

GALATHEA REPORT

Volume 13

GALATHEA REPORT

Volume 13

*Scientific Results
of The Danish Deep-Sea Expedition
Round the World 1950-52*



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SYSTEMATICS AND BIOLOGY OF THE DEEP-SEA HOLOTHURIANS

Part 1. Elasipoda

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I. INTRODUCTION

Among the five orders of the class Holothurioida, the Elasipoda are unique in being confined to the deep sea, i. e. to depths exceeding 200–400 meters.

The four remaining orders (Aspidochirota, Molpadonia, Dendrochirota, and Apoda) all include sublittoral as well as deep-sea groups. These orders will be dealt with in subsequent volumes of the Galathea Report.

The Holothurioida comprise about 1100 described species (Madsen 1954). Approximately 380 species belong to the deep sea.

Previous to the present revision, the Elasipoda comprised 171 species. Of these, 165 belonged to the benthic families Deimatidae, Laetmogonidae, Psychropotidae, and Elpidiidae, while the remaining six belonged to the pelagic family Pelagothuriidae. The present investigation deals with the four benthic families only. Eleven species are erected, while 18 previously described species are left out, being insufficiently described. The total number of recognized benthic species is reduced from 165 to 106.

In addition to the material brought home by the Galathea Expedition (1950–1952), the investi-

gation also includes the Elasipoda taken during three collecting voyages of the late Dr. Th. Mortensen during the years 1913–1930.

The working up of this global material made necessary a comparison with the described materials from earlier deep-sea expeditions. With this purpose visits were paid to the museums of London, Amsterdam, Paris, Monaco, Washington, and Cambridge (Mass.).

The present work discusses all the 106 known species of benthic Elasipoda, 75 of which have been examined.

Among the many people who have contributed with aid and advice to the present work I owe a particular debt to the late Dr. Anton Fr. Bruun, the inspiring scientific leader of the Galathea Expedition, who gave me the opportunity to participate in the expedition and afterwards placed at my disposal the rich material of holothurians.

I am indebted to all my deep-sea colleagues in the Zoological Museum, of whom I may mention Dr. F. J. Madsen, curator of echinoderms, and Dr. T. Wolff, editor of the Galathea Report.