

MARBEL, a plea for a catalogue of the Belgian marine fauna

by Guido RAPPÉ

Abstract

The European Invertebrate Survey in most, if not in all of the countries participating, seems largely to neglect the very diverse marine invertebrate fauna. This is a serious shortcoming since some phyla only have marine representatives. In Belgium many efforts have been made this century to collect marine material. Nevertheless taxonomical data on most groups still remain scattered, incomplete or out-of-date. An up-to-date catalogue on the MARine fauna (and flora) of BELgium (MARBEL) is needed, for faunistic/biogeographical studies, ecological/environmental and conservation issues.

Keywords: E.I.S., Belgium, marine fauna.

Résumé

Dans le cadre du "European Invertebrate Survey", la grande diversité de la faune marine n'attire guère l'attention de la plupart des pays. Cette lacune est assez grave, car plusieurs groupes zoologiques sont exclusivement marins. En Belgique, beaucoup de récoltes de matériel ont été faites depuis le début du siècle. Néanmoins, des révisions de la plupart des groupes taxonomiques font défaut. Un catalogue à jour de la faune (et de la flore) marine de la Belgique (MARBEL) s'avère nécessaire. Un tel instrument serait utile dans plusieurs domaines: études faunistiques et biogéographiques, écologie, environnement, conservation de la nature, ...

Mots-clefs: E.I.S., Belgique, faune marine.

Introduction

At present the European Invertebrate Survey almost exclusively covers terrestrial and freshwater invertebrate groups. In most, if not in all of the countries participating, the very diverse marine invertebrate fauna seems largely to be neglected, although in the British Isles the distribution of some marine invertebrate groups is studied using large maritime areas (e.g. SEAWARD, 1982). This is the more surprising since some phyla only have marine representatives, such as Echinodermata. For obvious reasons of completeness one should expect that at least some of these groups in at least some of the countries are treated within E.I.S. In fact none of this happens. In this way our knowledge of a considerable part of the invertebrate taxa remains ephemeral, despite an initiative like E.I.S.

Situation in Belgium

In Belgium many efforts have been made the last two centuries to collect marine fauna, mainly during two periods:

- "Exploration de la Mer" started in the late 1890's, under the guidance of G. GILSON, former director of the Royal Museum of Natural History (at present: Royal Belgian Institute of Natural Sciences, Brussels). This campaign lasted until the 1930's. Part of this rich collection still remains

unstudied. Several checklists based on this material have been published, but are now outdated (a.o. HOLTHUIS, 1950; LELOUP, 1941).

- During the past twenty years several marine biology units were founded at various universities. A vast quantity of samples, mainly for ecological studies, have been taken. Most of these are turned into ash-free dryweight, while some of them are only superficially identified or lumped together in higher taxonomic levels. Only minor efforts are made to store a representative species collection of the marine fauna of Belgian waters in a national collection. In the extreme case of wrong identifications no means of correcting them are available.

When scanning the literature of the past 25 years for checklists or review articles of marine invertebrates, we see that only a very limited number of groups received some attention, most of them at the occasion of the Symposium "Invertebrates of Belgium" held in November 1988. The number of contributions strictly devoted to marine and/or brackish-water invertebrates published in the proceedings of this symposium (WOUTERS & BAERT, 1989) reflects the general lack of interest: only 12,5 % of the total or 1 "marine" versus 7 "terrestrial/freshwater" contributions. A wealth of recent information is available though, but it is contained within ecological papers or in grey literature.

The following list comprises all recent checklists and review articles on Belgian marine fauna we were able to trace, published during the past three decades.

CNIDARIA: Scyphozoa and Hydrozoa Siphonophora (RAPPÉ, 1989a)

CTENOPHORA: (RAPPÉ, 1989a)

PLATHELMINTHES: freeliving species (SCHOCKAERT *et al.*, 1989)

NEMATODA: freeliving species, together with non-marine species (COOMANS, 1989)

TARDIGRADA: together with non-marine species (HASPELAGH, 1989)

MOLLUSCA: (BACKELJAU, 1986), brackish-water species (DUMOULIN, 1989), Littorinidae (WARMOES *et al.*, 1989).

CRUSTACEA: brackish-water Copepoda (together with non-marine species) (DUMONT, 1989), Cirripedia Thoracica (VAN FRAUSUM, 1989), Isopoda (RAPPÉ, 1989b), Decapoda Brachyura (ADEMA, 1991)

ECHINODERMATA: (MASSIN & DE RIDDER, 1989).

Furthermore, we are aware of the existence of at least two unpublished manuscripts: on Polychaeta (excl. Archiannelida) and Bryozoa.

The reader is requested to read the above list in between the lines; the list of recently, non-treated groups is much longer.

Final plea

We urge scientific institutes and universities to pay considerably more attention to the species composition of the Belgian marine fauna and flora. This can be done in many ways, e.g. by depositing the collected and no longer needed animals in the national collection of the Royal Belgian Institute of Natural Sciences in Brussels, by stimulating students to review a particular group (or do

it yourself if you happen to be specialised in a certain group)... The first step could be a catalogue. If this is possible in a country like Great Britain (HOWSON, 1987), with its longer coastline and much richer fauna, this should be possible in a country with a total coastline of 67 km. Recognizing and monitoring the fauna of our seas is of the utmost importance for measuring possible changes (e.g. pollution, 'Global Change', ...). Indeed many marine species have proven to be excellent biological indicators, e.g. many species of Chaetognatha.

Contributions to a better knowledge of the Marine fauna (and flora) of Belgium (MARBEL) can be published anywhere, referring or not to MARBEL. In the former case a continuing numbering of contributions as started by the author (RAPPÉ, 1989a; 1989b) at the above mentioned symposium could be a useful and stimulating feature. This would only require a minimum of co-ordination. MARBEL has at present no bounds with any particular institute, association or person. MARBEL is a plea in favor of some discriminated minorities. Some interest and support from professional biologists to fill the big gap in the knowledge of marine invertebrates would be more than welcome.

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