from coast to $0^{\circ}30'W$ (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. $54^{\circ}40'$ to $55^{\circ}40'N$ and from coast to 0° long., and young stages 24-29 Jun. 1926 in area approx. $54^{\circ}40'$ to $55^{\circ}20'N$ and from coast to 0° long. principally E. of Sunderland, and 100 specimens in haul at $55^{\circ}33'N$, $1^{\circ}7'W$ on 4 Sep. 1926 (Savage 1931) : In herring stomachs, Shields Ground, May-Sep. 1930-4 (Savage 1937) :

One late cyrtopia in coarse net off Blyth 16 Mar. 1951 ; furcilia stages present in bottom sledge net hauls in 5 fms. Blyth Bay and in 14 fms. Cambois Bay N.E. Sow Buoy in summer 1950 and 1952 respectively ; also in tow netting at latter locality Apr. 1952 (J.B.) : Large adults abundant in beam and agassiz trawls 15 miles E. Blyth Oct. 1961 ; large numbers (thousands) living H.W. Blyth harbour 10 Nov. 1961 (H.O.B.).

Thysanoessa longicaudata (KRØYER)

Adult : Holt & Tattersall 1905, p.107, pl.15 : Einarsson 1945, p.45, fig.17 : Zimmer 1904, p.424, figs.18-21. *Juv* : Einarsson 1945, p.26, figs.10, 11.

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 furciliars of *Th. longicaudata* and *Th. inermis* combined per 10 cub. m. in plankton recorder catches from 1948 from area approx. $55^{\circ}30'$ to $55^{\circ}50'N$ and 0° to $2^{\circ}W$ (Glover 1952).

One, adult, Cullercoats Bay, 21 Jan. 1935, coll. S.J.A.B. id. H.O.B. (Lab.coll.) : One adult in coarse net haul at 20 fms. 5 miles E. Blyth lighthouse on 14 Jan. 1952, with large numbers of *Th. inermis* and *raschii* (q.v.) ; one adult in coarse net at 12 fms. 1 mile E. Sow Buoy, Blyth, on 6 Mar. 1952 ; furciliars present in bottom sledge net hauls in 5 fms. Blyth Bay summer 1950 and in 14 fms. N.E. Sow Buoy Apr. 1952 ; at latter locality also in tow netting (J.B.) : In stomachs of whiting caught in 20-35 fms. 8-12 miles E. to N.E. of Blyth, 31 Mar. 1954 and in Jun. 1955 (Goonewardene 1956).

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.). *Juv* : Einarsson 1945, p. 34, fig. 13 ; MacDonald 1928, p. 57, pl. 1-7.

An average of 0.6-1.9 adults, 0.6-1.9 cyrtopias and 0.1-0.5 furciliars 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 Blyth, on 6 Mar. 1952 ; adults fairly numerous and some late cyrtopias in coarse net haul in Blyth Bay over 5 fms. on 24 Oct. 1952, together with *Nyctiphanes couchii* ; furciliars 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)). *Juv* : 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 cyrtopias, and of 10.0 or more furciliars 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 ; furciliars 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

Adult : Sars 1885,p.127,pl.23,figs.5-10 ; pl.24 : Zimmer 1909,p.16,figs. 24-27 : Hansen 1911,p.48,fig.18A. *Juv* : Frost 1935,pp.443 and 451, pls.12,13.

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

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H.O.B.	...	H. O. Bull

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.