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Titolo	Plankton Ecology of the Southwestern Atlantic : From the Subtropical to the Subantarctic Realm / / edited by Mónica S. Hoffmeyer, Marina E. Sabatini, Frederico P. Brandini, Danilo L. Calliari, Norma H. Santinelli
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Nota di contenuto	Part 1: Historical Background of Plankton Research in the Region 1. Overview of the history of biological oceanography in the Southwestern Atlantic, with emphasis on plankton -- Part 2: Regional Settings of Productivity and Nutrient Cycling 2. Physical oceanography of the SW Atlantic Shelf: a review -- 3. Nutrient transport, cycles and fate in southern Brazil (Southwestern Atlantic Ocean Margin) -- 4. Surface macronutrient dynamics of the Drake Passage and the Argentine Sea -- 5. Perspective: continental inputs of matter into planktonic ecosystems of the Argentinean continental shelf, the case of atmospheric dust -- 6. Overview on primary production in the Southwestern Atlantic -- Part 3: Plankton of Shelf and Boundary Systems 7. Phytoplankton assemblages of the subtropical South West Atlantic: composition and dynamics in relation to physical and chemical processes -- 8. Community structure and spatial-temporal dynamics of the zooplankton in the South

Brazilian Bight, a review -- 9Zooplankton communities of the Argentine continental shelf (SW Atlantic, ca. 34° - 55°S), an overview -- 10. Ecological role of common appendicularian species from shelf waters off Argentina -- 11. Ichthyoplankton associated to the frontal regions of the Southwestern Atlantic -- Part 4: Plankton of Coastal Systems 12. Flagellates versus diatoms: phytoplankton trends in tropical and subtropical estuarinecoastal ecosystems -- 13. Phytoplankton patterns and processes in a tropicalsubtropical transition region: Santa Catarina coast, southern Brazil -- 14. Near-surface biogeochemistry and phytoplankton carbon assimilation in the Rio de la Plata estuary -- 15. Satellite-measured phytoplankton and environmental factors in north Patagonian gulfs -- 16. Mesozooplankton structure and seasonal dynamics in three coastal systems of Argentina: Bahía Blanca Estuary, Pirámide Bay and Ushuaia Bay -- 17. Trophic ecology of the white croaker (Micropogonias furnieri Desmarest 1823) and rough scad (Trachurus lathami Nichols 1920) larvae in the Río de la Plata estuary -- Part 5: Gelatinous Zooplankton 18. Diversity, species composition and assemblage dynamics of estuarine gelatinous and semi-gelatinous zooplankton from Brazil -- 19. An overview of the Medusozoa from the Southwestern Atlantic -- Part 6: Harmful Algae and their Impacts 20. Alexandrium tamarense/catenella blooms in the Southwestern Atlantic: Paralytic Shellfish Toxins production and its trophic transference -- 21. Harmful algal blooms in the Rio de la Plata region -- 22. Harmful marine microalgae in coastal waters off Chubut (Argentina) -- Part 7: Plankton, Climate Change and Human-Induced Changes 23. Composition and structure of phytoplankton communities in coastal environments with anthropogenic disturbance (Patagonia, Argentina) -- 24. Responses of subantarctic marine phytoplankton to ozone decrease and increased temperature -- 25. Global change and plankton ecology in the Southwestern Atlantic.

Sommario/riassunto

This book integrates a variety of issues such as regional settings of productivity and nutrient cycling; plankton of coastal and shelf systems; plankton, climate change and human-induced changes; harmful algae and their impacts; and gelatinous zooplankton. This book explores the intriguing marine plankton communities of the SWA region of South America encompassing low to high latitude environments, framed by a complex hydrographic background and global climate change. This vast and iconic region has been largely under-recognized and under-studied. However, in recent years a strong interest has emerged along with the acknowledgment of its high biological productivity. The book concludes by discussing conservation in the region, highlighting regional biodiversity hotspots where the challenges of climate change, habitat loss, and other threats to biodiversity may be particularly acute. Plankton Ecology of the Southwestern Atlantic is a timely synthesis of the field, setting a new baseline for future research. It will be important reading for both researchers and graduate students, and will also be of interest and use to a professional audience of oceanographers, conservation biologists, stake holders and educated science enthusiasts.