

**IOW Press Release August 12, 2021**

## **The German sea shells – New publication presents an extensive documentation of mussels living in German sea areas (and beyond)**

*Michael L. Zettler, senior scientist at the Leibniz Institute for Baltic Sea Research Warnemünde (IOW), has been researching the occurrence and living conditions of the inhabitants of the seabed of the Baltic Sea and other seas – the so-called zoobenthos – for many years. Now he has contributed his profound expertise to a monograph on the marine bivalves of Germany, thus closing, together with co-author Axel Alf, a gap in the renowned series “Die Tierwelt Deutschlands”.*

Mussels have always attracted people’s attention. Whether as food or as ornaments, coastal societies knew how to use these marine animals. Modern marine research sees them as important components of healthy ecosystems in terms of water purification: By filtering suspended matter out of the water, mussels can both improve light penetration and help to transfer pollutants or excess nutrients from the water column to the sediment. With the rapid increase in offshore construction activities in the early 1990s, environmental concerns for these inhabitants of the seafloor grew. Extensive monitoring programs were launched, providing more and more knowledge about the various species and their life requirements. From the beginnings of species determination in the German part of the North and Baltic Seas in the 1860s until today, the level of knowledge grew successively.

In the renowned series “Die Tierwelt Deutschlands” (The Animal World of Germany), in which compendia on specific animal groups of Germany have been published regularly since 1925, marine bivalves have been missing until now. Volume 85 finally closes this gap. The two authors, IOW scientist Dr. Michael L. Zettler and Prof. Dr. Axel Alf, who taught at the University of Weihenstephan-Triesdorf before his retirement, have described a total of 123 species, classified them taxonomically and documented them with impressive photographs. For each species, information is given on the habitat they require as well as distribution maps. In contrast to other field guides, the monograph also contains an up-to-date overview of invasive species that are in the process of establishing themselves in German waters or have already done so successfully.

The authors primarily address their work to scientists who need a taxonomically reliable identification of their sample material for their work. By writing in English, they furthermore make this valuable compilation accessible beyond Germany, which is important as the distribution of the various species is of course not restricted by national borders, but primarily depends on environmental factors such as salinity. Therefore, benthologists of Danish, Swedish, Polish, Dutch and Norwegian research institutes can also benefit from this extensive collection.

Beyond the scientific interest, a book has been created that also impressively demonstrates the diversity of this animal group and the beauty of their shells, making it a valuable reference book for all people with an interest in nature conservation and biodiversity in our coastal waters.

The series “Die Tierwelt Deutschlands” was first published in 1925 by Gustav Fischer Verlag, Jena. Since the 2000er years the publishing houses Goecke & Evers, Keltern (for insects and arachnids) and ConchBooks, Hackenheim, (for all other groups) has taken over the publication.

Zettler, M.L., Alf, A. 2021: *Bivalvia of German marine waters of the North and Baltic Seas*. ConchBooks, Harxheim: 329pp [Dahl, F.: Die Tierwelt Deutschlands 85. Teil]. ISBN 978-3-948603-12-0

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