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MEDEDELINGEN

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BIJDRAGE TOT DE KENNIS DER MARIENE FAUNA VAN DE BELGISCHE KUST.

V. — Some observations on the Crustacean fauna of the Sluice-dock (Bassin de Chasse) of Ostend,

by Philip Polk (*) (Ghent).

1. INTRODUCTION.

During investigations on oyster-biology at the « Bassin de Chasse », Ostend (Belgium), we were able to observe the Crustacean fauna of this biotope. The data collected on Harpacticids are especially interesting, since the study of this group in Belgium has been neglected until now.

The chemical analyses were carried out during our investigations by L. Van Meel (1962) : they indicate the chemical regime tolerated by this fauna.

It is interesting to note that certain Crustaceans introduced by the high-tide in the sluice-dock (**) were not able to maintain themselves. These species are indicated in the lists by the figure (2). The species belonging to the fauna of the sluice-dock *sensu stricto* carry the indication (1). Two species, which were very numerous during the year 1937 have completely disappeared. They are indicated by the figure (3).

2. THE BIOTOPE.

The proportions of the Sluice-dock where the investigations took place are described in (a) and (b).

The sluice-dock has a surface of c. 86 ha. and a mean depth of 1,5 m. It is particularly noteworthy that the waters of the sluice-dock are sepa-

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(**) By opening the sluices a few times a year.

rated from those of the port of Ostend by locks, so that they are not influenced by the tides. This, coupled with the shallowness of the water, prevents a pronounced vertical zonation of the different animals.

TABLE 1.
Chemical extremes (1960-1961).

	1960 10-III/27-XII		1961 14-III/19-XII	
	Maximum	Minimum	Maximum	Minimum
Temperature °C	21	3.0	20	ice
pH	9.07	7.80	8.60	7.79
Oxygen ‰ satur.	155.16	64.33	131.55	73.45
Salinity g/l	32.77	25.17	30.75	24.14
Alcalinity cc HCl N ‰	3.074	2.260	3.254	1.936
Nitrates mg/l	3.353	0.013	4.457	0.035
Nitrites mg/l	0.764	0.0	1.400	0.006
Silicates mg/l	8.205	0.595	7.695	1.496
Phosphates mg/l	1.183	0.0	0.933	0.007

3. HARPACTICIDS LIVING IN THIS BIOTOPE.

The following list of Harpacticids with the exception of *Alteutha interrupta* (GOODSIR, 1845) and *Euterpina acutifrons* (DANA, 1848) are new for the fauna of Belgium.

Tribus HARPACTICOIDA SARS.

Family *LONGIPEDIIDAE* SARS.

Genus Longipedia CLAUS, 1863.

Longipedia minor CLAUS, 1863.

4-VII-1960 : 1 ♀ ; 10-XI-1960 : 1 ♀ ; 29-XI-1960 : 1 ♀ ; 18-VII-1961 : 1 ♀ with eggs.

Family *CANUELLIDAE* (LANG).

Genus Canuella T. & A. SCOTT, 1893.

Canuella perplexa T. & A. SCOTT, 1893.

16-VII-1960 : 4 ♀ (1 with eggs); 25-VII-1960 : 1 ♀ ; 17-VIII-1960 : 1 ♀ ; 9-VI-1961 : 1 ♀ ; 23-VI-1961 : 1 ♀ ; 23-VII-1961 : 1 ♀ with eggs; 30-VIII-1961 : 1 ♀ with eggs; 6-X-1961 : 1 ♀ .

Family *ECTINOSOMIDAE* Sars.

Genus Ectinosoma Boeck, 1864.

Ectinosoma melaniceps Boeck, 1864.

4-VII-1960 : 8 ♀; 17-VII-1960 : 1 ♀; 29-XI-1960 : 5 ♀; 1 ♂; 18-IV-1961 : 2 ♀; 26-V-1961 : 1 ♀ with eggs; 1-VI-1961 : 1 ♀ with eggs; 23-VI-1961 : 1 ♀ with eggs.

Family *TACHIDIIDAE* Sars.

Genus Euterpina Norman, 1903.

Euterpina acutifrons (Dana, 1848).

20-XI-1959 : 1 ♀; 16-XII-1959 : 1 ♀; 9-V-1961 : 3 ♀ (1 ♀ with eggs); 26-V-1961 : 3 ♀ (1 ♀ with eggs); 9-VI-1961 : 1 ♀; 23-VI-1961 : 2 ♀; 18-VII-1961 : 1 ♀ with eggs; 25-VII-1961 : 3 ♀ (1 ♀ with eggs); 23-VIII-1961 : 1 ♀ with eggs; 6-X-1961 : 1 ♀ with eggs; 23-X-1961 : 1 ♀ with eggs.

Family *PELTIDIINAE* Sars.

Genus Altheutha Baird, 1845.

Alteutha interrupta (Goodsir, 1845).

18-VII-1961 : 1 ♀; 25-VII-1961 : 1 ♀; 23-VIII-1961 : 2 ♀; 30-VIII-1961 : 1 ♀; 6-X-1961 : 1 ♀.

Family *HARPACTICIDAE* Sars .

Genus Harpacticus M. Edw., 1840.

Harpacticus obscurus T. Scott, 1895.

1-VI-1960 : 2 ♀, 1 ♂; 4-VII-1960 : 10 ♀ (8 ♀ with eggs); 29-VII-1960 : 1 ♀; 17-VIII-1960 : 1 ♂; 29-XI-1960 : 2 ♀ (1 ♀ with eggs), 2 ♂.

Harpacticus uniremis Kröyer, 1842.

23-VI-1961 : 8 ♀ (3 ♀ with eggs).

Family *TISBIDAE* Lang.

Genus Tisbe Lilljeborg, 1853.

Tisbe furcata (Baird, 1837).

8-X-1959 : 4 ♀ (2 ♀ with eggs); 9-V-1960 : 3 ♀ with eggs; 1-VI-1960 : 1 ♂, 3 (1 ♀ with eggs); 2-VII-1960 : 1♂, 8 ♀ (5 ♀ with

eggs); 14-IX-1960 : 1 ♀ with eggs; 28-IX-1960 : 1 ♀ with eggs; 29-XI-1960 : 1 ♀ with eggs; 23-VI-1961 : 1 ♀.

Family *THALESTRIDAE* Sars.

Genus Parathalestris Brady & Robertson, 1873.

Parathalestris intermedia Brady & Robertson, 1873.

9-V-1960 : 1 ♀; 23-VI-1960 : 1 ♀; 9-VI-1961 : 3 ♀ (1 ♀ with eggs).

Family *DIOSACCIDAE* Sars.

Genus Diosaccus Boeck, 1872.

Diosaccus tenuicornis (Claus ,1872).

8-X-1959 : 1 ♂; 3 ♀ with eggs; 1-VI-1960 : 4 ♀; 4-VII-1960 : 11 ♀ (7 ♀ with eggs); 17-VIII-1960 : 2 ♀; 29-IX-1960 : 4 ♂, 8 ♀ (4 ♀ with eggs); 29-XI-1960 : 1 ♀ with eggs.

Family *AMEIRIDAE* Monard, Lang.

Genus Nitocra Boeck, 1864.

Nitocra typica Boeck, 1864.

1-VI-1960 : 2 ♀, 1 ♂; 4-VII-1960 : 1 ♀ with eggs, 1 ♂; 9-V-1961 : 2 ♀ (1 ♂ with eggs).

Family *CANTHOCAMPTIDAE* Sars.

Genus Mesochra Boeck, 1864.

Mesochra pygmaea (Claus, 1863).

8-X-1959 : 1 ♀ with eggs; 4-VII-1960 : 1 ♂, 11 ♀ (5 ♀ with eggs); 26-X-1960 : 1 ♀ with eggs; 4-XI-1960 : 1 ♂, 2 ♀; 29-XI-1960 : 1 ♂; 18-VII-1961 : 1 ♀ with eggs.

Mesochra lilljeborgi Boeck, 1864.

18-IV-1961 : 1 ♀ with eggs.

Family *LAOPHONTIDAE* T. Scott.

Genus Laophonte Philippi, 1840.

Laophonte longicaudata Boeck, 1864.

8-X-1959 : 2 ♀, 1 ♂.

Genus Heterolaophonte LANG, 1948.

Heterolaophonte strömi (BAIRD, 1837).
14-X-1959 : 1 ♀.

4. CRUSTACEAN FAUNA EXCLUDING HARPACTICIDS, FOUND IN THIS BIOTOPE.

(1) Belonging to the fauna proper of the sluice-dock.
(2) Fortuitous guest, not able to maintain themselves.
(3) Species, disappeared since 1957.

CLADOCERA.

Fam. *POLYPHEMIDAE.*

Podon LILLJ., 1853.
Podon leuckarti SARS, 1862 (2).

COPEPODA.

Fam. *CALANIDAE.*

Calanus LEACH, 1816.
Calanus helgolandicus (CLAUS ,1863) (2).

Fam. *TEMORIDAE.*

Temora BAIRD, 1856.
Temora longicornis (O. F. MÜLLER, 1792) (1).

Eurytemora GIESBRECHT, 1881.
Eurytemora affinis (POPPE, 1880) (1).
Eurytemora hirundoides (NORDQUIST, 1888) (1).
Eurytemora velox (LILLJEBORG, 1853) (2).

Fam. *CENTROPAGIDAE.*

Centropages KRÖYER, 1848.
Centropages hamatus (LILLJ., 1853) (2).

Fam. *PONTELLIDAE.*

Labidocera LUBBOCK, 1853.
Labidocera wollastoni LUBBOCK, 1857 (2).

Fam. *ACARTIIDAE.*

Acartia DANA, 1846.
Acartia clausi GIESBRECHT, 1889 (2).
Acartia bifilosa GIESBRECHT, 1881 (var. *inermis* ROSE, 1929) (1).
Acartia tonsa DANA, 1848 (1).
Acartia discaudata (GIESBRECHT, 1882) (2).

Fam. *CYCLOPINIDAE.*

Lichomolgus SARS.
Lichomolgus canui SARS ,1917 (1).

Fam. *DICHELESTIIDAE.*

Mytilicola STEUER, 1902.
Mytilicola intestinalis STEUER, 1902 (1).

CIRRIPEDIA.

Fam. *BALANIDAE.*

Balanus DA COSTA, 1778.
Balanus improvisus DARWIN, 1854 (1).
Balanus crenatus BRUGUIÈRE, 1780 (1).
Balanus balanoides (L. 1761) (1).

Elminius LEACH, 1825.
Elminius modestus DARWIN, 1854 (1).

MYSIDACEA.

Fam. *MYSIDAE.*

Praunus LEACH, 1813.
Praunus flexuosus (O. F. MÜLLER, 1788) (1).

Mesopodopsis CZERNIAVSKY, 1882.
Mesopodopsis slabberi (VAN BENEDEN, 1861) (2).

Neomysis CZERNIAVSKY, 1882.
Neomysis integer LEACH, 1815 (2).

Gastrosaccus NORMAN, 1868.
Gastrosaccus sanctus (VAN BENEDEN, 1861) (2).

ISOPODA.

Fam. *CYMOTHOIDAE.*

Eurydice LEACH, 1815.
Eurydice pulchra LEACH, 1815 (2).

Fam. *LIGIIDAE.*

Ligia FABRICIUS, 1798.
Ligia oceanica (L. 1758) (2).

AMPHIPODA.

Fam. *GAMMARIDAE.*

Gammarus FABR. 1775.
Gammarus locusta (L. 1767) (1).

Fam. *JASSIDAE.*

Jassa LEACH, 1813.
Jassa falcata (MONT. 1808) (2).

Fam. *COROPHIIDAE.*

Corophium LATR. 1806.
Corophium insidiosum CRAWFORD, 1937 (1).

Fam. *HYPERIIDAE.*

Hyperia.
Hyperia galba (MONT. 1841) (2).

Fam. *AORIDAE.*

Microdeutopus COSTA, 1853.
Microdeutopus gryllotalpa COSTA, 1853 (1).

DECAPODA.

REPTANTIA.

Tr. ANOMURA.

Fam. *PORCELLANIDAE.*

Porcellana LAMARCK, 1801.
Porcellana longicornis (L. 1767) (1).
Porcellana platycheles (PENNANT, 1777) (3).

Tr. BRACHYURA.

Fam. *PORTUNIDAE.*

Carcinus LEACH, 1813.
Carcinus maenas L. 1758 (1).

Fam. *GRASPIDAE.*

Eriocheir DE HAAN, 1850.
Eriocheir sinensis H. MILNE EDW. 1854 (3).

Fam. *MAIIDAE.*

Macropodia LEACH, 1813.
Macropodia rostrata (L. 1761) (2).

NATANTIA.

Fam. *PALAEMONIDAE.*

Palaemonetes HELLER, 1869.
Palaemonetes varians (LEACH, 1814) (1).

Fam. *CRANGONIDAE.*

Crangon FABRICIUS, 1798.
Crangon crangon (L. 1758) (2).

RÉSUMÉ.

Au cours des recherches sur l'ostréiculture dans le « Bassin de Chasse » d'Ostende (***), nous avons pu déterminer les Crustacés présents dans ce biotope. 13 espèces d'Harpacticides sont nouvelles pour la faune de Belgique. Parmi la faune des autres Crustacés : a) il y a des espèces qui vivent dans ce milieu : elles sont indiquées dans la liste par le chiffre (1); b) on en trouve après l'ouverture des écluses, mais elles ne peuvent s'y maintenir (2); c) des espèces abondantes en 1937 n'ont plus été observées depuis lors (3).

Le tableau I concernant les données chimiques indique les limites entre lesquelles évolue la faune.

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(***) Les recherches sont subsidiées par le Ministère de l'Agriculture, Commission T. W. O. Z. et sont effectuées dans le cadre du groupe de travail « Ostréiculture ».