

Volume 6

TOPICS IN GEOBIOLOGY

Series Editors: F. G. Stehli and D. S. Jones

# NAUTILUS

The Biology and Paleobiology of a Living Fossil

Edited by

W. Bruce Saunders and Neil H. Landman

Bryn Mawr College  
Bryn Mawr, Pennsylvania

American Museum of Natural History  
New York, New York

Few organisms have been as well known to the layman, but as poorly known to science, as the chambered nautilus. Although the shell was recognized and named more than two millennia ago by Aristotle, it was not until 1705 that the living organism was illustrated by the great naturalist Rumpf. Richard Owen was the first to describe the anatomy of *Nautilus* in 1832. In 1902, after a three-year search for fertile *Nautilus* embryos, Arthur Willey presented some of the first information on *Nautilus* habits and habitats in a major monograph that is still an authoritative reference. In recent years, however, greatly revised and entirely new views of *Nautilus* have emerged as a result of novel research methods and technology from such diverse sources as telemetric tracking, shell radionuclides, deep-water remote camera sequences, analyses of shell strength, and physiological and aquarium studies.

Synthesizing a wealth of new material with existing information, the editors of *Nautilus: The Biology and Paleobiology of a Living Fossil* provide a truly multidisciplinary volume. An international array of

experts cover diverse aspects of *Nautilus*, including

- The ancestry of *Nautilus*
- The species of *Nautilus* and their geographic distribution
- Ecology and population characteristics
- General physiology
- Metabolism
- Reproduction, embryology, and growth
- Shell architecture, ultrastructure, and biomineralization
- Swimming, shell hydrostatics, and buoyancy
- Collection and aquarium maintenance

Illustrations include color plates, line-drawings, and photographs.

*Nautilus: The Biology and Paleobiology of a Living Fossil* is a comprehensive sourcebook for marine biologists, paleontologists, evolutionary biologists, zoologists, physiologists, interested laymen, and other nautilophiles.

662 pp., illus., 1988, ISBN 0-306-42709-5



PLENUM PUBLISHING CORPORATION

233 Spring Street, New York, New York 10013-1578

ISBN 0-306-42977-2