

# THE MARINE BIOLOGICAL ASSOCIATION OF THE UNITED KINGDOM

## TERMS OF MEMBERSHIP FOR 2011

Annual members, receiving the Journal – online only, per annum	£55.00*
Annual members, receiving the Journal – print only, per annum	£95.00*
Annual members, receiving the Journal – print and online, per annum	£115.00*
Annual members, without the Journal, per annum	£35.00*
Corporate members, receiving the Journal – online only, per annum	£360.00
Corporate members, receiving the Journal – print and online, per annum	£425.00
Student members, with the Journal – online only, per annum (non-voting)	£30.00
Student members, with the Journal – print only, per annum (non-voting)	£45.00
Student members, without the Journal, per annum (non-voting)	£20.00

The Association is a registered charity and was founded in 1884 to promote accurate researches leading to the advancement of zoological and botanical science and to increase our knowledge of the food, life, conditions and habits of British fish. The work of the Association is controlled by the Council elected annually by its subscribing members.

The Marine Biological Association, under the direction of its Council, has undertaken research in all branches of marine science and many of the results have been published in this Journal. An account of the history of the first hundred years of the Association and Journal may be found in Volume 67 (pp. 463 and 465). Summaries of the activities and research of the Association are given annually in the Report of the Council, sent to members in April, and to other subscribers with a later issue of the *JMBA*.

Since its foundation the Association has been supported by grants from Research Councils and by subscriptions and donations from private members, universities, learned societies, the Fishmongers' Company and other public bodies.

The Plymouth Laboratory was opened in June 1888 and, since that date, considerable additions have been made to the buildings, including a library, resource centre, extensive laboratory accommodation and seawater facilities.

In 1988 an agreement was reached between the MBA Council and the Natural Environment Research Council (NERC) to merge a large part of the Plymouth Laboratory with the NERC's Institute for Marine Science which had been in Plymouth since 1971. This new institute was called the Plymouth Marine Laboratory (PML) based at both Citadel Hill and West Hoe sites. In 2001 the MBA and PML re-established separate identities funded by Grants-in-aid from NERC. The Association and the research programme are based entirely at the Citadel Hill Laboratory. The building is shared with SAHFOS (Sir Alister Hardy Foundation for Ocean Science). The research organizations are part of the Plymouth Partnership

which includes PML, the University of Plymouth and the NMA (National Marine Aquarium). Active collaboration and shared resources mutually enhance the marine research programmes of the participants.

The Marine Biological Association retains the lease of the building on Citadel Hill and continues as a very active scientific learned society with a large international membership. The MBA manages a research programme carried out by research fellows (partly funded by NERC) together with scientific visitors, publishes an International Journal, Annual Report, Newsletters and organizes scientific meetings.

Subscriptions can be paid by cash/cheque, direct debit from a UK bank account or credit card. \*Subscriptions are reduced by £5 per annum if paying by direct debit.

Members of the Association have the following rights and privileges: they elect the Officers and Council annually; they are entitled to receive the Journal of the Association at the members' rate; they receive the biannual Newsletter; they have the option to apply to the Director for research facilities at the laboratory; and they have access to the resources in the library at Plymouth during working hours. Corporate members have significant additional rights and privileges, details of which can be supplied on request. Student members do not have voting rights. The Commissioners of Inland Revenue have approved the Association for the purposes of Section 16, Finance Act, 1958, and that the whole of the annual subscriptions paid by a member who qualifies for relief under the section will be allowable as a deduction from his emoluments assessable to income tax.

All correspondence should be addressed to: The Membership Secretary, Marine Biological Association, The Laboratory, Citadel Hill, Plymouth, PL1 2PB, UK (Tel: +44 (0) 1752 633207; Fax: +44 (0) 1752 633102; e-mail: membership@mba.ac.uk).

PUBLISHED BY THE PRESS SYNDICATE OF THE UNIVERSITY OF CAMBRIDGE  
The Pitt Building, Trumpington Street, Cambridge, CB2 1RP, United Kingdom

This journal issue has been printed on FSC-certified paper and cover board. FSC is an independent, non-governmental, not-for-profit organization established to promote the responsible management of the world's forests. Please see [www.fsc.org](http://www.fsc.org) for information.

CAMBRIDGE UNIVERSITY PRESS

The Edinburgh Building, Cambridge, CB2 2RU, United Kingdom  
40 West 20th Street, New York, NY 10011-4211, USA  
477 Williamstown Road, Port Melbourne, VIC 3207, Australia  
C/ Orense, 4, planta 13, 28020, Madrid, Spain  
Dock House, The Waterfront, Cape Town 8001, South Africa

CONTENTS

ECOLOGY AND BIODIVERSITY

- BARRÍA DE CAO, M.S., PICCOLO, M.C. & PERILLO, G.M. Biomass and microzooplankton seasonal assemblages in the Bahía Blanca Estuary, Argentinean Coast 953
- CHRISTOFOLETTI, R.A., TAKAHASHI, C.K., OLIVEIRA, D.N. & FLORES, A.A.V. Abundance of sedentary consumers and sessile organisms along the wave exposure gradient of subtropical rocky shores of the south-west Atlantic 961
- HERNÁNDEZ-ARANA, H.A. & AMENYRO-ANGELES, B. Benthic biodiversity changes due to the opening of an artificial channel in a tropical coastal lagoon (Mexican Caribbean) 969

SPONGES

- GOODWIN, C.E., PICTON, B.E. & VAN SOEST, R.W.M. *Hymedesmia* (Porifera: Demospongiae: Poecilosclerida) from Irish and Scottish cold-water coral reefs, with a description of five new species 979
- CRUZ-BARRAZA, J.A., CARBALLO, J.L., BAUTISTA-GUERRERO, E. & NAVA, H. New species of excavating sponges (Porifera: Demospongiae) on coral reefs from the Mexican Pacific Ocean 999
- RUA, C.P.J., ZILBERBERG, C. & SOLÉ-CAVA, A.M. New polymorphic mitochondrial markers for sponge phylogeography 1015

CRUSTACEA AND PYCNOGONIDS

- FERRARI, L., GIL, D.G. & VINUESA, J.H. Breeding and fecundity of the sub-Antarctic crab *Halicarcinus planatus* (Crustacea: Hymenosomatidae) in the Deseado River estuary, Argentina 1023
- KORNIENKO, E.S. & KORN, O.M. The larval development of the hermit crab *Areopaguristes nigroapiculus* (Decapoda: Anomura: Diogenidae) reared under laboratory conditions 1031
- MÉNDEZ CASARIEGO, A., LUPPI, T. & IRIBARNE, O. Differential coloration patterns in the intertidal crab *Neohelice* (= *Chasmagnathus*) *granulata* 1041
- NANRI, T., FUKUSHIGE, M., UBALDO, J.P., KANG, B.-J., MASUNARI, N., TAKADA, Y., HATAKEYAMA, M. & SAIGUSA, M. Occurrence of abnormal sexual dimorphic structures in the gonochoristic crustacean, *Upogebia major* (Thalassinidea: Decapoda), inhabiting mud tidal flats in Japan 1049
- DUMONT, L.F.C. & D'INCAO, F. By-catch analysis of Argentinean prawn *Artemesia longinaris* (Decapoda: Penaeidae) in surrounding area of Patos Lagoon, southern Brazil: effects of different rainfall 1059
- FENG, D., KE, C., LU, C. & LI, S. Antifouling activity of marine sessile organisms from China against barnacle settlement 1073
- LEHMANN, T., WEINZIERL, C. & MELZER, R.R. SEM description of the first larval instar of *Achelia assimilis* (Pycnogonida: Ammotheidae) 1081

GASTROPODS AND BIVALVES

- TESO, V., SIGNORELLI, J.H. & PASTORINO, G. Shell phenotypic variation in the south-western Atlantic gastropod *Olivancillaria carcellesi* (Mollusca: Olividae) 1089
- YOKOYAMA, L.Q. & AMARAL, A.C.Z. Allometric growth of a common Nassariidae (Gastropoda) in south-east Brazil 1095
- BÁEZ, D.P., ARDILA, N., VALDÉS, A. & ACERO, A.P. Taxonomy and phylogeny of *Armina* (Gastropoda: Nudibranchia: Arminidae) from the Atlantic and eastern Pacific 1107
- SUDO, K., HIRANO, Y.J. & HIRANO, Y.M. Newly discovered parasitic Turbellaria of opisthobranch gastropods 1123
- KRYLOVA, E.M., GEBRUK, A.V., PORTNOVA, D.A., TODT, C. & HAFLIDASON, H. New species of the genus *Isorropodon* (Bivalvia: Vesicomidae: Pliocardiinae) from cold methane seeps at Nyegga (Norwegian Sea, Vøring Plateau, Storrega Slide) 1135