

BOOK REVIEW

An annotated bibliography of Antarctic invertebrates (terrestrial and freshwater), William Block, British Antarctic Survey, Natural Environment Research Council, 263 pp., 1992 ISBN 0 85665 148 6

In 1992, there appeared a major tool for all scientists involved in biological studies of the Antarctic, namely the voluminous work by William Block: "An annotated bibliography of Antarctic invertebrates (terrestrial and freshwater)". This author was assisted by several collaborators: S.J. Benton, S. Chambers, P. Harrison, S. Lahav, A. Lawrence and C. Ryan.

Dr William Block of British Antarctic Survey, Cambridge, is a renowned authority in the field of the knowledge of Antarctic land Arthropoda. In last two decades he has published over 40 papers dealing with various aspects of the biology and eco-physiology of Antarctic and sub-Antarctic terrestrial arthropods, mainly Acarina and Insecta.

Historical scope of this bibliography encompasses the period of some 170 years, beginning from French "Coquille" expedition of early twentieths of the 19th century, when first Antarctic invertebrates were recorded, and ending in 1990.

Geographical scope follows Holdgate (1977, Phil. Trans. Roy. Soc. London B, 279: 5-25) and outside the Antarctic continent itself it comprises most of sub-Antarctic islands except for Antipodes, Campbell, Auckland and Amsterdam and St. Paul islands.

Bibliography includes over 1400 entries. Nearly all of them are supplied with an abstract well presenting the contents of the paper. Abstracts are divided into following sections: taxonomic group, ecology, physiology and systematics. Very useful parts of the bibliography are thoroughly prepared: Classification, Taxonomic, Species, Authors, Subject, Geographical and Expeditions indexes. These indexes perfectly facilitate the search for any information needed. Noteworthy are nice pictures of over 30 Antarctic terrestrial invertebrates, mainly mites, insects, rotifers and water-bears, decorating both front and back covers as well as the text of the whole bibliography.

In this ample set of literature entries I have found a few unnecessary ones. In several cases papers are included that do not fit to the terrestrial and freshwater scope of the book. These cases are entries 12, 340, 720 and 1358, i.e. the papers by Androsova (1981), Dell (1972), Lazzaretto and Libertini (1986) and Sassi and Melo (1986) where marine animals are treated (Bryozoa, Mollusca, Harpacticoida and Tintinnidae -- respectively). Therefore in the Classification index phylum Bryozoa and in Taxonomic and Species indexes such genera as *Tisbe* (Harpacticoida) and *Bathynomus*, *Carditella* and *Solariella* (Mollusca) are to be removed from all indexes. The case of the entry 871 is more complicated. In fact, only one species of Amphipoda recorded in this paper from South Georgia by Pfeffer (1888) could be regarded as a terrestrial one since it inhabits the supralittoral; it is *Allorchestes georgianus*, which, in fact, is a junior synonym of *Hyale hirtipalma* (Dana, 1852). All other species mentioned in the abstract and in the Taxonomic and Species indexes are purely marine ones and as such they should be removed from page 126 and from the indexes. On the other hand it is debatable whether this bibliography should include data on all invertebrates occurring in the uppermost littoral and/or supralittoral of the Antarctic and sub-Antarctic regions. In the group that is familiar to the reviewer — in amphipod Crustacea alone — over 15 species of the families Hyalidae and Talitridae s.str. were recorded in this habitat that constitutes a contact zone between the land and the Southern Ocean (see Lowry and Bullock, 1976. Catalogue of the marine gammaridean Amphipoda of the Southern Ocean. Bull. Roy. Soc. N. Zealand, 16, and De Broyer

and Jażdżewski, 1993. Contribution to the Marine Biodiversity Inventory: a Checklist of the Amphipoda (Crustacea) of the Southern Ocean. Doc. Trav. Inst. roy Sci nat. Belgique, 73). Taking only the case of the above mentioned *Hyale hirtipalma* that was several times found outside South Georgia also on Kerguelen, Crozet and Macquarie islands some 10 additional entries would be necessary.

Taking into account all talitroid amphipods (beach hoppers) hitherto recorded from the shores of the Southern Ocean the scope of the bibliography would be much enlarged. Moreover one can expect that in such supralittoral habitats much more invertebrate animals, that could be collected directly from land, are nearly or really "terrestrial". However, in my opinion at least those of purely marine origin or of clear marine affinities should be rather treated in marine bibliographies and not in the presently reviewed one.

Anyway, taking into account the modern systematics of Amphipoda, in the W. Block's bibliography in the Classification index (p. 212) the family name Gammaridae for *Allorchestes georgianus* (= *Hyale hirtipalma*), if retained, should be changed to Hyalidae and to Bogidiellidae for *Kerguenella* (now *Kergueleniola*; see Ruffo S., 1974. Boll. Mus. Civ. Storia Nat., Verona, 1).

These minor inaccuracies do not change the reviewers absolutely enthusiastic opinion on the W. Block's bibliography. This book is really an inappreciable help, especially for zoologists working on the systematics, biology, eco-physiology and zoogeography of land and freshwater invertebrates of the whole Antarctic realm. It is a true milestone on our way to the knowledge and understanding of the structure and functioning of Antarctic terrestrial and freshwater ecosystems.

Krzysztof JAŹDŹEWSKI

Łódź

@inproceedings{Block1992AnAB, title={An annotated bibliography of Antarctic invertebrates (terrestrial and fresh water)}, author={William Block}, year={1992} }. William Block. Published 1992. Geography. Scopes and trends of Antarctic invertebrate faunal research with special reference to Southern ocean, east Antarctica and Schirmacher oasis. Ashis Kumar Hazra, Bulganin Mitra. Geology. Scientific reasons for the study of terrestrial ecosystems in the Antarctic are outlined together with brief descriptions of the maritime and continental zones. Opportunities for ecological research... Research Theme Terrestrial Ecosystem Community Development Ecological Research Terrestrial Environment. These keywords were added by machine and not by the authors. This process is experimental and the keywords may be updated as the learning algorithm improves. Block W (1984) Terrestrial microbiology, invertebrates and ecosystems. In Laws RM (ed) Antarctic ecology, vol. 1. Academic Press, London, pp. 163-236 Google Scholar. Block W (1990) Cold tolerance of insects and other arthropods. Phil Trans R Soc Ser B 326:613-633 Google Scholar. William Block. Senior Research Associate, British Antarctic Survey, High Cross, Madingley Road, Cambridge CB3 0ET, England. The UK Arctic Research Station is situated at Ny-Ålesund (78° 55'N , 15° 56' E), Spitsbergen, Svalbard. It is funded by the Natural Environment Research Council (NERC) and managed by the British Antarctic Survey (BAS). The station, which supports mainly life, environmental and earth scientists is part of an international research community which includes stations owned by Norway, Germany, Japan, Italy, France and the UK. All field activities are monitored by a local research and environmental committee co-ordinated by the Norsk Polarinstittut and Kings Bay AS.