

POSTER PRESENTATION "MARINE STATIONS"

Poster presentation of marine stations founded in the same period of time as the
Biologische Anstalt Helgoland

1. The Netherlands Institute for Sea Research (Den Burg, Texel) presented itself by a set of posters
2. A. Guille (Banyuls sur Mer): The Laboratoire Arago: A Mediterranean French Marine Station
3. Y. Le Gal (Concarneau): Laboratoire de Biologie Marine Concarneau
4. H. von Westernhagen (Hamburg): Biologische Anstalt Helgoland: One hundred years of research and service
5. P. T. Hognestad (His): Flødevigen Marine Research Station
6. L. Hernroth & J.-O. Strömberg (Kristineberg): Kristineberg Marine Biological Station - a Swedish gateway to marine biological research
7. J. Ramster (Lowestoft): MAFF, Fisheries Laboratory Lowestoft
8. J. Davenport (Millport): The Marine Biological Station of Millport
9. D. A. Powers (Pacific Grove): The Hopkins Marine Station
10. A. J. Southward (Plymouth): History of the Marine Biological Association of the United Kingdom
11. J. B. L. Matthews (Oban): The Scottish Association for Marine Science
12. T. A. Norton (Port Erin): Port Erin Marine Laboratory
13. P. Lassere (Roscoff): The Station Biologique de Roscoff (founded 1872)
14. D. Zavodnik (Rovinj): A North Adriatic centenarian: The Marine Research Station of Rovinj, Part I, Part II
15. R. K. H. Kinne (Salsbury Cove): The Mount Desert Island Biological Laboratory (MDIBL): A short history and background
16. O. Cendrero & J. L. Casado (Santander): The Marine Biology Station of Santander: 100 years of marine research (1886–1986)
17. S. M. Konovalov (Sevastopol): Institute of Biology of the Southern Seas: 120 years of continued research
18. H. P. Makarenkova (St. Petersburg): Marine research at the White Sea Marine Station
19. A. Zhirmunsky (Vladivostok): The role of biological stations in the research of the Institute of Marine Biology, Vladivostok
20. V. Kasyanov (Vladivostok): Role of marine stations in marine research in the Russian Far East
21. H. W. Jannasch (Woods Hole): Marine Biological Laboratory Woods Hole

Newly founded Stations

22. K. E. Skóra (Hel): Hel Marine Laboratory, a new research station on the Baltic
23. L.-A. Meyer-Reil & H. Hübel (Kloster, Hiddensee): Institute for Ecology in Kloster, Hiddensee
24. P. Wirtz, T. Dellinger & M. Kaufmann (Madeira): Marine Biology at the Universidade de Madeira

Historical Aspects of Marine Biology

25. M. Fouda (Oman): History of marine biology in Egypt, with emphasis on the Red Sea and Mediterranean
26. V. Kasyanov (Vladivostok): Konstantin Dawydoff – A great Russian marine biologist
27. M. Maciejowska (Gdynia): History of the marine microbiological investigations in Poland
28. V. Angelescu & R. P. Sánchez (Mar del Plata): One century of international oceanographic and fisheries exploration on the continental shelf of Argentina

Visiting Scientists at the Biologische Anstalt Helgoland (History and Specific Results)

29. U. Hoßfeld (Jena): The zoologist Victor Franz (1883–1950) from Jena – Opinions on the BAH

North Sea Ecology: Biodiversity, Biogeography

30. E. Hagmeier (Helgoland): Dominant phytoplankton species around Helgoland
31. S. Nehring (Kiel): Cysts as factors in phytoplankton ecology: Resting and temporary cysts of dinoflagellates
32. R. Kuhlenskamp (Konstanz): Biogeography and evolution of the brown algal order Tilopteridales
33. T. Merck (Helgoland): *Chrysaora hysoscella* – the emblem of the BAH, a key species in the German Bight
34. M. de Kluyver (Amsterdam): Sublittoral hard substrate communities of the North Sea
35. K. Janke (Hamburg): Intertidal communities on the rocky shores of Helgoland – an introduction to a field excursion
36. I. Ulrich (Helgoland): Biological interactions concerning the colonization of rocky shores
37. J. D. Hardege (Oldenburg): On the reproduction of nereids (Annelida, Polychaeta) at the isle of Helgoland
38. T. Neudecker (Hamburg) & U. Damm (Cuxhaven): Seasonality of egg-bearing shrimp *Crangon crangon* in coastal waters of the southern North Sea
39. K. Herrmann (Erlangen): Metamorphosis in Echinodermata, as shown in Echinoidea (*Psammechinus miliaris*), Asteroidea (*Asterias rubens*), Ophiuroidea (*Ophiura albida*)
40. I. Wehrtmann (Valdivia) & W. Greve (Hamburg): Larvae of uncommon caridean decapods in the German Bight: distribution and abundance

41. I. Wehrtmann (Valdivia): Interannual variability of *Crangon* (Decapoda: Caridea, Crangonidae) reproduction at Helgoland
42. B. Meyer (Helgoland): Food ingestion and consumption by *Carcinus maenas* (Crustacea: Decapoda) in the field
43. L. Debus (Warnemünde): The last sturgeons of the North and the Baltic Sea?
44. K. M. Weber (Tröndel): Vertical distribution of herring larvae in relation to light
45. W. Weidemann (Hannover): Gastrointestinal tract – morphology and histology – of some Pleuronectiformes near Helgoland
46. M. F. Leopold¹, B. Grunsky², O. Hüppop², A. M. Maul² & J. van der Meer¹ (¹Den Burg, Texel, ²Helgoland): How large an area of sea do the Helgoland seabirds use for foraging during the breeding season
47. J. Jensen (Hamburg): Mean sea level development of Helgoland tide station
48. I. M. Munda (Ljubljana) & B. P. Kremer (Köln): Morphological variations and population structure of fucoids from Helgoland
49. K. Schultze, K. Anger & W. Meyer (Helgoland): Experimental investigations on the larval development of *Pandalus montagui* Leach (Decapoda, Caridea)
50. T. A. Cordeiro (Helgoland) & P. Martens (List): The Tintinnina (Ciliata) species and their biomass distribution in the North Sea
51. C. Neira & T. Höpner (Oldenburg): Production of fecal pellets by *Heteromastus filiformis* and their role in the organic carbon cycle
52. L. Lohse (Den Burg, Texel): North Sea nutrient cycling: Benthic denitrification – nitrification coupling
53. C. P. Slomp (Den Burg, Texel): North Sea nutrient cycling: Sediment-water exchange of phosphorus
54. J. F. P. Malschaert (Den Hoorn): North Sea nutrient cycling: Benthic pools of ammonium

North Sea Research: Ecology of the Wadden Sea

55. G. Hilgerloh (Wilhelmshaven): Effects of predation on mussel banks – hypothesis and experimental approach
56. M. Rackemann, M. Kogge & T. Höpner (Oldenburg): Chemical approaches to characterize „Anoxic Spots“ on the surface of tidal flats
57. I. Langer-van Voorst & T. Höpner (Oldenburg): Inhomogeneity and variability of nutrient fluxes and concentrations in the wadden area of Crildumersiel
58. D. Schories (List): Green algal mats in the Wadden Sea: the role of benthic macrofauna in their development and distribution
59. C. J. M. Philippart & A. G. Brinkman (Den Burg, Texel): A mesocosm monitoring study
60. P. Martens (List): Seasonal distribution and interannual changes in the mesoplankton of the Wadden Sea
61. G. Drebes & H. Halliger (List): Two types of the centric diatom *Actinocyclus senarius* in the North Frisian Wadden Sea (North Sea)
- 62, 63. H. Meyer¹, H. Fock², A. Haase², H.-D. Reinke¹, I. Tulowitzki¹ (¹Kiel, ²Büsum): Structure of the invertebrate fauna in saltmarshes of the Wadden Sea Coast of Schleswig-Holstein influenced by sheep-grazing (2 posters)

64. C. le Maire Munksgaard (Aarhus): *Cerastoderma edule* and *Macoma balthica* in the Danish Wadden Sea
65. I. Gamenick & O. Giere (Hamburg): Aspects of the population dynamics and ecophysiology of *Capitella capitata* (Fabricius 1780) from a North Sea intertidal flat
66. M. Thiel (Kiel) & K. Reise (List): Nemertines in the Wadden Sea. Voracious predators or dangerous neighbours?
67. G. Hilgerloh & W. Berberich (Wilhelmshaven): Ecosystem research in the tidal flats of Lower Saxony
68. M. Zhou (Qingdao) & M. Elbrächter (List): Growth and vertical migration of two bloom-forming dinoflagellates
69. P. Berger & M. Elbrächter (List): Uptake of marine toxic and non-toxic algae by blue mussel, *Mytilus edulis*
70. K.-H. van Bernem (Geesthacht): Diversity of habitats on tidal flats – results of an ecological assessment of the entire German Wadden Sea
71. T. Wippermann (Hannover): Distribution of inorganic and organic compounds in the tidal flats of Wangerooge
72. J. Rahmel, M. Bätje, H. Michaelis & U. Noack (Norderney): *Phaeocystis globosa* and the phytoplankton succession in the East Frisian Waters (German North Sea Coast)
73. U. Vietinghoff (Rostock): Ecosystem research in the Greifswald Bodden (data recording, picture analysis, modelling)
74. U. Kopacz (List): Diurnal vertical migration of Hydromedusae in tidal channels of the northern Wadden Sea
75. M. K. Simon (List): Studies on population dynamics of juvenile lugworms (*Arenicola marina*) in the German Wadden Sea

Marine Ecology: Microbial Processes

76. A. Nehrkorn (Bremen): Microbial activities on South Atlantic sediment profiles
77. J. McInerney, L. Paskins, D. Eardly, R. Powell & J. W. Patching (Galway): Phylogenetic analysis of marine microbial communities in the North East Atlantic
78. M. Kirchner (Helgoland): Microbial colonization of copepod body surfaces and chitin degradation in the sea
79. M. Hollinde¹, R. Bruns¹ & L.-A. Meyer-Reil² (¹Kiel, ²Kloster, Hiddensee): Pore water nutrient profiles as an indication of fluctuations of microbial remineralization processes in Wadden Sea sediments
80. A. Wichels (Hamburg): Influence of heavy metals on the protein structure of membranes of marine bacteria
81. H. Gerlach, R. Gumprecht & A. Nehrkorn (Bremen): Comparison of different microbial parameters from deep sea sediments of the equatorial Atlantic
82. A. Boetius (Hamburg): Microbial enzyme activity in deep sea sediments
83. R. Gumprecht, H. Gerlach & A. Nehrkorn (Bremen): Total microbial activity in marine sediments
84. J. Bodenbender & R. Waßmann (Garmisch-Partenkirchen): Local net fluxes of gaseous carbon-, nitrogen-, and sulfur compounds at the interface between the Wadden Sea and the atmosphere in tidal flats of the Sylt-Rømø area
85. J. J. Cooney (Boston): Organotin compounds and aquatic bacteria

North Sea Research: Marine Ecophysiology, Parasite-Host Relationships

86. J.-U. Kerstein (Kiel): The occurrence of *Hyperia galba*, a parasite on scyphomedusae, in the Kiel Bight/Baltic Sea 1990/91
87. S. Groenewold, C.-D. Zander & R. Berghahn (Hamburg): On the importance of small-sized fish from discards of shrimpers in the Wadden Sea as intermediate hosts for parasites
88. R. Berghahn & K. Wiese (Hamburg): Physical and physiological aspects of gear efficiency in brown shrimp fisheries
89. A. Moosler (Hamburg): Neuropeptides from Hydro- and Scyphozoa: Structure, localisation and biosynthesis
90. D. Kltz (Rostock), K. Bttcher (Hamburg) & R. Bastrop (Rostock): Cellular localisation and activity of carbonic anhydrase in the branchial epithelium of the euryhaline *Tilapia*, *Oreochromis mossambicus* (Peters)
91. P. Pawlik & H. Langer (Bochum): Light-induced morphological effects in the compound eye of *Pagurus bernhardus* (Crustacea, Anomura)
92. D. Lardinois & M. Poulicek (Liège): Fate of organic compounds in North Sea sediments
93. J. F. Imhoff & A. Schneider (Bonn): Bacteria involved in the oxidative part of the sulfur cycle in marine sediments
94. A.-S. Niemeyer (Hamburg): Sulfide dynamics and annelid distribution patterns in a North Sea tidal flat (List/Sylt)
95. H. H. Janssen & R. Oeschger (Bremerhaven): Hydrogen sulfide resistance in benthic marine invertebrates
96. K. T. Hill & C. Z. Womersley (Honolulu): Patterns of fluorescent age-pigment accumulation and variation in aquatic organisms
97. R. Saborowski¹, S. Donachie², R.-A. Vetter³, G. Peters³ & F. Buchholz¹ (¹Helgoland, ²Warsaw, ³Kiel): Endosymbiotic bacteria in northern krill?
98. B. Schaffelke (Helgoland): The seasonal growth of *Laminaria hyperborea* and its relation to endogenous abscisic acid levels
99. G. Akoev (St. Petersburg): Electrosensory system of lower vertebrates
100. B. Lbbering (Liège) & D. K. Hofmann (Bochum): Do test cells secrete a hatching enzyme in *Ascidella aspersa* (Tunicata, Ascidiacea)?
101. S. Gollasch (Hamburg): Population dynamics and parasitization of planktonic and benthic crustacea in the Baltic Sea fjord Schlei
102. K. Warnke (Bremen): Colour patterns of *Sepia officinalis* (Cephalopoda) and their relation to social behaviour
103. A. Olsowski (Berlin), M. Putzenlechner (Berlin) & K. Bttcher (Hamburg): The carbonic anhydrase in posterior gills of *Eriocheir sinensis*. Effects of adaptation from tapwater to sea water
104. K. Graszynski, A. Johannsen, H. Onken, M. Putzenlechner, S. Riestenpatt, C. Schirmer & W. Zeiske (Berlin): Na⁺- and Cl⁻ uptake across posterior gills of *Eriocheir sinensis* acclimated to freshwater
105. H. Onken (Berlin) & D. Siebers (Hamburg): Electrogenic uptake of NaCl across split lamellae of posterior gills of low-salt adapted shore crabs (*Carcinus maenas*)
106. K. Bttcher (Hamburg), D. Siebers (Hamburg) & S. Sender (Hannover): Localization, biochemistry, and physiology of the enzyme carbonic anhydrase in the gills of the shore crab *Carcinus maenas*

Modern Techniques in Marine Ecology

107. F. Buchholz¹, C. Buchholz¹, S. Kosfeld² & J. Reppin² (¹Helgoland, ²Kiel): A study of vertical migration of Kattegat zooplankton, comparing net catches and measurements with acoustic doppler current profilers
108. K. H. Vanselow¹, B. Ruesch¹, C. Moldaenke² & U.-P. Hansen² (¹Büsum, ²Kiel): A new system for measuring changes in environmental parameters and algal concentrations by photosynthetic activity
109. H.-J. Schwarz (Berlin): Toxicological influences in the ecophysiological environment of crab gills induced by cadmium and copper – an electrophysiological investigation
110. B. Stjepcevic (Kotor): Biotesting of trickling filter efficiency of BAH's recycling aquarium system in Hamburg
111. U. H. Brockmann (Hamburg): Mesocosms in estuaries

Marine Ecology: Political, Economic and Environmental Implications

112. I. Vukadin (Split): Fate and distribution of toxic heavy metals in some marine organisms from the eastern Adriatic coast
113. S. Ostroumov, J. Waterburg & M. Maertz-Wente (Moscow): Effects of water contamination by surfactants on marine organisms
114. D. Schiedek (Warnemünde): The importance of physiological studies for marine ecology: Investigations on polychaetes
115. U. Lange (Hamburg): Initial characterization of the cytochrome P 450 enzyme system in the liver of dab (*Limanda limanda* L.)
116. H. Marencic & D. Lorch (Hamburg): Comparative investigations on the potential use of Wadden Sea organisms of different trophic levels for trend monitoring. Part II: Polychlorinated biphenyls
117. W. Matthäus & H. Franck (Warnemünde): Strong aperiodic salt water inflows and their effects in the Baltic Sea
118. C. J. M. Philippart & A. G. Brinkman (Den Burg, Texel): Incorporation of mesocosm monitoring in a study of the Venice Lagoon
119. F. Weinberger (Hamburg): Sorption of heavy metals in marine algae

Marine Ecology of Specific Areas

120. R. Gradinger, H. H. Janssen & J. Weissenberger (Bremerhaven): Acoel Turbellaria: A major component of sea ice meiofauna
121. H. Hübel (Kloster, Hiddensee): Long-term changes in nutrient content and primary production in coastal waters of the Arkona Sea (Baltic)
122. Zander, C. D. & H. Blessin (Hamburg): The shallow benthic system of the SW Baltic, a seriously endangered area
123. S. M. Saifullah (Karachi): Seasonal distribution of chlorophyll a in the N. E. Arabian Sea
124. A. Zhirmunsky (Vladivostok): Cells' heat resistance and species distribution in the upper sublittoral zone of NE Atlantic

125. T. A. Cordeiro (Helgoland): Cluster analysis of conservative parameters of water masses. An alternative graphical representation of temperature and salinity gradients
126. Y. Q. Chen (Shanghai): The distribution of *Noctiluca* in the China Sea
127. M. Carstens (Hamburg), A. J. Gooday (Wormley) & H. Thiel (Hamburg): The protistan challenge: The importance of nanobenthic and larger benthic protists in deep sea sediments
128. N. A. Kayombo (Berlin): Some morphometric characteristics of the edible cockle *Anadara uropigimelana* (Bory, 1824) from the Dar-Es-Salaam Coast, Tanzania
129. R. Weigmann-Haass (Kiel): Seasonal change in the Greenland Sea – response of planktic crustaceans
130. B. L. Wu (Qingdao) & W. Westheide (Osnabrück): Chinese-German cooperative study on polychaetes in the Yellow Sea and Hainan Waters (South China Sea)
131. D. Jinhai (Qingdao): Today and tomorrow of the studies on marine mammals in China
132. A. N. Petrov (Sevastopol): Evaluation of the effects of recreational use of the water area on the state of the bottom landscape of the Black Sea Bay