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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.*Altheutha 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).

T<sub>r</sub>. 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.

ZEEWETENSCHAPPELIJK INSTITUUT, OOSTENDE.  
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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 ».