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Marine Laboratories**

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Marine Laboratories, 1978–1984**

Edited by Vivienne Mawson

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Preface

The Fisheries Investigation Section of the Council for Scientific and Industrial Research was formally created in 1936, with the appointment of its first Officer-in-Charge, Dr Harold Thompson. The section became the Division of Fisheries of the Commonwealth Scientific and Industrial Research Organisation (CSIRO) in 1948; in March 1981 it was reorganised into the Division of Fisheries Research and the Division of Oceanography. The headquarters of both divisions are at the CSIRO Marine Laboratories, Hobart, Tasmania. Regional laboratories are located in Marmion (Perth, Western Australia) and Cleveland (Brisbane, Queensland).

Publications by members of the divisions are listed in the annual and biannual research reports of the divisions. A consolidated list of publications between 1938 and 1978 was published in 1978. The present list covers publications between 1978 and 1985, with some earlier publications omitted from the previous list. The publications are listed by offprint number (pp.1-53) and indexed by author (pp.55-66). Offprints of most of the publications are available on request from the Librarian, CSIRO Marine Laboratories, GPO Box 1538, Hobart, Tas 7001, Australia.

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*Vivienne Mawson
Scientific Editor
CSIRO Divisions of Fisheries and Oceanography*

Publications by Offprint Number Assigned by the
CSIRO Marine Laboratories Library

- 1004 RITZ, D.A. (1977)
The larval stages of *Scyllarus demani* Holthuis, with notes on the larvae of *S. sordidus* (Stimpson) and *S. timidus* Holthuis (Decapoda, Palinuridea).
Crustaceana 32, 229-240.
- 1005 MACKEY, D.J. (1982)
The adsorption of simple trace metal cations on Amberlite XAD-1 and XAD-2. A study using a multichannel non-dispersive atomic fluorescence detector with quantitation by batch measurements.
Journal of Chromatography 236, 81-95.
- 1006 BRAINE, S.J., RIMMER, D.W. and PHILLIPS, B.F. (1979)
An illustrated key and notes on the phyllosoma stages of the western rock lobster *Panulirus cygnus* George.
CSIRO Division of Fisheries and Oceanography Report 102.
- 1007 DALL, W., AND SMITH, D.M. (1978)
Changes in apparent water permeability during the moulting cycle in the western rock lobster.
Journal of Experimental Marine Biology and Ecology 34, 43-54.

- 1008 HINDLEY, J.P.R. and ALEXANDER, C.G. (1978)
Structure and function of the chelate pereopods of the banana prawn
Penaeus merguensis.
Marine Biology 48, 153-160.
- 1009 DAL PONT, G. and MAJOR, G.A (1978)
Determination of mercury in sea-water using Tin II reduction and
syringe injection atomic absorption.
CSIRO Division of Fisheries and Oceanography Report 83.
- 1010 PHILLIPS, B.F. and HALL, N.G. (1978)
Catches of puerulus larvae on collectors as a measure of natural
settlement of the western rock lobster *Panulirus cygnus* George.
CSIRO Division of Fisheries and Oceanography Report 98.
- 1011 SANDLAND, R.L. and YOUNG, P.C. (1979)
Probabilistic tests and stopping rules associated with hierarchical
classification techniques.
Australian Journal of Ecology 4, 399-406.
- 1012 STAPLES, D.J. (1979)
Seasonal migration patterns of postlarval and juvenile banana
prawns, *Penaeus merguensis* de Man, in the major rivers of the Gulf
of Carpentaria, Australia.
Australian Journal of Marine and Freshwater Research 30, 143-157.
- 1013 PARKER, R.R. and VAUDREY, D.J. (1980)
A proposed reference standard for *in vivo* chlorophyll *a* fluorometry.
CSIRO Division of Fisheries and Oceanography Report 125.
- 1014 WEINER, P. and KIRKMAN, H. (1979)
Continuous recording technique to measure oxygen release from a
seagrass community within an acrylic insulation chamber.
CSIRO Division of Fisheries and Oceanography Report 96.
- 1015 SMITH, D.F. and HIGGINS, H.W. (1978)
An interspecies regulatory control of dissolved organic carbon
production by phytoplankton and incorporation by microheterotrophs,
pp. 34-39 in *Microbial Ecology* (ed. M.W. Loutit and J.A.R. Miles)
Berlin: Springer-Verlag.
- 1017 KIRKWOOD, G.P. and ALLEN, K.R. (1978)
Programme to calculate time series of sei whale population
components for given catches (SEI).
International Whaling Commission. *Report of the Commission* 28, 227-
231.
- 1018 SCOTT, B.D. (1978)
Nutrient cycling and primary production in Port Hacking, New South
Wales.
Australian Journal of Marine and Freshwater Research 29, 803-815.

- 1019 KIRKWOOD, G.P. (1980)
The net catcher day as a measure of effort.
International Whaling Commission. *Report of the Commission* 29, 163-165.
- 1020 WEBB, B.F. and GRANT, C.J. (1979)
Age and growth of jack mackerel, *Trachurus declivis* (Jenyns), from south-eastern Australian waters.
Australian Journal of Marine and Freshwater Research 30, 1-9.
- 1021 DALL, W. and BARCLAY, M.C. (1979)
The effect of exogenous 20-hydroxydysone on levels of epidermal DNA and RNA in the western rock lobster.
Journal of Experimental Marine Biology and Ecology 36, 103-110.
- 1022 SCOTT, B.D. (1979)
Seasonal variations of phytoplankton production in an estuary in relation to coastal water movements.
Australian Journal of Marine and Freshwater Research 30, 449-461.
- 1024 ALLEN, K.R., and KIRKWOOD, G.P. (1979)
Program to estimate baleen whale population sizes (BALEEN).
International Whaling Commission. *Report of the Commission* 29, 367-368.
- 1025 STANLEY, C.A. (1980)
Lee's phenomenon in the western subspecies of the Australian salmon, *Arripis trutta esper*.
Australian Journal of Marine and Freshwater Research 31, 13-19.
- 1026 KIRWAN, A.D. and CRESSWELL, G.R. (1982)
Observations of large and mesoscale motions in the near-surface layer, pp. 79-125 in *Topics in Ocean Physics* (ed. A.R. Osborne and P.M. Rizzoli) Bologna: Corso.
- 1027 ROTH LISBERG, P.C., JACKSON, C.J. and PENDRY, R.C. (1978)
Larvae of Gulf of Carpentaria prawns reared at sea.
Australian Fisheries 37(7), 8-12.
- 1028 DALL, W. and SMITH, D.M. (1978)
Water uptake at ecdysis in the western rock lobster.
Journal of Experimental Marine Biology and Ecology 35, 165-176.
- 1029 BEDDINGTON, J.R., and KIRKWOOD, G.P. (1980)
On the mathematical structure of possible sperm whale models.
International Whaling Commission *Report of the Commission Special Issue* 2, 57-58.
- 1030 KIRKMAN, H. and REID, D.D. (1979)
A study of the role of the seagrass *Posidonia australis* in the carbon budget of an estuary.
Aquatic Botany 7, 173-183.

- 1031 HALLEGRAEFF, G.M. and JEFFREY, S.W. (1985)
Description of new chlorophyll *a* alteration products in marine phytoplankton.
Deep-Sea Research 32(6), 697-705.
- 1032 KIRKWOOD, G.P. (1980)
A note on the assessment of North Pacific sperm whales.
International Whaling Commission. *Report of the Commission* Special Issue 2, 77.
- 1033 MAXWELL, J.G.H. and BROWN, P.A. (1978)
CSIRO investigation of the demersal fish community of the western Great Australian Bight.
Australian Fisheries 37(8), 2-9.
- 1034 CUFF, W., SINCLAIR, R. and PARKER, R. (1978)
The development of an ecosystem model of South West Arm (Port Hacking, N.S.W.), pp. 33-38 in *Simulation of Modelling Techniques and applications* (Proceedings of SIMSIG-78: Simulation Conference) Canberra: Australian National University.
- 1035 WADLEY, V.A. (1978)
A checklist and illustrated key to the epibenthic shrimps (Decapoda: Natantia) of Moreton Bay, Queensland.
CSIRO Division of Fisheries and Oceanography Report 99.
- 1036 RAINER, S.F., IVANOVICI, A.M. and WADLEY, V.A. (1979)
Effect of reduced salinity and adenylate energy charge in three estuarine molluscs.
Marine Biology 54, 91-99.
- 1037 BOLAND, F.M. (1979)
A time series of expendable bathythermograph sections across the East Australian Current.
Australian Journal of Marine and Freshwater Research 30, 303-313.
- 1038 STAPLES, D.J. and VANCE, D.J. (1979)
Effects of changes in catchability on sampling of juvenile and adolescent banana prawns, *Penaeus merguensis* de Man.
Australian Journal of Marine and Freshwater Research 30, 511-519.
- 1039 MORIARTY, D.J.W. (1979)
Muramic acid in the cell walls of *Prochloron*.
Archives of Microbiology 120, 191-193.
- 1040 STANLEY, C.A. (1979)
Decline in WA salmon catch.
Australian Fisheries 38(3), 14-17.

- 1041 HUTCHINGS, P. and RAINER, S.F. (1979)
The polychaete fauna of Careel Bay, Pittwater, New South Wales, Australia.
Journal of Natural History 13, 745-796.
- 1042 SAINSBURY, K.J. (1979)
CSIRO defining fish stocks on NW Shelf.
Australian Fisheries 38(3), 4-10.
- 1043 GARDNER, D. and DAL PONT, G. (1979)
A rapid, simple method for the determination of total mercury in fish and hair by cold-vapour atomic absorption spectrometry.
Analytica Chimica Acta 108, 13-20.
- 1044 CRESSWELL, G.R. and GOLDING, T.J. (1979)
Satellite-tracked buoy data report III. Indian Ocean 1977 Tasman Sea July-December 1977.
CSIRO Division of Fisheries and Oceanography Report 101.
- 1045 BLACKBURN, M. (1979)
The gemfish, *Rexea solandri* (Cuvier and Valenciennes): distribution and length data from Australian east coast shelf waters.
CSIRO Division of Fisheries and Oceanography Report 103.
- 1046 EDWARDS, R.J. (1979)
Tasman and Coral Sea ten year mean temperature and salinity fields, 1967-1976.
CSIRO Division of Fisheries and Oceanography Report 88.
- 1047 SAINSBURY, K.J. (1980)
Effect of individual variability on the von Bertalanffy growth equation.
Canadian Journal of Fisheries and Aquatic Sciences 37(2), 241-247.
- 1048 CRESSWELL, G.R. and GREIG, M.A. (1979)
Satellite-tracked buoy data report IV. South west Pacific Ocean January - June 1978.
CSIRO Division of Fisheries and Oceanography Report 104.
- 1049 WADLEY, V.A. and YOUNG P.C. (1979)
Distribution and abundance of epibenthic faunal species collected from the littoral and infra-littoral fringes of Moreton Bay, Queensland, 1972-1973.
CSIRO Division of Fisheries and Oceanography Microfiche Report 2.
- 1050 BLACKBURN, M., and SERVENTY, D.L. (1981)
Observations on distribution and life history of skipjack tuna, *Katsuwonus pelamis*, in Australian waters.
Fishery Bulletin, 79(1), 85-94.

- 1051 TRANTER, D.J., PARKER, R.R. and VAUDREY, D.J. (1979)
In vivo chlorophyll *a* fluorescence in the vicinity of warm-core eddies off the coast of New South Wales, 1. September 1978.
CSIRO Division of Fisheries and Oceanography Report 105.
- 1052 WEBSTER, I., GOLDING, T.J. and DYSON, N. (1979)
Hydrological features of the near-shelf waters off Fremantle, Western Australia, during 1974.
CSIRO Division of Fisheries and Oceanography Report 106.
- 1053 MURPHY, G.I. (1979)
Southern bluefin tuna.
CSIRO Division of Fisheries and Oceanography. Fishery Situation Report 1.
- 1054 RAINER, S.F. (1979)
The benthic macrofauna of Gunnamatta Bay, Port Hacking, NSW: biological and physicochemical data, January 1975 - February 1975.
CSIRO Division of Fisheries and Oceanography Microfiche Report 3.
- 1055 BLACKBURN, M. (1980)
Observations on the distribution of *Nyctiphanes australis* Sars (Crustacea, Euphausiidae) in Australian waters.
CSIRO Division of Fisheries and Oceanography Report 119.
- 1056 PHILLIPS, B.F., BROWN, P.A., RIMMER, D.W. and REID, D.D. (1979)
Distribution and dispersal of phyllosoma larvae of the western rock lobster, *Panulirus cygnus*, in the south-eastern Indian Ocean.
Australian Journal of Marine and Freshwater Research 30, 773-783.
- 1057 CRESSWELL, G.R. and GOLDING, T.J. (1980)
Observations of a south-flowing current in the southeastern Indian Ocean.
Deep-Sea Research 27(A), 449-466.
- 1058 GARDNER, D. (1979)
Design and operation of a laminar flow clean-room for trace metal analysis in marine chemistry.
CSIRO Division of Fisheries and Oceanography Report 107.
- 1059 MORIARTY, D.J.W. (1979)
Biomass of suspended bacteria over coral reefs.
Marine Biology 53, 193-200.
- 1060 SANDLAND, R.L. and YOUNG, P.C. (1979)
Tables of probabilities associated with the fission of replicate samples in classifications.
CSIRO Division of Fisheries and Oceanography Report 108.

- 1061 CHITTLEBOROUGH, R.G. (1979)
Natural regulation of the population of *Panulirus longipes cygnus* George and responses to fishing pressure.
Rapports et Proces-Verbaux des Reunions, Conseil International pour l'Exploration de la Mer 175, 217-221.
- 1062 CHITTLEBOROUGH, R.G. and PHILLIPS, B.F. (1979)
Recruitment to the catchable stock of the western rock lobster *Panulirus longipes cygnus* George.
Rapports et Proces-Verbaux des Reunions, Conseil International pour l'Exploration de la Mer 175, 139-142.
- 1063 RAINER, S.[F.] (1980)
The benthic biotopes of South West Arm, Port Hacking, N.S.W., 1975.
CSIRO Division of Fisheries and Oceanography Report, 109.
- 1064 GODFREY, J.S., CRESSWELL, G.R. and BOLAND, F.M. (1980)
Observations of low Richardson numbers and undercurrents near a front in the East Australian Current.
Journal of Applied Meteorology 10(2), 301-307.
- 1065 CHURCH, J.A. and FORBES, A. (1979)
Tidal and non-tidal circulation in Gulf of Carpentaria.
Australian Fisheries 9, 21-23.
- 1066 TRANTER, D.J., PARKER, R.R. and HIGGINS, H.W. (1979)
In vivo chlorophyll *a* fluorescence in the vicinity of warm-core eddies off the coast of New South Wales 2. October 1978.
CSIRO Division of Fisheries and Oceanography Report 110.
- 1067 HAMON, B.V. (1979)
Mean sea level at Norfolk Island and Lord Howe Island.
CSIRO Division of Fisheries and Oceanography Report 111.
- 1068 HAMON, B.V. (1979)
Direct measurement of ocean currents over the continental slope off Sydney.
Australian Journal of Marine and Freshwater Research 30, 833-836.
- 1069 MAXWELL, J.G.H. (1980)
A field guide to trawl fish from the temperate waters of Australia.
CSIRO Australia Division of Fisheries and Oceanography Circular 8.
- 1070 RIMMER, D.W. and PHILLIPS, B.F. (1979)
Diurnal migration and vertical distribution of phyllosoma larvae of the western rock lobster *Panulirus cygnus*.
Marine Biology 54, 109-124.
- 1071 KIRKWOOD, G.P. (1980)
A note on modelling of sperm whale pregnancy rates.
International Whaling Commission Report of the Commission Special Issue 2, 79-80.

- 1072 GODFREY, J.S., CRESSWELL, G.R., GOLDING, T.J., PEARCE, A.F. and BOYD, R. (1980)
The separation of the East Australian Current.
Journal of Physical Oceanography 10(3), 430-440.
- 1073 KIRKWOOD, G.P. (1980)
Sensitivity tests for the sperm whale model.
International Whaling Commission *Report of the Commission Special Issue 2*, 81-82.
- 1074 GARDNER, D. (1979)
A laminar flow clean-room for trace metal analysis: requirements, design, construction and operation.
Laboratory Practice 28(10), 1071-1075.
- 1075 STAPLES, D.J. (1980)
Ecology of juvenile and adolescent banana prawns, *Penaeus merguensis*, in a mangrove estuary and adjacent off-shore area of the Gulf of Carpentaria. I. Immigration and settlement of postlarvae.
Australian Journal of Marine and Freshwater Research 31, 635-652.
- 1076 TRANTER, D.J., PARKER, R.R., GARDNER, D. and CAMPBELL, R. (1980)
In vivo chlorophyll *a* fluorescence in the vicinity of warm-core eddies off the coast of New South Wales 3. November 1978.
CSIRO Division of Fisheries and Oceanography Report 112.
- 1077 TRANTER, D.J., PARKER, R.R. and VAUDREY, D.J. (1980)
In vivo chlorophyll *a* fluorescence in the vicinity of warm-core eddies off the coast of New South Wales 4. December 1978.
CSIRO Division of Fisheries and Oceanography Report 113.
- 1078 GRIFFITHS, F.B. and CAPERON, J. (1979)
Description and use of an improved method for determining estuarine zooplankton grazing rates on phytoplankton.
Marine Biology 54, 301-309.
- 1079 THOMPSON, R.O.R.Y. and HAMON, B.V. (1980)
Wave setup of harbour water levels.
Journal of Geophysical Research 85, C2, 1151-1152.
- 1080 CRESSWELL, G.R. and GARRETT, J. (1980)
The reponse of drogued and undrogued drifting buoys to eddies and the wind.
CSIRO Division of Fisheries and Oceanography Report 115.
- 1081 MAXWELL, J.G.H. (1979)
Jack mackerel.
CSIRO Division of Fisheries and Oceanography. Fishery Situation Report 2.

- 1082 REDFIELD, J.A., HEDGECOCK, D., NELSON, K. and SALINI, J.P. (1980)
Low heterozygosity in tropical marine crustaceans of Australia and the trophic stability hypothesis.
Marine Biology Letters 1, 303-313.
- 1083 GODFREY, J.S., JONES, I.S.F., MAXWELL, J.G.H. and SCOTT, B.D. (1980)
On the winter cascade from Bass Strait into the Tasman Sea.
Australian Journal of Marine and Freshwater Research 31, 275-286.
- 1084 MAXWELL, J.G.H. and CRESSWELL G.R. (1981)
Dispersal of tropical marine fauna to the Great Australian Bight by the Leeuwin Current.
Australian Journal of Marine and Freshwater Research 32, 493-500.
- 1085 GARDNER, D. (1980)
High mercury levels in Australian commercial fish.
Marine Pollution Bulletin 11(1), 2.
- 1086 REDFIELD, J.A. and SALINI, J.P. (1980)
Techniques of starch-gel electrophoresis of penaeid prawn enzymes (*Penaeus* spp. and *Metapenaeus* spp.).
CSIRO Division of Fisheries and Oceanography Report 116.
- 1087 KIRKMAN, H. and YOUNG, P.C. (1981)
Measurement of health, and echinoderm grazing on *Posidonia oceanica* (L.) Delile.
Aquatic Botany 10, 329-338.
- 1088 HAMON, B.V. (1980)
Estimating the depth of neutrally buoyant floats.
Deep-Sea Research 27A, 293-296.
- 1089 BRANDT, S.B. (1980)
Spatial segregation of adult and young-of-the-year alewives across a thermocline in Lake Michigan.
Transactions of the American Fisheries Society 109, 469-478.
- 1090 HUTCHINGS, P. and RAINER, S. (1981)
Designation of a neotype of *Capitella filiformis* Claparede, 1864, type species of the genus *Heteromastus* (Polychaeta: Capitellidae).
Records of the Australian Museum 34(4), 373-380.
- 1091 KIRKWOOD, G.P. (1981)
Allowing for risks in setting catch limits based on MSY.
Mathematical Biosciences 53, 119-129.
- 1092 KIRKWOOD, G.P. (1981)
Generalized models for the estimation of rates of tag shedding by southern bluefin tuna (*Thunnus maccoyii*).
Rapports et Proces-Verbaux des Reunions, Conseil Internationale pour l'Exploration de la Mer 39, 256-260.

- 1093 PHILLIPS, B.F. and SCOLARO, A.B. (1980)
An electrofishing apparatus for sampling sublittoral benthic marine habitats.
Journal of Experimental Marine Biology and Ecology **47**, 69-75.
- 1094 RAINER, S.F. and GRIFFITHS, F.B. (1980)
Hydrology of an estuary with periodic deoxygenation.
CSIRO Division of Fisheries and Oceanography Report **117**.
- 1095 TRANTER, D.J., PARKER, R.R. and CRESSWELL, G.R. (1980)
Are warm-core eddies unproductive?
Nature **284**(5756), 540-542.
- 1096 GEORGE, R.W., MORGAN, G.R. and PHILLIPS, B.F. (1979)
The western rock lobster, *Panulirus cygnus*.
Journal of the Royal Society of Western Australia **62**, 45-51.
- 1097 THOMPSON, R.O.R.Y. (1979)
Coherence significance levels.
Journal of the Atmospheric Sciences **36**(10), 2020-2021.
- 1098 MULHEARN, P.J. and EDWARDS, R.J. (1980)
A time series of oceanographic sections across the equator at 92°E in the Eastern Indian Ocean.
R.A.N. Research Laboratory. *RANRL Technical Note* **2/79**.
- 1099 MANN, E.H. and KIRKMAN, H. (1981)
Biomass method for measuring productivity of *Ecklonia radiata*, with the potential for adaptation to other large brown algae.
Australian Journal of Marine and Freshwater Research **32**, 297-304.
- 1100 TOMCZAK, M.Jr. (1981)
A multi-parameter extension of temperature/salinity diagram techniques for the analysis of non-isopycnal mixing.
Progress in Oceanography **10**, 147-171.
- 1101 MAXWELL, J.G.H. (1980)
Soela rigged for important role in researching AFZ.
Australian Fisheries **39**(3), 4-80.
- 1102 WADLEY, V.A. and LU, C.C. (1983)
Distribution of mesopelagic cephalopods around a warm-core ring in the East Australian Current.
Memoirs of the National Museum of Victoria, **44**, 197.
- 1103 CRESSWELL, G.R. and BOLAND, F.M. (1981)
Internal waves detected with a continental shelf current-meter array.
Australian Journal of Marine and Freshwater Research **32**, 1-8.

- 1104 JEFFREY, S.W. (1981)
Phytoplankton ecology - with particular reference to the Australasian region, pp. 242-291 in *Marine Botany: an Australasian Perspective* (ed. M.N Clayton and R.J. King) Melbourne: Longman Cheshire.
- 1105 BOLAND, F.M. and CHURCH, J.A. (1981)
The East Australian Current 1978.
Deep-Sea Research 28A(9), 937-957.
- 1106 HAMON, B.V. and GODFREY, J.S. (1981)
Mean sea level and its interpretation.
Marine Geodesy 4(4), 315-329.
- 1107 EDWARDS, R.J. and EMERY, W.J. (1982)
Australasian southern ocean frontal structure during summer 1976-77.
Australian Journal of Marine and Freshwater Research 33, 3-22.
- 1108 SCOTT, B.D. (1981)
Hydrological structure and phytoplankton distribution in the region of a warm-core eddy in the Tasman Sea.
Australian Journal of Marine and Freshwater Research 32, 479-492.
- 1109 JEFFREY, S.W. and HALLEGRAEFF, G.M. (1980)
Studies of phytoplankton species and photosynthetic pigments in a warm core eddy of the East Australian Current. I. Summer populations.
Marine Ecology Progress Series 3, 285-294.
- 1110 GREIG, M.A. (1980)
Satellite-tracked buoy data report V. Bureau of Meteorology buoys tracked in the Southern, Indian and Pacific oceans, January to March 1979.
CSIRO Division of Fisheries and Oceanography Report 120.
- 1111 PHILLIPS, B.F. , MORGAN, G.R. and AUSTIN, C.M. (1980)
Synopsis of biological data on the western rock lobster *Panulirus cygnus* (George, 1962.)
FAO Fisheries Synopsis 128(i-v), 1-64.
- 1112 PARKER, R.R. (1981)
A note on the so-called "soluble fluorescence" of chlorolphyll *a* in natural waters.
Deep-Sea Research 28A(10), 1231-1235.
- 1113 FORBES, A.M.G. and CHURCH, J.A. (1980)
The effects of compass calibration on Aanderaa current meter records.
CSIRO Division of Fisheries and Oceanography Report 121.

- 1114 DALL, W. and MORIARTY, D.J.W. (1983)
Functional aspects of nutrition and digestion, pp. 215-261 in *The Biology of Crustacea* (ed. D. E. Bliss) New York: Academic.
- 1115 GODFREY, J.S. (1980)
A numerical model of the James River estuary, Virginia, USA.
Estuarine and Coastal Marine Science 11, 295-310.
- 1116 GRIFFITHS, F.B., BRANDT, S.B. and CAVILL, G.A. (1980)
A collapsible rectangular midwater trawl - RMT 1-8.
CSIRO Division of Fisheries and Oceanography Report 122.
- 1117 CASTLE, M.J. (1980)
Proceedings of the Australasian workshop on the use of underwater acoustics in biological oceanography, February 1979.
CSIRO Division of Fisheries and Oceanography Report 123.
- 1118 CHURCH, J.A. (1980)
The relationship between mean sea level and steric height at Sydney.
CSIRO Division of Fisheries and Oceanography Report 124.
- 1119 GARDNER, D. (1980)
The use of magnesium perchlorate as desiccant in the syringe injection technique for determination of mercury in cold-vapour atomic absorption spectrometry.
Analytica Chimica Acta 119, 167-169.
- 1120 NILSSON, C.S. and CRESSWELL, G.R. (1981)
The formation and evolution of East Australian Current warm-core eddies.
Progress in Oceanography 9, 133-183.
- 1121 JEFFREY, S.W. (1980)
Cultivating uni-cellular marine plants.
CSIRO Division of Fisheries and Oceanography Research Report 1977-79, 23-43.
- 1122 TRANTER, D.J., BULLEID, N.C., CAMPBELL, R., HIGGINS, H., ROWE, F., TRANTER, H.A. and SMITH, D.F. (1981)
Nocturnal movements of phototactic zooplankton in shallow waters.
Marine Biology 61, 317-326.
- 1123 SAINSBURY, K.J. (1982)
Population dynamics and fishery management of paua, *Haliotis iris*.
I. Population structure, growth, reproduction and mortality.
New Zealand Journal of Marine and Freshwater Research 16, 147-161.
- 1124 SAINSBURY, K.J. (1982)
Population dynamics and fishery management of paua, *Haliotis iris*.
II. Dynamics and management as examined using a size class population model.
New Zealand Journal of Marine and Freshwater Research 16, 163-173.

- 1125 HALLEGRAEFF, G.M. (1983)
Scale-bearing and loricate nanoplankton from the East Australian Current.
Botanica Marina **26**, 493-515.
- 1126 AIREY, D. and JONES, P.D. (1982)
Mercury in the River Mersey, its estuary and tributaries during 1973 and 1974.
Water Research **16**, 565-577.
- 1127 HALLEGRAEFF, G.M. (1981)
Seasonal study of phytoplankton pigments and species at a coastal station off Sydney: importance of diatoms and nanoplankton.
Marine Biology **61**, 107-118.
- 1128 TOMCZAK, M. Jr. (1981)
Coastal upwelling systems and eastern boundary currents: a review of terminology.
Geoforum **12**(2), 179-191.
- 1129 SMITH, D.F., MEYER, D.L. and HORNER, S.M.J. (1981)
Amino acid uptake by the comatulid crinoid *Cenometra bella* (Echinodermata) following evisceration.
Marine Biology **61**, 207-213.
- 1130 JOHANNES, R.E. (1980)
The ecological significance of the submarine discharge of groundwater.
Marine Ecology Progress Series **3**, 365-373.
- 1131 WEBB, D.J. (1981)
Numerical model of the tides in the Gulf of Carpentaria and the Arafura Sea.
Australian Journal of Marine and Freshwater Research **32**, 31-44.
- 1132 GODFREY, J.S. (1981)
The Bass Strait overflow.
Sea Frontiers **27**(5), 295-297.
- 1133 EDWARDS, R.J. (1980)
SA ocean studies reveal enrichment, if not upwelling.
Australian Fisheries **39**(11), 14-17.
- 1135 DALL, W. (1981)
Lipid absorption and utilization in the Norwegian lobster, *Nephrops norvegicus* (L.)
Journal of Experimental Biology and Ecology **50**, 33-45.
- 1137 WADLEY, V.A. (1981)
Spatial and temporal heterogeneity in the epibenthic fauna of estuarine sand and seagrass beds.
Australian Journal of Ecology **6**, 217-218.

- 1138 LEGECKIS, R. and CRESSWELL, G. (1981)
Satellite observations of sea-surface temperature fronts off the coast of western and southern Australia.
Deep-Sea Research 28A(3), 297-306.
- 1139 STANLEY, C.A. (1980)
Australian salmon.
Australian Division of Fisheries and Oceanography. Fisheries Situation Report 5.
- 1140 PHILLIPS, B.F. (1981)
The circulation of the southeastern Indian Ocean and the planktonic life of the western rock lobster.
Oceanography and Marine Biology Annual Review 19, 11-39.
- 1141 BRANDT, S.B., PARKER, R.R. and VAUDREY, D.J. (1981)
Physical and biological description of warm-core eddy J during September-October, 1979.
CSIRO Division of Fisheries and Oceanography Report 126.
- 1142 BRANDT, S.B. and WADLEY, V.A. (1981)
Thermal fronts as ecotones and zoogeographic barriers in marine and freshwater systems.
Proceedings of the Ecological Society of Australia 11, 13-26.
- 1143 KIRKMAN, H., COOK, I.H. and REID, D.D. (1982)
Biomass and growth of *Zostera capricorni* Aschers in Port Hacking N.S.W., Australia.
Aquatic Botany 12, 57-67.
- 1144 JEFFREY, S.W. and HALLEGRAEFF, G.M. (1980)
Studies of phytoplankton species and photosynthetic pigments in a warm-core eddy of the East Australian Current. II. A note on pigment methodology.
Marine Ecology Progress Series 3, 295-301.
- 1145 AIREY, D. and HOGAN, M. (1980)
Methods for the determination of dissolved and particulate organic carbon in marine samples.
CSIRO Division of Fisheries and Oceanography Report 127.
- 1146 THOMPSON, R.O.R.Y. (1982)
A potential-flow model of turbulence caused by breaking surface waves.
Journal of Geophysical Research 87C3, 1935-1937.
- 1147 TOMCZAK, M. Jr. (1981)
Longshore advection during an upwelling event in the Canary Current area as detected by airborne radiometer.
Oceanologica Acta 4(2), 161-169.

- 1148 CHURCH, J.A. and FORBES, A.M.G. (1981)
Non-linear model of tides in the Gulf of Carpentaria.
Australian Journal of Marine and Freshwater Research 32, 685-697.
- 1149 ROCHFORD, D.J. (1980)
Nutrient status of the oceans around Australia.
CSIRO Division of Fisheries and Oceanography Research Report 1977-1979, 9-20.
- 1150 RAINER, S. and FITZHARDING, R.C. (1981)
Benthic communities in an estuary with periodic deoxygenation.
Australian Journal of Marine and Freshwater Research 32, 227-243.
- 1151 MORIARTY, D.J.W. and BARCLAY, M.C. (1980)
Determination of organic carbon and carbonate in the same sample with an elemental analyser.
Laboratory Practice 29(11), 1177-1178.
- 1152 WARD, T.J. and YOUNG, P.C. (1981)
Trace metal contamination of shallow marine sediments near a lead smelter, Spencer Gulf, South Australia.
Australian Journal of Marine and Freshwater Research 32, 45-56.
- 1153 TOMCZAK, M. Jr. (1981)
An analysis of mixing in the frontal zone of South and North Atlantic Central Water off North-west Africa.
Progress in Oceanography 10, 173-192.
- 1154 MORIARTY, D.J.W. (1980)
Measurement of bacterial biomass in sandy sediments, pp. 131-138 in
International symposium on environmental geochemistry. 4th: 1979: Canberra. Biogeochemistry of Ancient and Modern Environments (ed. P.A. Trudinger, M.R. Walker and B.J. Ralph) Canberra: Australian Academy of Science; New York: Springer-Verlag.
- 1155 MORIARTY, D.J.W. and BARCLAY, M.C. (1981)
Carbon and nitrogen content of food and the assimilation efficiencies of penaeid prawns in the Gulf of Carpentaria.
Australian Journal of Marine and Freshwater Research 32, 245-251.
- 1156 WARD, T.J. (1982)
Laboratory study of the accumulation and distribution of cadmium in the Sydney rock oyster *Saccostrea commercialis* (I&R).
Australian Journal of Marine and Freshwater Research 33, 33-44.
- 1157 PEARCE, A. (1980)
Variability of currents off Cape Hawke, New South Wales 1978-1979.
CSIRO Division of Fisheries and Oceanography Report 128.

- 1158 YOUNG, P.C. (1981)
Temporal changes in the vagile epibenthic fauna of two seagrass meadows (*Zostera capricorni* and *Posidonia australis*).
Marine Ecology Progress Series 5, 91-102.
- 1159 WADLEY, V.A., IVANOVICI, A.M. and RAINER, S.F. (1980)
A comparison of techniques for the measurement of adenine nucleotides in three species of estuarine mollusc.
CSIRO Division of Fisheries and Oceanography Report 129.
- 1160 RAINER, S. (1981)
Temporal patterns in the structure of macrobenthic communities of an Australian estuary.
Estuarine, Coastal and Shelf Science 13, 597-620.
- 1161 TOMCZAK, M. Jr. (1981)
Bass Strait water intrusions in the Tasman Sea and mean temperature-salinity curves.
Australian Journal of Marine and Freshwater Research 32, 699-708.
- 1162 PEARCE, A. F. and GRUNDLINGH, M.L. (1982)
Is there a seasonal variation in the Agulhas Current?
Journal of Marine Research 40(1), 177-184.
- 1163 ALEXANDER, C.G., HINDLEY, J.P.R., and JONES, S.G. (1980)
Structure and function of the third maxillipeds of the banana prawn *Penaeus merguensis*.
Marine Biology 58, 245-249.
- 1164 PHILLIPS, B.F., BROWN, P.A., RIMMER, D.W. and BRAINE, S.J. (1981)
Description, distribution and abundance of late larval stages of the Scyllaridae (slipper lobsters) in the south-eastern Indian Ocean.
Australian Journal of Marine and Freshwater Research 32, 417-437.
- 1165 CRESSWELL, G.R. (1980)
Satellite-tracked buoys in the Eastern Indian Ocean, pp. 531-541 in *Proceedings of the Fourteenth International Symposium on Remote Sensing of the Environment 23-30 April 1980 San Jose, Costa Rica*.
Ann Arbor, Michigan: Environmental Research Institute of Michigan.
- 1166 BRANDT, S.B. (1981)
Effects of a warm-core eddy on fish distributions in the Tasman Sea off East Australia.
Marine Ecology Progress Series 6, 19-33.
- 1167 GODFREY, J.S. and GOLDING, T.J. (1981)
The Sverdrup relation in the Indian Ocean, and the effect of Pacific-Indian Ocean throughflow on Indian Ocean circulation and on the East Australian Current.
Journal of Physical Oceanography 11(6), 771-779.

- 1168 PARKER, R.R. and TRANTER, D.J. (1981)
Estimation of algal standing stock and growth parameters using *in vivo* fluorescence.
Australian Journal of Marine and Freshwater Research 32, 629-638.
- 1169 BRANDT, S.B., MAGNUSON, J.J. and CROWDER, L.B. (1980)
Thermal habitat partitioning by fishes in Lake Michigan.
Canadian Journal of Fisheries and Aquatic Sciences 37(10), 1557-1564.
- 1170 WILLIAMS, K. (1981)
Aerial survey of pelagic fish resources off south east Australia 1973-1977.
CSIRO Division of Fisheries and Oceanography Report 130.
- 1171 DALL, W. (1981)
Osmoregulatory ability and juvenile habitat preference in some penaeid prawns.
Journal of Experimental Marine Biology 54, 55-64.
- 1172 MORIARTY, D.J.W. and POLLARD, P.C. (1981)
DNA synthesis as a measure of bacterial productivity in seagrass sediments.
Marine Ecology Progress Series 5, 151-156.
- 1173 CROWDER, L.B., MAGNUSON, J.J. and BRANDT, S.B. (1981)
Complementarity in the use of food and thermal habitat by Lake Michigan fishes.
Canadian Journal of Fisheries and Aquatic Sciences 38, 662-668.
- 1174 MAJKOWSKI, J., WILLIAMS, K. and MURPHY, G.I. (1981)
Research identifies changing patterns in Australian tuna fishery.
Australian Fisheries 40(2), 5-10.
- 1175 SHINGU, C. (1981)
Ecology and stock of southern bluefin tuna.
CSIRO Division of Fisheries and Oceanography Report 131.
- 1176 PEARCE, A. (1981)
A brief introduction to descriptive physical oceanography.
CSIRO Division of Fisheries and Oceanography Report 132.
- 1177 PEARCE, A. (1981)
Simple physical oceanographic techniques for use in coastal waters.
CSIRO Division of Fisheries and Oceanography Report 133.
- 1178 TRANTER, D.J. (1982)
Interlinking of physical and biological processes in the Antarctic Ocean.
Oceanographic Marine Biology Annual Review 20, 11-35.

- 1179 JEFFREY, S.W. (1981)
Responses to light in aquatic plants, pp. 251-276 in *Encyclopedia of Plant Physiology New Series, V.12A Physiological Plant Ecology 1* (ed. O.L. Lange *et al.*) Berlin: Springer-Verlag.
- 1180 JEFFREY, S.W. (1981)
An improved thin-layer chromatographic technique for marine phytoplankton pigments.
Limnology and Oceanography 26(1), 191-197.
- 1181 MAJOR, G.A., DICKSON, W.D., LEECH, G.S. and DINGELDEI, S. (1981)
A prototype system for monitoring off-shore marine pollution.
CSIRO Division of Fisheries and Oceanography Report 134.
- 1182 JEFFREY, S.W. (1980)
Algal pigment systems, pp. 33-58 in *Primary Productivity in the Sea* (ed. P.G. Falkowski) New York: Plenum.
- 1183 THOMPSON, R.O.R.Y. and GOLDING, T.J. (1981)
Tidally induced 'upwelling' by the Great Barrier Reef.
Journal of Geophysical Research 86 (C7), 6517-6521.
- 1184 BRANDT, S.B. and HODGSON, H.L. (1981)
Lanternfishes, oceanic fronts and warm-core eddies.
Australian Fisheries 40(3), 14-15,17.
- 1185 BRIDGES, K.W., PHILLIPS, R.C. and YOUNG, P.C. (1982)
Patterns of some seagrass distributions in the Torres Strait, Queensland.
Australian Journal of Marine and Freshwater Research 33, 273-283.
- 1186 CUFF, W., SINCLAIR, R. and PARKER, R.R. (1980)
Carbon flow within the South West Arm of Port Hacking (NSW, Australia), pp. 139-144 in *Biogeochemistry of Ancient and Modern Environments: proceedings of 4th International Symposium on Environmental biogeochemistry in Relation to the Mining Industry and Environmental Pollution (Leaching Conference), Canberra, 1979.* Canberra: Australian Academy of Science.
- 1187 IVANOVICI, A.M., RAINER, S.F., and WADLEY, V.A. (1981)
Free amino acids in three species of mollusc: responses to factors associated with reduced salinity.
Comparative Biochemistry and Physiology 70A, 17-22.
- 1188 PHILLIPS, B.F. (1980)
Spatial temporal distribution of early-stage phyllosoma of western rock lobster, *Panulirus cygnus*.
Australian Journal of Marine and Freshwater Research 31, 485-497.

- 1189 KIRKMAN, H. (1981)
The first year in the life history and the survival of the juvenile marine macrophyte, *Ecklonia radiata* (Turn.) J. Agardh.
Journal of Experimental Marine Biology and Ecology 55, 243-254.
- 1190 HERON, A.C. (1982)
A vertical free fall plankton net with no mouth obstructions.
Limnology and Oceanography 27(2), 380-383.
- 1191 PEARCE, A. (1981)
Temperature-salinity relationships in the Tasman Sea.
CSIRO Division of Fisheries and Oceanography Report 135.
- 1192 PHILLIPS, B.F. and SASTRY, A.N. (1980)
Larval ecology, pp. 11-57 in *The biology and management of lobsters* vol. 2 (ed. S. Cobb and B.F. Phillips) New York: Academic Press.
- 1193 SOMERS, I.F. (1981)
Tiger prawn tagging program in Gulf of Carpentaria.
Australian Fisheries 40(3), 18-19.
- 1194 STAPLES, D.J. (1980)
Ecology of juvenile and adolescent banana prawns, *Penaeus merguensis*, in a mangrove estuary and adjacent off-shore area of the Gulf of Carpentaria. II Emigration, population structure and growth of juveniles.
Australian Journal of Marine and Freshwater Research 31, 653-665.
- 1198 THOMPSON, R.O.R.Y. and EDWARDS, R.J. (1981)
Mixing and water-mass formation in the Australian Subantarctic.
Journal of Physical Oceanography 11(10), 1399-1406.
- 1199 BRADBURY, R.H. and YOUNG, P.C. (1981)
The effects of a major forcing function, wave energy, on a coral reef ecosystem.
Marine Ecology Progress Series 5, 229-241.
- 1200 HUTCHINGS, P. and RAINER, S. (1980)
A key to estuarine polychaetes in New South Wales.
Proceedings of the Linnean Society of New South Wales 104(1), 35-48.
- 1201 RAINER, S.F., IVANOVICI, A.M. and WADLEY, V.A. (1980)
Stress in estuarine molluscs as measured by adenylate energy charge.
Journal of the Malacological Society of Australia 4(4), 258.
- 1202 MAXWELL, J.G.H. (1981)
The fishing ventures of the Great Australian Bight: with a resume of known potential resources and review of trawling surveys of the south western continental shelf.
CSIRO Division of Fisheries and Oceanography Report 136.

- 1203 DALL, W. and SMITH, D.M. (1981)
Ionic regulation of four species of penaeid prawns.
Journal of Experimental Marine Biology and Ecology 55, 219-232.
- 1204 MACKEY, D.J. (1982)
An investigation of the suitability of amberlite XAD-1 resin for
studying trace metal speciation in seawater.
Marine Chemistry 11, 169-181.
- 1205 TOMCZAK, M. Jr. (1982)
New role for IOC.
Marine Policy 6(1), 60.
- 1206 SAINSBURY, K.J. (1982)
The biological management of Australia's multispecies tropical
demersal fisheries: a review of problems and approaches.
CSIRO Marine Laboratories Report 147.
- 1207 PARKER, R.R. (1981)
Guide lines for ecosystem research in coastal lagoons.
UNESCO Technical Papers in Marine Science 33, 305-314.
- 1208 MAJKOWSKI, J., and WAIWOOD, K.G. (1981)
A procedure for evaluating the food biomass consumed by a fish
population.
Canadian Journal of Fisheries and Aquatic Sciences 38(10), 1199-
1208.
- 1209 WARD, T.J. (1982)
The distribution of cadmium in shallow marine sediments, flora and
fauna near a lead smelter, Spencer Gulf, South Australia, pp. 88-93
in *Cadmium 81*, edited Proceedings Third International Cadmium
Conference, Miami 88-93 (ed. D. Wilson and R.A. Volpe) London:
Cadmium Association; New York: Cadmium Council and International
Lead Zinc Research Organization.
- 1210 MAXWELL, J.G.H. (1982)
Infestation of the jack mackerel, *Trachurus declivis* (Jenyns), with
the cymothoid isopod, *Ceratothoa imbricatus* (Fabricus), in south
eastern Australian waters.
Journal of Fish Biology 20, 341-349.
- 1211 IVANOVICI, A.M. (1981)
A method for extraction and analysis of adenine nucleotides for
determination of adenylate energy charge in molluscan tissue.
CSIRO Marine Laboratories Report 118.
- 1212 TOMCZAK, M. Jr. (1983)
Water masses in East Australian Current Eddy H.
CSIRO Marine Laboratories Report 161.

- 1213 TRANTER, D.J. (1981)
Marine science and technology in Australia.
Marine Pollution Bulletin 12(7), 231-232.
- 1215 OKERA, W., GUNN, J.S. and JONES, G.B. (1981)
Fishery situation report: Smaller pelagic fishes of the tropics, pp. 101-118 in Northern Pelagic Fish Seminar, Darwin, Northern Territory, 20-21 January (ed. C.J. Grant and D.G. Walter) Canberra: Australian Government Publishing Service.
- 1216 OKERA, W., STEVENS, J.D. and GUNN, J.S. (1981)
Fishery situation report: Tropical sharks, pp. 59-72 in Northern Pelagic Fish Seminar, Darwin, Northern Territory, 20-21 January (ed. C.J. Grant and D.G. Walter), Canberra: Australian Government Publishing Service.
- 1218 HORNER, S.M.J. and SMITH, D.F. (1982)
Measurement of total inorganic carbon in seawater by a substoichiometric assay using $\text{NaH}^{14}\text{CO}_3$.
Limnology and Oceanography 27(5), 978-983.
- 1219 SHEPHERD, S.A., KIRKWOOD, G.P. and SANDLAND, R.L. (1982)
Studies on southern Australian abalone (Genus *Haliotis*) III. Mortality of two exploited species.
Australian Journal of Marine and Freshwater Research 33, 265-272.
- 1220 BRADBURY, R.H. and YOUNG, P.C. (1981)
The race and the swift revisited, or is aggression between corals important? pp. 351-356 in The Reef and Man. Proceedings of the Fourth International Coral Reef Symposium, Manila, 1981, Vol. 2 (ed. E.D. Gomez *et al.*) Quezon City, Philippines: Marine Sciences Centres, University of the Philippines.
- 1221 BRADBURY, R.H. and YOUNG, P.C. (1983)
Coral interactions and community structure: an analysis of spatial pattern.
Marine Ecology Progress Series 11, 265-271.
- 1222 CHURCH, J.A. and THOMPSON, R.O.R.Y. (1982)
Cloud-in-cell and finite-difference models for a stratified lake. pp. 455-469 in Numerical Solutions of Partial Differential Equations (ed. J. Noye) Amsterdam: North-Holland Publishing Co.
- 1223 DAVIS, T.L.O. (1982)
Maturity and sexuality in barramundi, *Lates calcarifer* (Bloch), in the Northern Territory and south-eastern Gulf of Carpentaria.
Australian Journal of Marine and Freshwater Research 33, 529-545.
- 1224 STEVENS, J.D. and CUTHBERT, G.J. (1983)
Observations on the identification and biology of *Hemigaleus* (Selachii: Carcharhinidae) from Australian waters.
Copeia 2, 487-497.

- 1225 STEVENS, J.D. (1983)
Observations on reproduction in the shortfin mako *Isurus oxyrinchus*.
Copeia 1, 126-130.
- 1226 MORIARTY, D.J.W. (1982)
Feeding of *Holothuria atra* and *Stichopus chloronotus* on bacteria,
organic carbon and organic nitrogen in sediments of the Great
Barrier Reef.
Australian Journal of Marine and Freshwater Research 33, 255-263.
- 1228 STEVENS, J.D., DAVIS, T.L.O. and CHURCH, A.D. (1982)
NT shark gillnetting survey shows potential for Australian
fishermen.
Australian Fisheries 41(4), 39, 41-43.
- 1229 JEFFREY, S.W. (1981)
The phytoplankton - systematics, morphology and ultrastructure, pp.
138-179 in *Marine Biology: an Australasian Perspective* (ed. M.N.
Clayton and R.J. King) Melbourne: Longman Cheshire.
- 1230 MACKEY, D.J. (1982)
Amberlite XAD-2 and XAD-4 as cation-exchange resins of low
capacity. An investigation using an atomic fluorescence detector
directly coupled to a liquid chromatograph.
Journal of Chromatography 237, 79-88.
- 1231 RAINER, S.F. (1982)
Trophic structure and production in the macrobenthos of a temperate
Australian estuary.
Estuarine, Coastal and Shelf Science 15, 423-441.
- 1232 LORENZEN, C.J. and JEFFREY, S.W. (1980)
Determination of chlorophyll in seawater.
UNESCO Technical Papers in Marine Science 35, 1-21.
- *1233 STAPLES, D. (1981)
Young banana prawns seem unaffected by heavy Gulf fishing - so far.
Australian Fisheries 40(11), 10-13.
- 1234 CRESSWELL, G.R., ELLYETT, C., LEGECKIS, R. and PEARCE, A.F. (1981)
Exploring the East Australian Current System with aircraft,
satellite and ship pp. 7.4.1-7.4.5 in *Landsat 81: Proceedings of the
Second Australasian Remote Sensing Conference*. Canberra: Organizing
Committee LANDSAT 81.
- 1235 AIREY, D. (1982)
Contributions from coal and industrial materials to mercury in air,
rainwater and snow.
Science of the Total Environment 25, 19-40.

- 1236 HIGGINS, H.W. (1982)
Determination of low levels of ^{14}C radioactivity in cell exudates by means of ultraviolet photooxidation and a rapid $^{14}\text{CO}_2$ -collection technique.
Analytical Biochemistry 127(1), 121-133.
- 1237 ROTH LISBERG, P.C. (1982)
Vertical migration and its effect on dispersal of penaeid shrimp larvae in the Gulf of Carpentaria, Australia.
Fisheries Bulletin 80(3), 541-554.
- 1239 THOMPSON, R.O.R.Y. and VERONIS, G. (1983)
Poleward boundary currents off Western Australia.
Australian Journal of Marine and Freshwater Research 34, 173-185.
- 1242 STANLEY, C.A. (1983)
Some effects of handling techniques on returns of tagged Australian Salmon, *Arripis trutta* (Bloch & Schneider).
Australian Journal of Marine and Freshwater Research 34, 845-855.
- 1243 SOMERS, I.F. and TAYLOR, B.R. (1981)
Fishery statistics relating to the declared management zone of the Australian Northern Prawn Fishery, 1968-1979.
CSIRO Marine Laboratories Report 138.
- 1244 FORBES, A.M.G. (1981)
Tide stream atlas - Gulf of Carpentaria.
CSIRO Marine Laboratories Report 139.
- 1245 THOMPSON, R.O.R.Y. (1982)
A tidal pump to raise water from the ocean's depths.
Speculations in Science and Technology 5(3), 245-249.
- 1246 MORIARTY, D.J.W. and HAYWARD, A.C. (1982)
Ultrastructure of bacteria and the proportion of gram-negative bacteria in marine sediments.
Microbiology and Ecology 8, 1-14.
- 1247 CRESSWELL, G.R. (1982)
The coalescence of two East Australian Current warm-core eddies.
Science 215, 161-164.
- 1248 JOHANNES, R.E. (1981)
Working with fishermen to improve coastal tropical fisheries and resource management.
Bulletin of Marine Science 31(3), 673-680.
- 1249 ROCHFORD, D.J. (1981)
Anomalously warm sea surface temperatures in the western Tasman Sea, their causes and effects upon the southern bluefin tuna catch, 1966-1977.
CSIRO Marine Laboratories Report 114.

- 1250 GODFREY, J.S. (1980)
Short-term change: a physical oceanographer's point of view.
Intergovernmental Oceanographic Commission Technical Series 21,
21-30.
- 1251 OKERA, W. (1982)
Exploring the potential of AFZ fisheries in Timor-Arafura Seas.
Australian Fisheries 41, 33-35, 38.
- 1252 MURPHY, G.I. and MAJKOWSKI, J. (1981)
State of the southern bluefin tuna population: fully exploited.
Australian Fisheries 40(11), 20-29.
- 1253 DUNNING, M., POTTER, M. and MACHIDA, S. (1981)
Hoyo Maru survey shows oceanic squid could have potential.
Australian Fisheries 40(12), 26-29.
- 1254 COLLINS, S. and DUNNING, M. (1981)
Tasman squid studies demonstrate gillnetting effective.
Australian Fisheries 40(8), 2-6.
- 1255 JOLL, M.L. (1982)
Foregut evacuation of four foods by the western rock lobster,
Panulirus, in aquaria.
Australian Journal of Marine and Freshwater Research 33, 939-943.
- 1256 WARD, T.J. (1982)
Effects of cadmium on particle clearance by the Sydney rock oyster,
Saccostrea commercialis (I.&R.).
Australian Journal of Marine and Freshwater Research 33, 711-715.
- 1257 MORIARTY, D.J.W. (1983)
Bacterial biomass and productivity in sediments, stromatolites, and
water of Hamelin Pool, Shark Bay, Western Australia.
Geomicrobiology Journal 3(2), 121-133.
- 1258 PHILLIPS, B.F. (1982)
The role of CSIRO in marine living resources management and
development pp. 47-67 in *Issues in Australia's Marine and Antarctic
Policies* (ed. R.A. Herr, R. Hall and B.W. Davis) Hobart: University
of Tasmania.
- 1259 MAXWELL, J.G.H. (1981)
Fishing the Great Australian Bight - history holds important lessons
for the future.
Australian Fisheries 40(10), 2-7.
- 1260 CHURCH, J.A. and FORBES, A.M.G. (1983)
Circulation in the Gulf of Carpentaria. I. Direct observations of
currents in the south-east corner of the Gulf of Carpentaria.
Australian Journal of Marine and Freshwater Research 34, 1-10.

- 1261 FORBES, A.M.G. and CHURCH, J.A. (1983)
Circulation in the Gulf of Carpentaria. II Residual currents and mean sea level.
Australian Journal of Marine and Freshwater Research 34, 11-22.
- 1262 YOUNG, P.C. and MARTIN, R.B. (1982)
Evidence for protogynous hermaphroditism in some lethrinid fishes.
Journal of Fish Biology 21, 475-484.
- 1263 ALLEN, K.R. (1971)
Relation between production and biomass.
Journal of the Fisheries Board of Canada 28, 1573-1581.
- 1264 PEARCE, A.F and BOLAND, F.M. (1982)
Aanderaa current meter records from the New South Wales continental shelf, 1978-1980.
CSIRO Marine Laboratories Report 140.
- 1265 WARD, T.J. and YOUNG, P.C. (1982)
Effects of sediment trace metals and particle size on the community structure of epibenthic seagrass fauna near a lead smelter, South Australia.
Marine Ecology Progress Series 9, 137-146.
- 1266 PEARCE, A.F. (1983)
Estimation of dynamic heights from temperature profiles in the Tasman Sea.
Australian Journal of Marine and Freshwater Research 34, 115-119.
- 1267 KIRKWOOD, G.P. (1982)
Some statistical aspects of the Beddington and Cooke estimation techniques.
International Whaling Commission. *Report of the Commission* 32, 471-473.
- 1268 MCWILLIAM, P.S., SALE, P.F. and ANDERSON, D.T. (1981)
Seasonal changes in resident zooplankton sampled by emergence traps in One Tree Lagoon, Great Barrier Reef.
Journal of Experimental Marine Biology and Ecology 52, 185-203.
- 1269 CRESSWELL, G.R., ELLYETT, C., LEGECKIS, R. and PEARCE, A.F. (1983)
Nearshore features of the East Australian Current system.
Australian Journal of Marine and Freshwater Research 34, 105-114.
- 1270 JOLL, L.M. and PHILLIPS, B.F. (1984)
Natural diet and growth of juvenile western rock lobsters *Panulirus cygnus* George.
Journal of Experimental Marine Biology and Ecology 75, 145-169.

- 1272 BRANDT, S.B. (1983)
Pelagic squid associations with a warm-core eddy of the East Australian Current.
Australian Journal of Marine and Freshwater Research **34**, 573-585.
- 1273 MAJKOWSKI, J. and HEARN, W.S. (1984)
Comparison of three methods for estimating the food intake of a fish.
Canadian Journal of Fisheries and Aquatic Sciences **41**(1), 212-215.
- 1274 KANCIRUK, P., HERRNKIND, W.F., PHILLIPS, B.F. and ARNAUD, P.M. (1982)
An indexed bibliography of the spiny (rock) lobsters (Decapoda: Palinuridae)
CSIRO Marine Laboratories Report **141**.
- 1275 JOHANNES, R.E., WIEBE, W.J., CROSSLAND, C.J., RIMMER, D.W. and SMITH, S.V. (1983)
Latitudinal limits of coral reef growth.
Marine Ecology Progress Series **11**, 105-111.
- 1276 JOLL, L.M. (1983)
Octopus tetricus, pp. 325-334 in *Cephalopod Life Cycles Vol. 1* (ed. P.R. Boyle) London: Academic Press.
- 1277 PHILLIPS, B.F., JOLL, L.M., SANDLAND, R.L. and WRIGHT, D. (1983)
Longevity, reproductive condition and growth of the western rock lobster, *Panulirus cygnus* George, reared in aquaria.
Australian Journal of Marine and Freshwater Research, **34**, 419-429.
- 1278 TRANTER, D.J., LEECH, G.S. and VAUDREY, D.J. (1981)
Biological significance of surface flooding in warm-core ocean eddies.
Nature **293**(5835) 751-755.
- 1280 ROTH LISBERG, P.C. and JACKSON, C.J. (1982)
Temporal and spatial variation of plankton abundance in the Gulf of Carpentaria, Australia 1975-1977.
Journal of Plankton Research **4**(1), 19-40.
- 1281 SMITH, D.M. and DALL, W. (1982)
Blood protein, blood volume and extracellular space relationships in two *Penaeus* spp. (Decapoda: Crustacea).
Journal of Experimental Marine Biology and Ecology **63**, 1-15.
- 1283 RAINER, S.F. and MUNRO, I.S.R. (1982)
Demersal fish and cephalopod communities of an unexploited coastal environment in northern Australia.
Australian Journal of Marine and Freshwater Research **33**, 1039-1055.

- 1284 MAJKOWSKI, J. and HAMPTON, J. (1983)
The effect of parameter uncertainties in an age-length relationship upon estimating the age composition of catches.
Canadian Journal of Marine and Aquatic Sciences **40**, 272-280.
- 1285 DAVIS, T.L.O. and REID, D.D. (1982)
Estimates of tag shedding rates for Floy FT-2 dart and FD-67 anchor tags in barramundi, *Lates calcarifer* (Bloch).
Australian Journal of Marine and Freshwater Research **33**, 1113-1117.
- 1286 AIREY, D. (1983)
Mercury in human hair due to environment and diet: a review.
Environmental Health Perspectives **52**, 303-316.
- 1287 WARD, T.J. and YOUNG, P.C. (1983)
The depauperation of epifauna on *Pinna bicolor* near a lead smelter, Spencer Gulf, South Australia.
Environmental Pollution (Series A) **130**, 293-308.
- 1291 TOMCZAK, M.Jr. (1982)
Relationships between climate and fishery in the Gulf of Guinea.
Tropical Ocean-atmosphere Newsletter **11**, 1-11.
- 1292 MACKEY, D.J. (1982)
Cation-exchange behaviour of a range of adsorbent and chromatographic supports with regard to their suitability for investigating trace metal speciation in natural waters.
Journal of Chromatography **242**, 275-287.
- 1293 AIREY, D. (1983)
Total mercury concentrations in human hair from 13 countries in relation to fish consumption and location.
Science of the Total Environment **31**, 157-180.
- 1294 MAJKOWSKI, J. (1982)
CSIRO data base for southern bluefin tuna (*Thunnus maccoyii* (Castlenau)).
CSIRO Marine Laboratories Report **142**.
- 1295 MAJKOWSKI, J. (1982)
Estimation of the abundance of the southern bluefin tuna (*Thunnus maccoyii* (Castlenau)) subpopulation exploited by the Australian fishery.
CSIRO Marine Laboratories Report **143**.
- 1296 SHEPHERD, S.A. and HEARN, W.S. (1983)
Studies of southern Australian abalone (Genus *Haliotis*) IV. Growth of *H. laevigata* and *H. ruber*.
Australian Journal of Marine and Freshwater Research **34**, 461-475.

- 1297 THOMPSON, R.O.R.Y. (1983)
Set-up of Sydney Harbour by waves, wind and atmospheric pressure.
Australian Journal of Marine and Freshwater Research **34**, 97-103.
- 1300 PHILLIPS, B.F. (1983)
Migration of pre-adult western rock lobsters, *Panulirus cygnus*, in
Western Australia.
Marine Biology **76**, 311-318.
- 1301 OKERA, W. (1982)
Observations on the maturation conditions of some pelagic fishes
from Northern Australian waters.
CSIRO Marine Laboratories Report **144**.
- 1302 MORIARTY, D.J.W., POLLARD, P.C., HUNT, W.G., MORIARTY, C.M. and
WASSENBERG, T.J. (1985)
Productivity of bacteria and microalgae and the effect of grazing by
holothurians in sediments on a coral flat.
Marine Biology **85**, 293-300.
- 1303 JOLL, L.M. and CROSSLAND, C.J. (1983)
Calcium uptake by juvenile western rock lobster, *Panulirus cygnus*
George, from dietary coralline algae.
Journal of Experimental Marine Biology and Ecology **66**, 69-80.
- 1304 MORIARTY, D.J.W., POLLARD, P.C. and HUNT, W.G. (1985)
Temporal and spatial variation in bacterial production in the water
column over a coral reef.
Marine Biology **85**, 285-292.
- 1305 POLLARD, P.C. and MORIARTY, D.J.W. (1984)
Validity of tritiated thymidine method for estimating bacterial
growth rates: measurement of isotope dilution during DNA synthesis.
Applied and Environmental Microbiology **48**, 1076-1083.
- 1306 PHILLIPS, B.F., JOLL, L.M. and RAMM, D.C. (1984)
An electromagnetic tracking system for studying the movements of
rock (spiny) lobsters.
Journal of Experimental Marine Biology and Ecology **79**, 9-18.
- 1307 MORIARTY, D.J.W., BOON, P.I., HANSEN, J.A., HUNT, W.G., POINER, I.R.,
POLLARD, P.C., SKYRING, G.W. and WHITE, D.C. (1984)
Microbial biomass and productivity in seagrass beds.
Geomicrobiology Journal **4**(1), 21-51.
- 1308 CRESSWELL, G.R. (1983)
Physical evolution of Tasman Eddy J.
Australian Journal of Marine and Freshwater Research **34**, 495-513.

- 1309 GREIG, M.A. (1982)
 Satellite-tracked buoy data report VI. Bureau of Meteorology buoys tracked in the Southern, Indian and Pacific Oceans, March to June 1979.
CSIRO Marine Laboratories Report 137.
- 1310 GREIG, M.A. and CRESSWELL, G.R. (1982)
 Satellite-tracked buoy data report VII. South-west Pacific Ocean, July to December 1978.
CSIRO Marine Laboratories Report 146.
- 1311 CLARKE, T.A. (1982)
 Distribution, growth and reproduction of the lightfish *Maurolicus muelleri* (Sternoptychidae) off south-east Australia.
CSIRO Marine Laboratories Report 145.
- 1312 FANG, X.H., BOLAND, F.M. and CRESSWELL, G.R. (1984)
 Further observations of high-frequency current variations on the continental shelf near Sydney, New South Wales.
Australian Journal of Marine and Freshwater Research 35, 611-618.
- 1313 SOMERS, I.F., KIRKWOOD, G.P., TAYLOR, B.R. and CARROLL, N. (1982)
 Early results reveal value of tiger prawn tagging in Gulf of Carpentaria.
Australian Fisheries 41(7), 3-9.
- 1314 McEWAN, A.D. (1982)
 Convection and mixing at high Rossby numbers in rotating systems, pp. 271-283 in *Intense Atmospheric Vortices: Proceedings of the Joint Symposium (IUTAM/IUGG) held at Reading (United Kingdom) July 14-17, 1981* (ed. L. Bengtsson and J. Lighthill) Berlin: Springer-Verlag.
- 1315 PEARCE, A.F. (1983)
 Adrift in the Agulhas Return Current.
Deep-sea Research 30, 343-347.
- 1316 MORIARTY, D.J.W. and POLLARD, P.C. (1982)
 Diel variation of bacterial productivity in seagrass (*Zostera capricorni*) beds measured by rate of thymidine incorporation into DNA.
Marine Biology 72, 165-173.
- 1317 STEVENS, J.D. and HAUSFELD, H.F. (1982)
 Age determination and mortality estimates on an unexploited population of jack mackerel *Trachurus declivis* (Jenyns, 1841) from south-east Australia.
CSIRO Marine Laboratories Report 148.

- 1318 JEFFREY, S.W. and VESK, M. (1981)
Blue-green light effects in marine micro-algae: enhanced thylakoid and chlorophyll synthesis, pp. 435-442 in *Photosynthesis VI. Photosynthesis and Productivity, Photosynthesis and Environment* (ed. G. Akoyunoglou) Philadelphia: Balaban International Science Services.
- 1319 CROSSLAND, C.J. (1981)
Seasonal growth of *Acropora cf. formosa* and *Pocillopora damicornis* on a high latitude reef (Houtman Abrolhos, Western Australia) pp. 663-667 in *Proceedings of the Fourth Coral Reef Symposium, Manila, 1981. Vol. 1* (ed. E. Gomaz *et al.*) Quezon City, Philippines: Marine Sciences Centre, University of the Philippines.
- 1321 TRANTER, D.J., LEECH, G.S. and AIREY, D. (1983)
Edge enrichment in an ocean eddy.
Australian Journal of Marine and Freshwater Research **34**, 665-680.
- 1322 BRANDT, S., YOUNG, J. and HARTLEY, J. (1982)
Soela makes good catches on 'untrawlable' ground near Gabo Island.
Australian Fisheries **41**(9), 32-35.
- 1323 CHURCH, J.A. and BOLAND, F.M. (1983)
A permanent undercurrent adjacent to the Great Barrier Reef.
Journal of Physical Oceanography **13**(9), 1747-1749.
- 1324 FORBES, A.M.G. (1982)
Prediction model for Carpentaria currents developed.
Australian Fisheries **42**(12), 10-13.
- 1325 ROCHFORD, D.J. (1983)
Origins of water within warm-core eddies of the western Tasman Sea.
Australian Journal of Marine and Freshwater Research **34**, 525-534.
- 1327 McWILLIAM, P.S. and PHILLIPS, B.F. (1983)
Phyllosoma larvae and other crustacean macrozooplankton associated with Eddy J, a warm core eddy off south-eastern Australia.
Australian Journal of Marine and Freshwater Research **34**, 653-663.
- 1329 GRIFFITHS, F.B. and BRANDT, S.B. (1983)
Distribution of mesopelagic decapod Crustacea in and around a warm-core eddy in the Tasman Sea.
Marine Ecology Progress Series **12**, 175-184.
- 1330 BRANDT, S.B. (1983)
Temporal and spatial patterns of lanternfish (family Myctophidae) communities associated with a warm-core eddy.
Marine Biology **74**, 231-244.

- 1331 HULINGS, N.C. and KIRKMAN, H. (1982)
Further observations and data on seagrasses along the Jordanian and Saudi Arabian coasts of the Gulf of Aqaba.
Tethys 10(3), 218-220.
- 1333 ROTHLISBERG, P.C., JACKSON, C.J. and PENDRY, R.C. (1983)
Specific identification and assessment of distribution and abundance of early penaeid shrimp larvae in the Gulf of Carpentaria, Australia.
Biological Bulletin, 164, 279-298.
- 1334 PHILLIPS, B.F., COBB, J.S. and GEORGE, R.W. (1980)
General Biology, pp. 1-82 *in* The Biology and Management of Lobsters Vol. 1 (ed. J.S. Cobb and B.F. Phillips) New York: Academic Press.
- 1335 DALL, W. (1980)
Physiology: Introduction pp. 85-89 *in* The Biology and Management of Lobsters Vol. 1 (ed. J.S. Cobb and B.F. Phillips) New York: Academic Press.
- 1336 CROSSLAND, C.J. (1982)
Dissolved nutrients in reef waters of Sesoko Island, Okinawa: a preliminary study.
Galaxea 1, 47-54.
- 1337 MACKEY, D.J. (1983)
Metal-organic complexes in seawater.
Marine Chemistry 13, 169-180.
- 1338 McEWAN, A.D. (1983)
Internal mixing in stratified fluids.
Journal of Fluid Mechanics 128, 59-80.
- 1339 McEWAN, A.D. (1983)
The kinematics of stratified mixing through internal wavebreaking.
Journal of Fluid Mechanics 128, 47-57.
- 1340 BULLEID, N.C. (1984)
Deoxygenation and remineralization above the sediment-water interface; an *in situ* experimental study.
Estuarine, Coastal and Shelf Science 19, 15-25.
- 1341 CROCOS, P.J. and KERR, J.D. (1983)
Maturation and spawning of the banana prawn *Penaeus merguensis* de Man (Crustacea: Penaeidae) in the Gulf of Carpentaria, Australia.
Journal of Experimental Marine Biology and Ecology 69, 37-59.
- 1342 STEVENS, J. (1982)
Streamlined scavengers of our east coast waters.
Australian Natural History 20, 399-403.

- 1343 THOMPSON, R.O.R.Y. (1983)
Low-pass filters to suppress inertial and tidal frequencies.
Journal of Physical Oceanography **13**(6), 1077-1083.
- 1345 THOMPSON, R.O.R.Y. and VERONIS, G. (1980)
Transport calculations in the Tasman and Coral Seas.
Deep-Sea Research **27**(A), 303-323.
- 1346 WELLS, G.S. (1983)
Satellite-tracked buoy data report VIII. South-west Pacific Ocean
July 1980-December 1981.
CSIRO Marine Laboratories Report **149**.
- 1350 TOMCZAK, M.Jr. and FANG, X.H. (1983)
Attempt to determine some properties of the semidiurnal internal tide
on the continental slope, Great Barrier Reef.
Australian Journal of Marine and Freshwater Research **34**, 921-926.
- 1351 BARCLAY, M.C., DALL, W. and SMITH, D.M. (1983)
Changes in lipid and protein during starvation and the moulting
cycle in the tiger prawn, *Penaeus esculentus* Haswell.
Journal of Experimental Biology and Ecology **68**, 229-244.
- 1353 JOHANNES, R.E., WIEBE, W.J. and CROSSLAND, C.J. (1983)
Three patterns of nutrient flux in a coral reef community.
Marine Ecology Progress Series **12**, 131-136.
- 1354 TRANTER, D.J., TAFE, S.J. and SANDLAND, R.L. (1983)
Some zooplankton characteristics of warm-core eddies shed by the
East Australian Current, with particular reference to copepods.
Australian Journal of Marine and Freshwater Research **34**, 587-607.
- 1355 DAVIS, T.L.O. and KIRKWOOD, G.P. (1984)
Age and growth studies on barramundi, *Lates calcarifer* (Bloch), in
northern Australia.
Australian Journal of Marine and Freshwater Research **35**, 53-62.
- 1356 GOLDING, T.J. (1982)
Coral Sea oceanography.
CSIRO Marine Laboratories Research Report, 1979-1981, 17-20.
- 1357 FORBES, A.M.G. and CHURCH, J.A. (1982)
Water movements and the transport of prawn larvae in the Gulf of
Carpentaria.
CSIRO Marine Laboratories Research Report 1979-1981, 21-30.
- 1358 STAPLES, D.J., DALL, W. and VANCE, D.J. (1982)
Banana prawn catch prediction.
CSIRO Marine Laboratories Research Report 1979-1981, 31-41.

- 1359 PHILLIPS, B.F. (1982)
The circulation of the southeastern Indian Ocean and the planktonic life of the western rock lobster.
CSIRO Marine Laboratories Research Report 1979-1981, 43-52.
- 1360 TRANTER, D.J., BRANDT, S.B. and CRESSWELL, G.R. (1982)
Warm-core eddies shed by the East Australian Current.
CSIRO Marine Laboratories Research Report 1979-1981, 53-62.
- 1361 JEFFREY, S.W., HALLEGRAEFF, G.M. and HERON, A.C. (1982)
Phytoplankton, marine food chains and their relation to ocean dynamics.
CSIRO Marine Laboratories Research Report 1979-1981, 63-74.
- 1362 ROBERTSON, A.I. and HANSEN, J.A. (1982)
Decomposing seaweed: a nuisance or a vital link in coastal food chains?
CSIRO Marine Laboratories Research Report 1979-1981, 63-74.
- 1363 KIRKWOOD, G.P. (1983)
Estimation of von Bertalanffy growth curve parameters using both length increment and age-length data.
Canadian Journal of Fisheries and Aquatic Sciences **40**(9), 1405-1411.
- 1364 GRIFFITHS, F.B. and BRANDT, S.B. (1983)
Mesopelagic crustacea in and around a warm-core eddy in the Tasman Sea off eastern Australia.
Australian Journal of Marine and Freshwater Research **34**, 609-623.
- 1365 MAJKOWSKI, J. and MURPHY, G.I. (1983)
CSIRO southern bluefin tuna tagging; scientific achievements and future objectives.
Australian Fisheries **42**(11), 26-27.
- 1366 SAINSBURY, K.J. and WHITELOW, A.E. (1984)
Biology of Peron's threadfin bream, *Nemipterus peronii* (Valenciennes), from the North West Shelf of Australia.
Australian Journal of Marine and Freshwater Research **35**, 167-185.
- 1367 AIREY, D. (1983)
Isothermal temperatures and transformations of the warm-core eddies in the western Tasman Sea.
Australian Journal of Marine and Freshwater Research **34**, 681-685.
- 1368 STAPLES, D.J. (1983)
Environmental monitoring: climate of Karumba and hydrology of the Norman River Estuary, south-east Gulf of Carpentaria.
CSIRO Marine Laboratories Report **156**.

- 1369 KIRKWOOD, G.P. (1982)
A preliminary look at the effect of concentrating whale sightings in a small arc around the trackline.
International Whaling Commission. *Report of the Commission* 32, 815-817.
- 1370 TOMCZAK, M. (1983)
Lessons from a multidisciplinary study of Port Hacking estuary.
Wetland, Journal of the Coast and Wetlands Society 3(1), 51-54.
- 1372 LU, C.C. and DUNNING, M. (1982)
Identification guide to Australian arrow squid (Family Omnastrephidae).
Victorian Institute of Marine Sciences Technical Report No. 2, 1-54.
- 1373 TRANTER, D.J. (1981)
Antarctic arguments and options, pp. 359-361 in *Mammals in the seas: Report of the FAO Advisory Committee in Marine Resources Research, Working Party on Marine Mammals, vol. 3*. Rome: Food and Agriculture Organization of the United Nations.
- 1374 JOHANNES, R.E. (1982)
Traditional conservation methods and protected marine areas in Oceania.
AMBIO 11(5), 258-261.
- 1375 REID, D.D. (1981)
The Poisson lognormal distribution and its use as a model of plankton aggregation, pp. 303-316 in *Statistical Distributions in Scientific Work Vol. 6*, (ed. C. Taillie *et al.*) Dordrecht: Reidel.
- 1376 DAVIS, T.L.O. (1984)
A population of sexually active precocious barramundi, *Lates calcarifer*, in the Gulf of Carpentaria, Australia.
Copeia 1, 144-149.
- 1377 OKERA, W. (1982)
Status of pelagic resource assessment in tropical Australian waters.
FAO Fisheries Report No. 275, 38-42.
- 1378 DUNNING, M. (1982)
Squid and cuttlefish resources of Australian waters.
FAO Fisheries Report No. 275, 103-108.
- 1379 SAINSBURY, K.J. (1982)
Status of demersal fish resources assessment in tropical Australian waters.
FAO Fisheries Report No. 275, 35-37.

- 1380 SMITH, D.F. (1982)
Observation and quantitative analysis of curvilinear regions of time-varying oxygen concentrations with an oxygen electrode and a minicomputer.
Journal of Experimental Marine Biology and Ecology **64**, 117-124.
- 1381 ROTHLISBERG, P.C., CHURCH, J.A. and FORBES, A.M.G. (1983)
Modelling the advection of vertically migrating shrimp larvae.
Journal of Marine Research **41**, 511-538.
- 1382 REDFIELD, J.A. (1982)
Primary productivity and trophic dynamics, pp. 211-212 in *Mangrove Ecosystems in Australia: structure, function and management. Proceedings of the Australian National Mangrove Workshop, Australian Institute of Marine Science (Cape Ferguson) 18-20 April 1979* (ed. B.F. Clough) Canberra: A.I.M.S. Australian Institute of Marine Science in association with Australian National University Press.
- 1383 REDFIELD, J.A. (1982)
Trophic relationships in mangrove communities, pp. 259-262 in *Mangrove Ecosystems in Australia: structure, function and management. Proceedings of the Australian National Mangrove Workshop, Australian Institute of Marine Science, Cape Ferguson 18-20 April 1979* (ed. B.F. Clough) Canberra: A.I.M.S. in association with A.N.U. Press.
- 1384 SWAINE, D.J., WARD, T.J. and WARREN, L.J. (1981)
Heavy metals in the environs of a smelter, pp. 356-365 in *Trace Substances in the Environmental Health-XV: A Symposium* (ed. D.D. Hemphill) Columbia: University of Missouri.
- 1385 WARD, T.J. and YOUNG, P.C. (1984)
Effects of metals and sediment particle size on the species composition of the epifauna of *Pinna bicolor* near a lead smelter, Spencer Gulf, South Australia.
Estuarine, Coastal and Shelf Science **18**, 79-95.
- 1386 KEENAN, C.P. and SHAKLEE, J.B. (1985)
Electrophoretic identification of raw and cooked fish fillets and other marine products.
Food Technology in Australia, **37**(3), 117-128.
- 1387 CROSSLAND, C.J., HATCHER, B.G., ATKINSON, M.J. and SMITH, S.V. (1984)
Dissolved nutrients of a high-latitude coral reef, Houtman Abrolhos Islands, Western Australia.
Marine Ecology - Progress Series **14**, 159-163.
- 1388 CROSSLAND, C.J. (1984)
Seasonal variations in the rates of calcification and productivity in the coral *Acropora formosa* on a high-latitude reef.
Marine Ecology Progress Series **15**, 135-140.

- 1393 DAVIS, T.L.O. (1984)
Estimation of fecundity in barramundi, *Lates calcarifer* (Bloch), using an automatic particle counter.
Australian Journal of Marine and Freshwater Research 35, 111-118.
- 1394 SHAKLEE, J.B. (1983)
The utilization of isozymes as gene markers in fisheries management and conservation pp. 213-247 in *Isozymes: Current Topics in Biological and Medical Research* Vol. 11 Medical and other applications (ed. M.C. Rattazzi *et al.*) New York: Alan R. Liss.
- 1395 SHAKLEE, J.B. (1984)
Genetic variation and population structure in the damselfish, *Stegastes fasciolatus*, throughout the Hawaiian Archipelago.
Copeia 3, 629-640.
- 1396 PEARCE, A.F. (1983)
A bibliography of physical oceanography in southwest Australian waters.
CSIRO Marine Laboratories Report 157.
- 1397 SHAKLEE, J.B. (1983)
FAO species identification sheets - fishing area 51 (west Indian Ocean. Albulidae (bonefishes).
FAO Species identification sheets - ALBU.
- 1398 SHAKLEE, J.B. and SALINI, J.P. (1983)
Studies suggest multiple stocks of Australian barramundi.
Australian Fisheries 42(2), 36-38.
- 1399 MORIARTY, D.J.W. (1983)
Measurement of muramic acid in marine sediments by high performance liquid chromatography.
Journal of Microbiological Methods 1, 111-117.
- 1400 CHURCH, J.A. and GOLDING, T.J. (1983)
Cruises into the western Coral Sea by R.V. 'Sprightly' 1980/81; a data report.
CSIRO Marine Laboratories Report 158.
- 1402 HALLEGRAEFF, G.M. (1984)
Coccolithophorids (calcareous nanoplankton) from Australian waters.
Botanica Marina 27, 229-247.
- 1403 VAUDREY, D.J., WELLS, G.S. and CRESSWELL, G.R. (1983)
Satellite-tracked buoy data report. IX. South-west Pacific and Indian Oceans and Great Australian Bight, January to June 1982.
CSIRO Marine Laboratories Report 159.

- 1404 FORBES, A.M.G. (1984)
The contribution of local processes to seasonal hydrology of the Gulf of Carpentaria.
Oceanographie Tropicale 19(2), 193-201.
- 1405 LATZKO, E. and KELLY, G. (1983)
The many-faceted function of phosphoenolpyruvate carboxylase in C₃ plants.
Physiologie Vegetale 21, 805-815.
- 1407 ROBERTSON, A.I. and LUCAS, J.S. (1983)
Food choice, feeding rates, and the turnover of macrophyte biomass by a surf-zone inhabiting amphipod.
Journal of Experimental Marine Biology and Ecology 72, 99-124.
- 1408 MUNRO, I.S.R. (1983)
Atlas of operational, environmental, and biological data from the Gulf of Carpentaria Prawn Survey, 1963-65. Part 1. Introduction.
CSIRO Marine Laboratories Report 151.
- 1409 MUNRO, I.S.R. (1984)
Atlas of operational, environmental, and biological data from the Gulf of Carpentaria Prawn Survey, 1963-65. Part 2. Survey operations.
CSIRO Marine Laboratories Report 152.
- 1410 MUNRO, I.S.R. (1984)
Atlas of operational, environmental, and biological data from the Gulf of Carpentaria Prawn Survey, 1963-1965. Part 3. Physical and chemical environment.
CSIRO Marine Laboratories Report 153.
- 1413 McEWAN, A.D. (1983)
Bruce Hamon and Australian physical oceanography.
Australian Journal of Marine and Freshwater Research 34(1), 1-4.
- 1415 MAJKOWSKI, J., HEARN, W.S. and SANDLAND, R.L. (1984)
An experimental determination of the effect of increasing the minimum age (or size) of fish at capture upon the yield per recruit.
Canadian Journal of Fisheries and Aquatic Science 41(5), 736-743.
- 1417 ROCHFORD, D.J. (1984)
Nitrates in eastern Australian coastal waters.
Australian Journal of Marine and Freshwater Research 35, 385-397.
- 1420 KIRKMAN, H. (1984)
Standing stock and production of *Ecklonia radiata* (C.Ag.) J. Agardh.
Journal of Experimental Marine Biology and Ecology 76, 119-130.

- 1421 MURPHY, G.I. (1982)
Recruitment of tropical fishes, pp. 141-148 *in* Theory and management of tropical fisheries: Proceedings of the ICLARM/CSIRO Workshop on the Theory and Management of Tropical Multispecies Stocks, 12-21 January 1981, Cronulla, Australia (ed. D. Pauly and G.I. Murphy) Manila: International Center for Living Aquatic Resources Management, Commonwealth Scientific and Industrial Research Organization.
- 1422 MAJKOWSKI, J. (1982)
Usefulness and applicability of sensitivity analysis in multispecies approach to fisheries management pp. 149-165 *in* Theory and Management of Tropical Fisheries: Proceedings of the ICLARM/CSIRO Workshop on the Theory and Management of Tropical Multispecies Stocks, 12-21 January 1981, Cronulla, Australia (ed. D. Pauly and G.I. Murphy) Manila: International Center for Living Aquatic Resources Management, Commonwealth Scientific and Industrial Research Organization.
- 1423 KIRKWOOD, G.P. (1984)
Simple models for multispecies fisheries, pp. 83-98 *in* Theory and Management of Tropical Fisheries: Proceedings of the ICLARM/CSIRO Workshop on the Theory and Management of Tropical Multispecies Stocks, 12-21 January 1981, Cronulla, Australia (ed. D. Pauly and G.I. Murphy) Manila: International Center for Living Aquatic Resources Management, Commonwealth Scientific and Industrial Research Organization.
- 1424 SAINSBURY, K.J. (1982)
The ecological basis of tropical fisheries management, pp. 167-188 *in* Theory and management of tropical fisheries: Proceedings of the ICLARM/CSIRO Workshop on the Theory and Management of Tropical Multispecies Stocks, 12-21 January 1981, Cronulla, Australia (ed. D. Pauly and G.I. Murphy) Manila: International Center for Living Aquatic Resources Management, Commonwealth Scientific and Industrial Research Organization.
- 1425 MORGAN, G.R., PHILLIPS, B.F. and JOLL, L.M. (1982)
Stock and recruitment relationships in *Panulirus cygnus*, the commercial rock (spiny) lobster of Western Australia.
Fisheries Bulletin 80(3), 475-486.
- 1428 ROTH LISBERG, P.C. (1984)
Overseas penaeid aquaculture examples in Japan and Ecuador, pp. 87-102 *in* The Potential of Aquaculture in Queensland, Proceedings of the Seminar held at the Professional Development Centre, Brisbane, 24-25 March 1983. (Eds. B.R. Pollock and R.H. Quinn) Brisbane: Queensland Department of Primary Industries.
- 1429 WILLIAMS, K. (1983)
Big numbers of SBF tuna tagged off Esperance.
Australian Fisheries 42, 26-27.

- 1430 STEVENS, J.D. (1984)
Biological observations on sharks caught by sport fishermen off New South Wales.
Australian Journal of Marine and Freshwater Research **35**, 573-590.
- 1431 TOMCZAK, M. Jr. (1983)
Coral Sea water masses, pp. 461-466 in Proceedings of the Inaugural Great Barrier Reef Conference, Townsville, August 28 - September 2, 1983 (ed. J.T. Baker *et al.*) Townsville: James Cook University of North Queensland.
- 1432 LINDHOLM, R. (1984)
Observations on the Chinaman leatherjacket *Nelusetta ayraudi* (Quoy & Gaimard) in the Great Australian Bight.
Australian Journal of Marine and Freshwater Research **35**, 597-599.
- 1433 CRESSWELL, G.R. (1982)
Indian Ocean and Tasman Sea pp. 27-29 in Nimbus 6 Random Access Measurement System Applications Experiments NASA SP-457 (ed. C. Cote, R. Taylor and E. Gilbert) Washington: National Aeronautics and Space Administration.
- 1434 STEVENS, J.D., DUNNING, M.C. and MACHIDA, S. (1983)
Occurrence of the porbeagle shark, *Lamna nasus*, in the Tasman Sea.
Japanese Journal of Ichthyology **30**, 301-307.
- 1435 RAINER, S.F. (1984)
Nephtys pente sp. nov. (Polychaeta: Nephtyidae) and a key to nephtys from northern Europe.
Journal of Marine Biology Association, U.K. **64**, 899-907.
- 1436 CROCOS, P.J. (1983)
Breeding biology of banana prawns in the Gulf of Carpentaria.
Australian Fisheries **42**(11), 22-24.
- 1437 STAPLES, D.J. (1984)
Habitat requirements of juvenile prawns, pp. 87-102 in The potential of Aquaculture in Queensland. Proceedings of the Seminar held at the Professional Development Centre, Brisbane, 24-25 March 1983 (eds. B.R. Pollock and R.H. Quinn) Brisbane: Queensland Department of Primary Industries.
- 1438 KIRKWOOD, G.P. and BANNISTER, J.L. (1980)
Revised abundance indices for sperm whale off Albany, Western Australia.
International Whaling Commission *Report of the Commission Special Issue* **2**, 89-91.

- 1439 KIRKWOOD, G.P., ALLEN, K.R. and BANNISTER, J.L. (1980)
An assessment of the sperm whale stock subject to Western Australia catching.
International Whaling Commission Report of the Commission Special Issue 2, 147-149.
- 1440 SMITH, D.F. (1983)
Automated data acquisition and analysis for coral reef primary productivity estimates, pp. 367-372 *in* Proceedings of the inaugural Great Barrier Reef Conference, Townsville, August 28 - September 2, 1983 (ed. J.T. Baker *et al.*), Townsville: James Cook University of North Queensland.
- 1441 HATCHER, B.G. (1983)
The role of detritus in the metabolism and secondary production of coral reef ecosystems, pp. 317-325 *in* Proceedings of the Inaugural Great Barrier Reef Conference, Townsville, August 28 - September 2, 1983 (ed. J.T. Baker *et al.*) Townsville: James Cook University of North Queensland.
- 1442 CHURCH, J.A. (1983)
A review of circulation in the western Coral Sea and internal tides on the shelf slope adjacent to the Great Barrier Reef, pp. 415-420 *in* Proceedings of the Inaugural Great Barrier Reef Conference, Townsville, August 28 - September 2, 1983 (ed. J.T. Baker *et al.*) Townsville: James Cook University of North Queensland.
- 1443 MCCOMB, A.J., CAMBRIDGE, M.L., KIRKMAN, H. and KUO, J. (1981)
The biology of Australian seagrasses, pp. 258-293 *in* The Biology of Australian Plants (ed. J.S. Pate and A.J. McComb) Perth: University of Western Australia Press.
- 1444 HAMON, B.V. (1984)
Diurnal and semi-diurnal tides on the Great Barrier Reef.
CSIRO Marine Laboratories Report 163.
- 1445 CROSSLAND, C.J. and WELLS, F.E. (1985)
A selected bibliography of marine and estuarine studies (other than physical oceanography) in Western Australia.
CSIRO Marine Laboratories Report 160.
- 1448 PARKER, R.R., ROCHFORD, D.J. and TRANTER, D.J. (1983)
History and organisation of the Port Hacking Estuary Project, pp. 7-16 *in* Synthesis and Modelling of Intermittent Estuaries (ed. W.R. Cuff and M. Tomczak) Berlin: Springer.
- 1460 BRADBURY, R.H., HAMMOND, L.S., REICHELT, R.E. and YOUNG, P.C. (1983)
Prediction versus explanation in environmental impact assessment.
Search 14, 323-325.

- 1461 STEVENS, J.D., HAUSFELD, H.F. and DAVENPORT, S.R. (1984)
Observations on the biology, distribution and abundance of *Trachurus declivis*, *Sardinops neophilcharadus* and *Scomber australasicus* in the Great Australian Bight.
CSIRO Marine Laboratories Report 164.
- 1462 HAMPTON, J., MAJKOWSKI, J. and MURPHY, G.I. (1984)
The 1982 assessment of the southern bluefin tuna (*Thunnus maccoyii*) population and the determination of catch levels which stabilize the parental biomass.
CSIRO Marine Laboratories Report 165.
- 1463 WILLIAMS, K. (1984)
Australian skipjack surveys inconclusive.
Australian Fisheries 2, 34-35.
- 1464 JOHANNES, R.E., LASSERE, P., NIXON, S.W., PLIYA, J. and RUDDLE, K. (1983)
Traditional knowledge and management of marine coastal systems.
Biology International Special Issue 4, 1-18.
- 1465 MAJKOWSKI, J. (1983)
Usefulness and applicability of sensitivity analysis in resource management, pp. 249-261 in *Resource Management: Issues, Techniques, Applications*. Proceedings of the Workshop on Resource Management held at James Cook University 14-17 July, 1981 (ed. L.C. Wadhwa) Townsville: James Cook University of North Queensland.
- 1467 ROCHFORD, D.J. (1984)
Effect of the Leeuwin Current upon sea surface temperatures off south-western Australia.
Australian Journal of Marine and Freshwater Research 35, 487-489.
- 1468 CARPENTER, D.J., BREMNER, A.J. and TRANTER, D.J. (1983)
Pilot investigation of chlorophyll distribution using satellite imagery in south-eastern Australian waters.
Victorian Department of Conservation, Forests and Lands, Fisheries and Wildlife Division Technical Report 34.
- 1469 RAINER, S.F. (1984)
Temporal changes in a demersal fish and cephalopod community of an unexploited coastal area in Northern Australia.
Australian Journal of Marine and Freshwater Research 35, 747-768.
- 1471 DAVIS, T.L.O. and WARD, T.J. (1984)
CSIRO finds two new scampi grounds off the North West Shelf.
Australian Fisheries 43(8), 43(8) 41-45.
- 1473 McDOUGALL, T.J. and WHITEHEAD, J.A. (1984)
Estimates of the relative roles of diapycnal, isopycnal and double-diffusive mixing in Antarctic bottom water in the North Atlantic.
Journal of Geophysical Research 89(C6) 10,479-10,483.

- 1474 THOMPSON, R.O.R.Y. (1984)
Observations of the Leeuwin Current off Western Australia.
Journal of Physical Oceanography 14(3) 623-628.
- 1475 KIRKWOOD, G.P and SOMERS, I.F. (1984)
Growth of two species of tiger prawn, *Penaeus esculentus* and *P. semisulcatus*, in the western Gulf of Carpentaria.
Australian Journal of Marine and Freshwater Research 35, 703-712.
- 1476 SOMERS, I.F. and KIRKWOOD, G.P. (1984)
Movements of tagged tiger prawns, *Penaeus* spp., in the western Gulf of Carpentaria.
Australian Journal of Marine and Freshwater Research 35, 713-723.
- 1477 THOMPSON, R.O.R.Y. (1984)
Formation of thermoclines in zero-mean-shear turbulence.
Journal of Geophysical Research 89(C5), 8017-8021.
- 1478 MAJKOWSKI, J. and HAMPTON, J. (1983)
Deterministic partitioning of the catch of southern bluefin tuna, *Thunnus maccoyii*, into age classes using an age-length relationship.
NOAA Technical Report NMFS 8, 87-90.
- 1479 GRIFFITHS, F.B., BROWN, G.H., REID, D.D. and PARKER, R.R. (1984)
Estimation of sample zooplankton abundance from Folsom splitter subsamples.
Journal of Plankton Research, 6(5) 721-731.
- 1480 MORIARTY, D.J.W. (1984)
Measurements of bacterial growth in some marine systems using the incorporation of tritiated thymidine into DNA, pp. 217-231 in *Heterotrophic activity in the Sea* (ed. J.E. Hobbie and P.J. LeB. Williams) New York: Plenum.
- 1481 AIREY, D. (1984)
Pollution indicators, fish consumption and the accumulation of mercury in human hair.
Marine Pollution Bulletin 15(9), 337-340.
- 1482 KIRKWOOD, G.P. and WALKER, M.H. (1984)
A new method for estimating tag-shedding rates, with application to data for Australian salmon, *Arripis trutta esper* Whitley.
Australian Journal of Marine and Freshwater Research 35, 601-606.
- 1483 FANDRY, C.B., LESLIE, L.M. and STEEDMAN, R.K. (1984)
Kelvin-type coastal surges generated by tropical cyclones.
Journal of Physical Oceanography, 14(3) 582-593.

- 1485 VOLKMAN, J.K. (1984)
Free and esterified sterols of the marine dinoflagellate *Gonyaulax polygramma*.
Lipids **19**(6), 457-465.
- 1486 KIRKWOOD, G.P. (1981)
Estimation of stock size using relative abundance data; a simulation study.
International Whaling Commission Report of the Commission. **31**, 729-735.
- 1487 STEVENS, J.D. (1984)
Life-history and ecology of sharks at Aldabra, Indian Ocean.
Proceedings of the Royal Society of London. Series B, Biological Sciences, **B222**, 79-106.
- 1488 McDOUGALL, T.J. (1983)
Double-diffusive plumes in unconfined and confined environments.
Journal of Fluid Mechanics **133**, 321-343.
- 1489 McDOUGALL, T.J. (1984)
Fluid dynamic implications for massive sulphide deposits of hot saline fluid flowing into a submarine depression from below.
Deep-Sea Research **31**(2), 145-170.
- 1490 AIREY, D., DAL PONT, G. and SANDARS, G. (1984)
A method of determining and removing sulphide to allow the determinations of sulphate, phosphate, nitrite ammonia by conventional method in small volumes of anoxic waters.
Analytica Chimica Acta **166**, 79-92.
- 1491 HALLEGRAEFF, G. (1984)
Species of the diatom genus *Thalassiosira* in Australian waters.
Botanica Marina **27**(2), 495-513.
- 1492 MACKEY, D.J. (1983)
The strong complexing capacity of seawater; an investigation of south-eastern Australian coastal waters.
Marine Chemistry **14**, 73-87.
- 1493 MACKEY, D.J. (1984)
An investigation of metal-organics in seawater using HPLC with atomic fluorescence detection, pp. 55-65 in *Complexation of Trace Metals in Natural Waters* (ed. C.J.M. Kramer and J.C. Duinker) The Hague: Martinus Nijhoff.
- 1494 MACKEY, D.J. (1984)
Trace metals and the productivity of shelf waters off North West Australia.
Australian Journal of Marine and Freshwater Research **35**, 505-516.

- 1495 KELLY, G.J. (1984)
Formation and fates of plant polyunsaturated fatty acids. *TIBS* **9**, 501-503.
- 1496 KELLY, G.J. (1984)
Calcium, calmodulin, and the action of plant hormones. *TIBS* **9** 4-5.
- 1497 KELLY, G.J. (1984)
The capture of carbon by aquatic plants. *TIBS*, 255.
- 1498 KELLY, G.J. (1983)
Two sugar bisphosphates in plant metabolism: one old, one new. *Trends in Biochemical Sciences* **8**, 151-152.
- 1500 MAJKOWSKI, J. and HAMPTON, J. (1983)
The estimation of a catch level which stabilizes the parental biomass of an exploited fish stock. *Fishery Bulletin* **81**(4), 723-732.
- 1502 WARD, T.J., WARREN, L.J. and TILLER, K.G. (1984)
The distribution and effects of metals in the marine environment near a lead-zinc smelter, South Australia, pp. 1-73 in *Environmental Impacts of Smelters* (ed. J. Nriagu) New York: Wiley.
- 1503 McDOUGALL, T.J. (1984)
Convective processes caused by a dense, hot, saline source flowing into a submarine depression from above. *Deep-Sea Research* **31**(11), 1287-1309.
- 1504 McDOUGALL, T.J. (1984)
The relative roles of diapycnal and isopycnal mixing on subsurface water mass conversion. *Journal of Physical Oceanography* **14**(10), 1577-1589.
- 1506 POLLARD, P.C. and MORIARTY, D.J.W. (1984)
Validity of tritiated thymidine method for estimating bacterial growth rates: measurement of isotope dilution during DNA synthesis. *Applied and Environmental Microbiology* **48**(6), 1076-1083.
- 1507 KIRKWOOD, G.P. (1984)
Modelling of the Gulf of Carpentaria prawn fisheries, pp. 211-219 in *Penaeid Shrimps - Their Biology and Management* (ed. J. Farham) Farnham, UK: Fishing News Books.
- 1508 PEARCE, A.F. and GRUNDLINGH, M.L. (1984)
Large vortices in the northern Agulhas Current. *Deep-Sea Research* **31**(9), 1149-1156.

- 1510 BUTLER, E.C.V. and SMITH, J.D. (1985) .
Iodine and arsenic redox species in oxygen-deficient estuarine waters.
Australian Journal of Marine and Freshwater Research 36, 301-309.
- 1511 ALEXANDER, R., KAGI, R.I., WOODHOUSE, G.W. and VOLKMAN, J.K. (1983)
The geochemistry of some biodegraded Australian oils.
Apea Journal 23, 53-63.
- 1512 VOLKMAN, J.K. and WAKEMAN, S.G. (1983)
Capillary GC and GC-MS analysis of wax esters and triacylglycerols in marine sediments, pp. 193-197 in *Fats for the future*. Proceedings of the International Conference on Oils, Fats and Waxes in Auckland, February, 1983 (ed. S.G. Brooker *et al.*) Auckland: Duromark.
- 1513 BLABER, S.J.M., YOUNG, J.W. and DUNNING, M.C. (1985)
Community structure and zoogeographic affinities of the coastal fishes of the Dampier region of North-western Australia.
Australian Journal of Marine and Freshwater Research 36, 247-266.
- 1514 DAVIS, T.L.O. (1985)
Seasonal changes in gonad maturity, and abundance of larvae juveniles of barramundi, *Lates calcarifer* (Bloch), in Van Diemen Gulf and the Gulf of Carpentaria.
Australian Journal of Marine and Freshwater Research 36, 177-190.
- 1516 JOHANNES, R.E. and MacFARLANE, J.W. (1984)
Traditional sea rights in the Torres Strait Islands, with emphasis on Murray Island.
Senri Ethnological Studies 17, 253-266.
- 1517 RAINER, S.F (1984)
Polychaeta as a representative taxon: their role in function and secondary production of benthic communities in three estuaries, pp. 370-382 in *Proceedings of the First International Polychaete Conference, Sydney* (ed. P.A. Hutchings) Sydney: Linnean Society of NSW.
- 1518 JOHANNES, R.E. and RIMMER, D.W. (1984)
Some distinguishing characteristics of nesting beaches of the green turtle *Chelonia mydas* on North West Cape Peninsula, Western Australia.
Marine Biology 83, 149-154.
- 1519 RAINER, S.F. (1985)
Population dynamics and production of the bivalve *Abra alba* and implications for fisheries production.
Marine Biology 85, 253-262.

- 1520 MACKEY, D.J. (1985)
HPLC analyses of metal-organics in seawater-interference effects attributed to stationary phase free silanols.
Marine Chemistry 16, 105-119.
- 1521 SMITH, D.F. (1982)
Observation and quantitative analysis of curvilinear regions of time-varying oxygen concentrations with an oxygen electrode and a microcomputer.
Journal of Experimental Marine Biology and Ecology 64, 117-124.
- 1522 SMITH, D.F. and HORNER, S.M.J. (1982)
Laboratory and field measurements of aquatic productivity made by a minicomputer employing a dual oxygen electrode system.
Marine Biology 72, 53-60.
- 1523 HORNER, S.M.J. and SMITH, D.F. (1984)
Distinguishing modes of dissolved organic carbon production in marine macrophytes by tracer kinetic analysis.
Marine Biology 81, 231-236.
- 1524 HERON, A.C. and BENHAM, E.E. (1985)
Life history parameters as indicators of growth rate in three salp populations.
Journal of Plankton Research 7(3), 365-379.
- 1525 KELLY, G.J., MUKHERJEE, U., HOLTUM, J.A.M. and LATZKO, E. (1985)
Purification, kinetic and regulatory properties of phosphofructokinase from *Chlorella pyrenoidosa*.
Plant Cell Physiology 26(2), 301-307.
- 1526 WASSENBERG, T.J. and HILL, B.J. (1984)
Moulting behaviour of the tiger prawn *Penaeus esculentus* (Haswell).
Australian Journal of Marine and Freshwater Research 35, 561-571.
- 1527 BRADBURY, R.H., HAMMOND, L.S., REICHEL, R.E. and YOUNG, P.C. (1984)
Prediction and explanation as a dialectical pair in ecology.
Search 15(7-8) 220-222.
- 1528 JOHANNES, R.E. (1982)
Implications of traditional marine resource use for coastal fisheries development in Papua New Guinea, pp. 241-249 in *Traditional Conservation in Papua New Guinea: Implications for Today*. (ed. L. Moranta, J. Pernetta and W. Hearney) Boroko, Papua New Guinea: Institute of Applied Social and Economic Research.
- 1529 JEFFREY, S.W. (1984)
Responses of unicellular marine plants to natural blue-green light environments, pp. 497-508 in *Blue Light Effects in Biological Systems* (ed. H. Senger) Berlin: Springer Verlag.

- 1530 SMITH, D.F., WIEBE, W.J. and HIGGINS, H.W. (1984)
Heterotrophic potential estimates: an inherent paradox in assuming Michaelis-Menten kinetics.
Marine Ecology Progress Series 17, 49-56.
- 1531 DUNNING, M. and BRANDT, S.B. (1985)
Distribution and life history of deep-water squid of commercial interest from Australia.
Australian Journal of Marine and Freshwater Research 36, 343-359.
- 1532 MORIARTY, D.J.W., POLLARD, P.C. and HUNT, W.G. (1985)
Temporal and spatial variation in bacterial production in the water column over a coral reef.
Marine Biology 85, 285-292.
- 1533 MORIARTY, D.J.W., POLLARD, P.C., HUNT, W.G., MORIARTY, C.M. and WASSENBERG, T.J. (1985)
Productivity of bacteria and microalgae and the effect of grazing by holothurians in sediments on a coral flat.
Marine Biology 85, 293-300.
- 1534 MORIARTY, D.J.W., WHITE, D.C. and WASSENBERG, T.J. (1985)
A convenient method of measuring rates of phospholipid synthesis in seawater and sediments; its relevance to the determination of bacteria productivity.
Journal of Microbiological Methods 3, 321-330.
- 1535 POLLARD, P.C. and FINCHER, G.B. (1981)
Biosynthesis of arabinogalactan - protein in *Lolium multiflorum* (ryegrass) endosperm cells.
Australian Journal of Plant Physiology 8, 121-132.
- 1537 BROTHERS, E.B. and THRESHER, R.E. (1985)
Pelagic duration, dispersal and the distribution of Indo-Pacific coral-reef fishes.
NOAA Symposia Series for Undersea Research 1(2), 53-69.
- 1538 JOHANNES, R.E. (1981)
Making better use of existing knowledge in managing Pacific Island reef and lagoon ecosystems.
South Pacific Regional Environmental Programme, Topic Review 4, 1-12.
- 1539 YOUNG, P.C. and MARTIN, R.B. (1985)
Sex ratios and hermaphroditism in nemipterid fish from northern Australia.
Journal of Fish Biology 26, 273-287.
- 1540 McEWAN, A.D., MANDER, D.W. and SMITH, R.K. (1972)
Forced resonant second-order interaction between damped internal waves.
Journal of Fluid Mechanics 55(4), 589-608.

- 1541 ROBINSON, R.M. and McEWAN, A.D. (1975)
Instability of a periodic boundary layer in a stratified fluid.
Journal of Fluid Mechanics 68(1), 41-48.
- 1542 McEWAN, A.D. (1971)
Degeneration of resonantly-excited standing internal gravity waves.
Journal of Fluid Mechanics 50(3), 431-448.
- 1543 McEWAN, A.D. (1976)
Angular momentum diffusion and the initiation of cyclones.
Nature 260(5547), 126-128.
- 1544 McEWAN, A.D. (1973)
A laboratory demonstration of angular momentum mixing.
Geophysical Fluid Dynamics 5, 283-311.
- 1545 McEWAN, A.D. (1973)
Interactions between internal gravity waves and their traumatic effect on a continuous stratification.
Boundary-Layer Meteorology 5, 159-175.
- 1546 McEWAN, A.D. (1974)
Thermal convection above a radiatively heated inversion; a laboratory simulation of stratus cloud, (8p.) in Fifth Australian Conference on Hydraulics and Fluid Mechanics at University of Canterbury, Christchurch, N.Z. 1974 December 9 to December 13 (ed. D. Lindley and A.J. Sutherland) Christchurch: University of Canterbury.
- 1547 ALEXANDER, R. , KAGI, R.I., NOBLE, R. and VOLKMAN, J. (1984)
Identification of some bicyclic alkanes in petroleum.
Organic Geochemistry 6, 63-70.
- 1548 VOLKMAN, J.K. (1984)
Biodegradation of aromatic hydrocarbons in crude oils from the Barrow Sub-basin of Western Australia.
Organic Geochemistry 6, 619-632.
- 1549 MARSHALL, J.I., ROWE, F.W.E., FISHER, R.P. and SMITH, D.F. (1980)
Alterations to the relative species-abundance of ascidians and barnacles in a fouling community due to screens.
Australian Journal of Marine and Freshwater Research 31, 147-153.
- 1550 SHAKLEE, J.B. and KEENAN, C.P. (1986)
A practical laboratory guide to the techniques and methodology of electrophoresis and its application to fish fillet identification.
CSIRO Marine Laboratories Report 177.
- 1551 McDOUGALL, T.J. (1985)
A model of a frictionless double-diffusive gravity current on a horizontal surface.
Geophysical and Astrophysical Fluid Dynamics 31, 221-245.

- 1552 SANDLAND, R.L. and KIRKWOOD, G.P. (1981)
Estimation of survival in marked populations with possibly dependent sighting probabilities.
Biometrika **68**(2), 531-541.
- 1553 YOUNG, P.C. (1972)
The relationship between the presence of larval anisakine nematodes in cod and marine mammals in British home waters.
Journal of Applied Ecology **9**, 459-485.
- 1554 SWIFT, I.E., MILBORROW, B.V. and JEFFREY, S.W. (1982)
Formation of neoxanthin, diadinoxanthin and peridinin from (14C) zeaxanthin by a cell-free system from amphidinium carterae.
Phytochemistry **21**(12), 2859-2864.
- 1555 HARRIS, G.P. (1985)
The answer lies in the nesting behaviour.
Freshwater Biology **15**, 375-380.
- 1556 HAMON, B.V. (1983)
Australian Research on Physical Sciences of the Oceans 1979-1983.
Australian National Committee for Oceanic Sciences.
- 1557 PLUMB, R.A. and McEWAN, A.D. (1978)
The instability of a forced standing wave in a viscous stratified fluid. A laboratory analogue of the quasi-biennial oscillation.
Journal of the Atmospheric Sciences **35**(10), 1827-1839.
- 1558 McEWAN, A.D. and PALTRIDGE, G.W. (1976)
Radiatively driven thermal convection bounded by an inversion - a laboratory simulation of stratus clouds.
Journal of Geophysical Research **81**(6), 1095-1102.
- 1559 McEWAN, A.D. (1966)
The peeling of a flexible strip attached by a cavitating viscous adhesive.
Sonderdruck aus Rheologica Acta **5**(3), 205-211.
- 1560 McEWAN, A.D. and TAYLOR, G.I. (1966)
The peeling of a flexible strip attached by a viscous adhesive.
Journal of Fluid Mechanics **26**(1), 1-15.
- 1561 McEWAN, A.D. and BAINES, P.G. (1974)
Shear fronts and an experimental stratified shear flow.
Journal of Fluid Mechanics **63**(2), 257-272.
- 1562 TAYLOR, G.I. and McEWAN, A.D. (1965)
The stability of a horizontal fluid interface in a vertical electric field.
Journal of Fluid Mechanics **22**(1), 1-15.

- 1563 McEWAN, A.D., THOMPSON, R.O.R.Y. and PLUMB, R.A. (1980)
Mean flows driven by weak eddies in rotating systems.
Journal of Fluid Mechanics 99(3), 655-672.
- 1564 McEWAN, A.D. (1980)
Mass and moment diffusion in internal breaking events, pp. 742-749
in Second International Symposium on Stratified Flows. Norwegian
Institute of Technology, Trondheim, Norway, 24-27 June, 1980 (ed. T.
Carstens and T. McClimans) Trondheim: Tapir.
- 1565 McEWAN, A.D. and PLUMB, R.A. (1977)
Off-resonant amplification of finite internal wave packets.
Dynamics of Atmosphere and Oceans 2(1), 83-105.
- 1566 GUNN, J.S. and MILWARD, N.E. (1985)
The food, feeding habits and feeding structures of the whiting
species *Sillago sihama* (Forsskai).
Journal of Fish Biology 26, 411-427.
- 1567 GODFREY, J.S. and RIDGWAY, K.R. (1985)
The large-scale environment of the poleward-flowing Leeuwin Current,
Western Australia.
Journal of Physical Oceanography 15(5), 481-495.
- 1568 JONES, G. (1985)
Revision of the Australian species of the fish family Leiognathidae.
Australian Journal of Marine and Freshwater Research 36, 559-613.
- 1569 CHURCH, J.A., ANDREWS, J.C. and BOLAND, F.M. (1985)
Tidal currents in the central Great Barrier Reef.
Continental Shelf Research 4(5), 515-531.
- 1570 SHAKLEE, J.B., BRILL, R.W. and ACERRA, R. (1983)
Biochemical genetics of Pacific blue *Makaira nigricans*, from
Hawaiian waters.
Fishery Bulletin 81(1), 85-90.
- 1571 McLOUGHLIN, R.L. and YOUNG, P.C. (1985)
Sedimentary provinces of the fishing grounds of the North West Shelf
of Australia; grain-size frequency analysis of surficial sediments.
Australian Journal of Marine and Freshwater Research 36, 671-681.
- 1572 MEYERS, G. and DONGUY, J.R. (1984)
The North Equatorial Countercurrent and heat storage in the western
Pacific Ocean during 1982-1983.
Nature, 312(5991), 258-260.
- 1573 CLARKE, A.J. and THOMPSON, R.O.R.Y. (1984)
Large-scale wind-driven ocean response in the Australian coastal
experiment region.
Journal of Physical Oceanography 14(2), 338-352.

- 1574 THRESHER, R.E. (1985)
Distribution, abundance and reproductive success in the coral reef fish *Acanthochromis polyacanthus*.
Ecology 66(4), 1139-1150.
- 1575 HEARN, C.J. and PEARCE, A.F. (1985)
NOAA satellite and air-borne sensing of a small-scale, coastal tidal jet.
Australian Journal of Marine and Freshwater Research 36, 643-653.
- 1576 McLACHLAN, A. and HESP, P. (1984)
Surf zone diatom accumulations on the Australian coast.
Search 15(7-8), 230-231.
- 1577 McLACHLAN, A. (1985)
The biomass of macro- and interstitial fauna on clean and wrack-covered beaches in Western Australia.
Estuarine, Coastal and Shelf Science 21, 587-599.
- 1578 McLACHLAN, A., ELIOT, I.G. and CLARKE, D.J. (1985)
Water filtration through reflective microtidal beaches and shallow sublittoral sands and its implications for an inshore ecosystem in Western Australia.
Estuarine, Coastal and Shelf Science 21, 91-104.
- 1579 McLACHLAN, A. and HESP, P. (1984)
Faunal response to morphology and water circulation of a sandy beach with cusps.
Marine Ecology Progress Series 19, 133-144.
- 1580 PEARCE, A.F., JOHANNES, R.E., MANNING, C.R., RIMMER, D.W. and SMITH, D.F. (1985)
Hydrology and nutrient data off Marmion, Perth, 1979-1982.
CSIRO Marine Laboratories Report 167.
- 1581 FANDRY, C.B., HUBBERT, G.D. and McINTOSH, P.C. (1985)
Comparison of predictions of a numerical model and observations of tides in Bass Strait.
Australian Journal of Marine and Freshwater Research 36, 737-752.
- 1582 CRESSWELL, G.R. (1984)
The East Australian Current on the northern NSW Continental Shelf.
CSIRO Marine Laboratories Research Report 1981-1984, 153-154.
- 1583 HILL, B.J. and WASSENBERG, T.J. (1985)
A laboratory study of the effect of streamer tags on mortality, growth, moulting and duration of nocturnal emergence of the tiger prawn *Penaeus esculentus* (Haswell).
Fisheries Research 3, 223-235.

- 1584 CRESSWELL, G.R. (1984)
Satellite drifters northwest of Australia.
Intergovernmental Oceanographic Commission Technical Series No. 30,
15-16.
- 1585 SAINSBURY, K.J. (1984)
Biological prediction in fisheries management.
CSIRO Marine Laboratories Research Report 1981-84, 57-64.
- 1586 NILSSON, C.S., CLIFT, S. and TILDESLEY, P. (1984)
Satellite remote sensing.
CSIRO Marine Laboratories Research Report 1981-84, 127-134.
- 1587 BOLAND, F.M. and PAPIJ, A. (1984)
Development of oceanographic equipment.
CSIRO Marine Laboratories Research Report 1981-84, 115-118.
- 1588 STEVENS, J.D. (1984)
Northern pelagic fish stocks.
CSIRO Marine Laboratories Research Report 1981-84, 65-68.
- 1589 PHILLIPS, B.F. (1984)
Successful prediction of commercial catches of western rock
lobsters.
CSIRO Marine Laboratories Research Report 1981-84, 41-46.
- 1590 CRESSWELL, G.R. (1984)
Satellite drifters north-west of Australia.
CSIRO Marine Laboratories Research Report 1981-84, 123-126.
- 1591 CHURCH, J.A. (1984)
The Australian Coastal Experiment.
CSIRO Marine Laboratories Research Report 1981-84, 149-152.
- 1592 YOUNG, P.C. (1984)
North West Shelf research program.
CSIRO Marine Laboratories Research Report 1981-84, 69-74.
- 1593 DALL, W. (1984)
The biology of tiger prawns in the western Gulf of Carpentaria.
CSIRO Marine Laboratories Research Report 1981-84, 51-56.
- 1594 DALL, W. and PHILLIPS, B.F. (1984)
Torres Strait research.
CSIRO Marine Laboratories Research Report 1981-84, 75-84.
- 1595 VOLKMAN, J.K. and EVERITT, D.A. (1984)
Marine organic chemistry.
CSIRO Marine Laboratories Research Report 1981-84, 141-148.
- 1596 GODFREY, J.S. and RIDGWAY, K.R. (1984)
Seasonal patterns of geostrophic flow off Western Australia.
CSIRO Marine Laboratories Research Report 1981-84, 119-122.

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