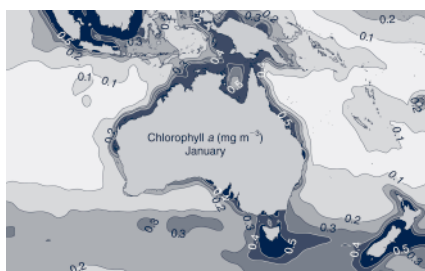




Cover

Predicting, estimating and measuring fish assemblage structure characteristics are vital for understanding and managing aquatic ecosystems. Read more in Chessman (p. 601), Balcombe *et al.* (p. 619) and Kennard *et al.* (p. 635).



A major challenge of ecosystem-based management is identifying the spatial units that define the distributions of marine communities. Condie and Dunn (p. 569) report physical, chemical and biological properties of the surface mixed layer environment in the Australasian region and define important biogeographical patterns.

CONTENTS

- Seasonal characteristics of the surface mixed layer in the Australasian region: implications for primary production regimes and biogeography
S. A. Condie and J. R. Dunn 569
- Constructing long-term proxy series for aquatic environments with absolute dating control using a sclerochronological approach: introduction and advanced applications
S. Helama, B. R. Schöne, B. A. Black and E. Dunca 591
- Prediction of riverine fish assemblages through the concept of environmental filters
B. C. Chessman 601
- Flowing water decreases hydrodynamic signal detection in a fish with an epidermal lateral-line system
D. K. Bassett, A. G. Carton and J. C. Montgomery 611
- Fish assemblages of an Australian dryland river: abundance, assemblage structure and recruitment patterns in the Warrego River, Murray–Darling Basin
S. R. Balcombe, A. H. Arthington, N. D. Foster, M. C. Thoms, G. G. Wilson and S. E. Bunn 619
- Estimating local stream fish assemblage attributes: sampling effort and efficiency at two spatial scales
M. J. Kennard, B. J. Pusey, B. D. Harch, E. Dore and A. H. Arthington 635
- No outbreeding depression at a regional scale for a habitat-forming intertidal alga with limited dispersal
P. F. McKenzie and A. Bellgrove 655

EARLY ALERT Sign-up at www.publish.csiro.au/journals/mfr for our electronic early alert and receive the next table of contents weeks in advance of the print version