

Robert E. Johannes

26 September 1936 – 4 September 2002

Achievements and contributions



Education

- BSc University of British Columbia (1958)
- MSc University of British Columbia (1959)
- PhD University of Hawaii (1963)

Awards

- Pew Foundation Scholarship in Conservation and the Environment 1993–1997
- CSIRO Medal 1990
- Guggenheim Foundation Fellowship 1974–75
- British Columbia Fisheries Association Scholarship 1958
- National Federation of Canadian University Students Exchange Scholarship 1956

Publications

Editorship

Editor, Live Reef Fish Information Bulletin, published by the Secretariat of the Pacific Community 1996–2002

Books

- R.E. Johannes and W. MacFarlane. 1991. Traditional Fishing in the Torres Strait Islands. Hobart: CSIRO. 268 p.
- R.E. Johannes. 1981. Words of the Lagoon: Fishing and Marine Lore in the Palau District of Micronesia. Berkeley: University of California Press. 245 p.

Books edited

- Ruddle, K. and R.E. Johannes (eds). 1990. Traditional Marine Resource Management in the Pacific Basin: An Anthology. Jakarta: UNESCO.
- Johannes, R.E. (ed). 1990. Contribution of Traditional Knowledge to Environmental Science. International Union for the Conservation of Nature and Natural Resources, IUCN Conservation Science Series No. 1.
- Ruddle, K. and R.E. Johannes (eds). 1985. The Traditional Knowledge and Management of Coastal Systems in Asia and the Pacific. Jakarta: UNESCO.
- Gomez, E., C.E. Birkeland, R.W. Buddemeier, R.E. Johannes, J.A. Marsh Jr. and R.T. Tsuda (eds). 1981. Proceedings of the Fourth International Coral Reef Symposium, Manila. 2 Vols. 1510 p.

Stoddart, D. and R.E. Johannes (eds). 1978. Coral Reefs: Research Methods. Paris: UNESCO. 581 p.

Wood, E.J.F. and R.E. Johannes (eds). 1975. Tropical Marine Pollution. Amsterdam; New York: Elsevier. 192 p.

Film

Directed and scripted a half-hour colour underwater documentary film on coral reef pollution, *Cloud over the Coral Reef* shown on U.S., Australian and Samoan Television. 1973.

Articles (by date)

Johannes, R.E. (in press). The renaissance of community-based marine resource management in Oceania. Annual Reviews of Ecology and Systematics.

Johannes, R.E. and F. R. Hickey. (in press). Evolution of village-based marine resource management in Vanuatu between 1993 and 2001. Report to Environment and Development in Coastal Regions and in Small Islands Bureau, UNESCO.

Johannes, R.E. (in press). Integrating traditional fishing knowledge with western scientific knowledge for better marine resource management. In: D. Nakashima et al. (eds). Local and indigenous knowledge systems, Paris: UNESCO.

Johannes, R.E. (in press). Fishers' knowledge and management: Differing fundamentals in indigenous and industrial fisheries. Proceedings of the Conference on Putting Fishers' Knowledge to Work. University of British Columbia Fisheries Centre, Vancouver.

Johannes, R.E. (in press) Use and misuse of traditional ecological knowledge and management practices: Pacific Island examples. In: D. Dallmeyer (ed) Values at sea: Ethics for the marine environment. University of Georgia Press. (Being reprinted in: Environmental Ethics and Policy, published by Thomson Learning)

Johannes, R.E. 2002. Did indigenous conservation ethics exist? SPC Traditional Marine Resource Management and Knowledge Information Bulletin 14:3-7.

Heyman W.D., R.T. Graham, B. Kjerfve and R.E. Johannes. 2001. Whale sharks, *Rhincodon typus*, aggregate to feed on fish spawn in Belize. Marine Ecology Progress Series 215:275-282.

Johannes, R.E. and N. Kile. 2001. Grouper spawning aggregations that are a potential target of the live reef food fish trade in Ysabel and Wagina Islands, Solomon Islands. SPC Live Reef Fisheries Information Bulletin 8:5-9.

Johannes, R.E. and B. Yeeting. 2001. I-Kiribati knowledge and management of Tarawa's lagoon resources. Atoll Research Bulletin 489. 24 p.

Johannes, R.E. 2001. A possible new candidate for grouper aquaculture. SPC Live Reef Fish Information Bulletin 8:31-32.

Johannes, R.E. and E. Hviding. 2001. Traditional knowledge of the fishers of Marovo Lagoon, Solomon Islands, concerning fish aggregating behaviour. SPC Traditional Marine Resource Management and Knowledge Information Bulletin 12:22-29.

Johannes, R.E., M.M.R. Freeman and R. Hamilton. 2000. Ignore fishers' knowledge and miss the boat. Fish and Fisheries 1:257-271.

Johannes, R.E. 2000. Palau: Protection of reef fish spawning aggregations. p. 320-323. In: R.V. Salm and J.R. Clark (eds). Marine and Coastal Protected Areas. IUCN, Gland, Switzerland. 3rd edition.

Johannes, R.E. and N.J. Ogburn. 1999. Collecting grouper seed for aquaculture in the Philippines. SPC Live Reef Fish Information Bulletin 6:35-48.

Johannes, R.E., L. Squire, T. Graham, Y. Sadovy and H. Renguul. 1999. Spawning aggregations of groupers (Serranidae) in Palau. The Nature Conservancy Marine Conservation Research Report #1, The Nature Conservancy and the Forum Fisheries Agency. 144 p. (Available online at www.tnc.org/asiapacific)

Johannes, R.E. and M. Lam. 1999. The live reef food fish trade in the Solomon Islands. SPC Live Reef Fish Information Bulletin 5:8-15.

- Johannes, R.E. 1998. Combating destructive fishing practices more effectively: The Nature Conservancy Perspective. p. 217–226. In: Proceedings of the APEC Workshop on the Impacts of Destructive Fishing Practices in the Marine Environment, Hong Kong, 16–18 December 1997.
- Johannes, R.E. 1998. The case for data-less marine resource management: Examples from tropical nearshore fisheries. *Trends in Ecology and Evolution* 13:243–246.
- Johannes, R.E. 1998. Government-supported, village-based management of marine resources in Vanuatu. *Ocean and Coastal Management Journal* 40:165–186.
- Johannes, R.E. 1997. Grouper spawning aggregations need protection. *SPC Live Reef Fish Information Bulletin* 3:13–14.
- Johannes, R.E. 1997. Traditional coral-reef fisheries management. p. 380–385. In: C. Birkeland (ed). *Life and death of coral reefs*. New York: Chapman and Hall. 536 p.
- Johannes, R.E. 1997. Expanding coral reef fish farming requires more research on wild-caught juveniles. *Aquaculture Asia* 2(1):32.
- Bettencourt, S., C. Talati and R.E. Johannes. 1995. Sustainable development of coastal fisheries in the Pacific island region. Proceedings of the Workshop on the Management of South Pacific Inshore Fisheries. Noumea, South Pacific Commission/Forum Fisheries Agency.
- Johannes, R.E. 1995. Fishery for live reef food fish is spreading human death and environmental degradation. *Coastal Management in Tropical Asia* 5:8–9.
- Nelson, P., L. Rymer, B. Allender, M. Neilson, R.E. Johannes, K. Abel and C. Bell. 1995. Review of alternative pulping and bleaching technologies. National Pulp Mills Research Program Technical Report No. 10. 54 p.
- Virtue, P., R.E. Johannes, P.D. Nichols and J.W. Youn. 1995. Biochemical composition of *Nyctiphanes australis* and its possible use as an aquaculture feed source: lipids, pigments and fluoride content. *Marine Biology* 122:121–128.
- Abel, K., P. Nelson, R. Johannes, J. Stauber, G. Vaughan, W. Bond, R. Kookana and S. Rogers. 1994. Bagasse pulp mill effluent literature review. Report prepared for the Joint Commonwealth-State Technical Working Group on Environmental Requirements for the Bagasse Pulp Mill Project. 106 p.
- Johannes, R.E. 1994. Co-operative fisheries management: Major changes in training required for government fisheries personnel. *SPC Traditional Marine Resource Management and Knowledge Information Bulletin* 4:7–10.
- Johannes, R.E. 1994. Design of tropical nearshore fisheries extension work beyond the 1990s. p. 162–174. In: R. South, D. Goulet, S. Tuquiri and M. Church (eds). *Traditional marine tenure and sustainable management of marine resources in Asia and the Pacific*. International Ocean Institute – University of the South Pacific, Suva.
- Johannes, R.E. 1994. Evaluating the impacts of pulp mill effluents on the marine environment: Monitoring, mesocosms, biomarkers and future trends. Keynote address at the Australian New Zealand Association of Science Annual Meeting, Perth. *Printed in: Significant speeches: The best current thinking on the environment. Summer 1993/94:35–38*.
- Johannes, R.E. 1994. The science of Pacific Island peoples and marine resource management. p. 81–89. In: J. Morrison, P. Geraghty and L. Crawl (eds). *Science of the Pacific Island peoples Vol. 1. Ocean and Coastal Studies*. Suva, Fiji: Institute of Pacific Studies. 149 p.
- Johannes, R.E., A.F. Pearce, W.J. Wiebe, C.J. Crossland, D.W. Rimmer, D.F. Smith and C. Manning. 1994. Nutrient characteristics of well-mixed coastal waters off Perth, Western Australia. *Estuarine, Coastal and Shelf Science* 39(3):273–295.
- Cook, J., A.J. Gilmour and R.E. Johannes. 1993. Western Samoa Fisheries Extension and Training Project. Project Design. Report to the Australian International Development Assistance Bureau.
- Johannes, R.E. 1993. Integrating traditional ecological knowledge and management with environmental impact assessment. p. 33–40. In: J.T. Inglis (ed). *Traditional ecological knowledge: Concepts and cases*. Ottawa, Canada, International Program on Traditional Ecological Knowledge and International Development Research Centre.
- Johannes, R.E. 1993. The plight of the osfish, or why quantitative sophistication is no substitute for asking the rights questions. *Naga* 16(1):4–5. *Reprinted in: Pacific Science Information Bulletin* 46(3/4):1–2 (1994).

- Johannes, R.E. and H.T. Lewis. 1993. The importance of researchers' expertise in environmental subjects. p. 104–108. In: N.G. Williams and G. Baines. Traditional ecological knowledge: Wisdom for sustainable development. Canberra, Centre for Resource and Environmental Studies, Australian National University.
- Johannes, R.E. and K. Ruddle. 1993. Human interactions in tropical coastal and marine areas: Lessons from traditional resource use. p. 19–27. In: R. Price and S. Humphrey (eds). Application of the biosphere reserve concept to coastal marine areas. Gland, Switzerland, IUCN.
- Johannes, R.E., K. Ruddle and E. Hviding. 1993. The value today of traditional management and knowledge of coastal marine resources in Oceania. p. 1–7. In: Proceedings of the Workshop on People, Society and Pacific Islands Fisheries Development and Management: Selected Papers. Inshore Fisheries Research Project Technical Document No. 5. Noumea, South Pacific Commission. Reprinted in: *Proceedings of the FAO/Japan Consultation on the Development of Community Based Coastal Fishery Management Systems for Asia and the Pacific*. FAO FI/CCFM/92/Inf. 16.
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- Ruddle, K., E. Hviding and R.E. Johannes. 1992. Marine resource management in the context of customary tenure. *Marine Resource Economics* 7:249–273.
- Johannes, R.E. and J.W. MacFarlane. 1991. Torres Strait traditional fisheries studies: Some implications for sustainable development. p. 389–402. In: D.R. Lawrence (ed). Sustainable development for traditional inhabitants of the Torres Strait region. Great Barrier Reef Marine Park Authority Workshop Series No. 16.
- Ruddle, K., E. Hviding and R.E. Johannes. 1991. Customary marine tenure: An option for small-scale fisheries management. Centre for Development Studies Report No. 10/9, University of Bergen, Norway. 46 p.
- Johannes, R.E. 1990. Contribution of traditional knowledge to environmental science. In: R.E. Johannes (ed). Contribution of traditional knowledge to environmental science. International Union for the Conservation of Nature and Natural Resources, IUCN Conservation Science Series No. 1.
- Johannes, R.E. 1990. Fishing for traditional knowledge. In: R.E. Johannes (ed). Contribution of traditional knowledge to environmental science. International Union for the Conservation of Nature and Natural Resources, IUCN Conservation Science Series No. 1.
- Johannes, R.E. 1990. Some recent history, the Pulp Mill Guidelines, and the need for a national research program. p. 4–9. In: Proceedings of the Conference and Workshop on Toxicology and Monitoring. National Pulp Mills Research Program. Melbourne, 8–10 May 1990.
- Johannes, R.E. and J.W. MacFarlane. 1990. Assessing traditional fishing rights systems in the context of fisheries management: A Torres Strait example. p. 241–261. In: K. Ruddle and R.E. Johannes (eds). Traditional management of coastal systems in Asia and the Pacific: A Compendium. Jakarta: UNESCO.
- Fandry, C.B., R.E. Johannes and P. Nelson. 1989. Pulp mills: Modern technology and environmental protection. Report to Senator the Honourable John Button, Minister for Industry, Technology and Commerce.
- Hatcher, B.G., R.E. Johannes and A.I. Robertson. 1989. Review of research relevant to the conservation of shallow tropical marine ecosystems. *Oceanography and Marine Biology: An Annual Review* 27:337–414.
- Johannes, R.E. 1989. A spawning aggregation of the grouper, *Plectropomus areolatus* (Rüppel) in the Solomon Islands. p. 751–755. In: J.H. Choat, D.J. Barnes, M.A. Borowitzka, J.C. Coll, P.J. Davies, P. Flood, B. G. Hatcher, D. Hopley, P.A. Hutchings, D. Kinsey, G.R. Orme, M. Pichon, P.F. Sale, P.W. Sammarco, C.C. Wallace, C.R. Wilkinson, E. Wolanski and O. Bellwood (eds). Proceedings of the Sixth International Coral Reef Symposium, Townsville, Australia, 8–12 August.
- Johannes, R.E. 1989. Criteria for determining the value of traditional marine tenure systems in the context of contemporary marine resource management in Oceania. p. 29–32. In: Report on the Workshop on Customary Tenure, Traditional Resource Management and Nature Conservation, South Pacific Regional Environment Program, Noumea, New Caledonia, March 1988.

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- Johannes, R.E. 1988. Research on traditional tropical fisheries: Some implications for Torres Strait and Australian Aboriginal fisheries. p. 30–41. In: F. Gray and L. Zann (eds). Traditional knowledge of the marine environment in Northern Australia, Great Barrier Reef Marine Park Authority, Canberra. (A condensed and revised version of this paper was published as Johannes, R.E. 1987. Traditional fisheries in Australia. p. 157–161. In: Proceedings of the National Conference on Coastal Management. Coff's Harbor, 7–9 October 1986. Australian Environment Council, Canberra.)
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- Johannes, R.E. and J.W. MacFarlane. 1986. Traditional fishing rights among Torres Strait Islanders: Management implications. p. 31–37. In: A.K. Haines, G.C. Williams and D. Coates (eds). Proc. Torres Strait Traditional Fisheries Seminar. Australian Department of Primary Industry, Canberra.
- Johannes, R.E. and C.J. Hearn. 1985. The effect of submarine groundwater discharge on nutrient and salinity regimes in a coastal lagoon off Perth, Western Australia. *Estuarine and Coastal Marine Science* 21: 789–800.
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- Johannes, R.E. 1984. Marine conservation in relation to traditional life-styles of tropical artisanal fishermen. *The Environmentalist* 4 (Supplement No. 7):30–35.
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- Johannes, R.E. 1984. Traditional use of reef and lagoon resources. p. 111–113. In: R.A. Kenchington and B.E.T. Hudson (eds). *Coral Reef Management Handbook*. Jakarta: UNESCO.
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- Johannes, R.E. and D.W. Rimmer. 1984. Some distinguishing characteristics of nesting beaches of the green turtle *Chelonia mydas* on North West Cape Peninsula, Western Australia. *Marine Biology* 75:149–154.
- Johannes, R.E., W.J. Wiebe and C.J. Crossland. 1983. Three patterns of nutrient flux in a coral reef community. *Marine Ecology Progress Series* 12:131–136.
- Johannes, R.E., P. Lasserre, S. Nixon, J. Pliya and K. Ruddle. 1983. Traditional knowledge and management of marine coastal systems. *Biology International* 4:1.
- Johannes, R.E., W.J. Wiebe, C.J. Crossland, D.W. Rimmer and S.V. Smith. 1983. On the latitudinal limits of coral reef growth. *Marine Ecology Progress Series* 11:105–111.
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- Johannes, R.E. 1980. Using knowledge of the reproductive behavior of reef and lagoon fishes to improve yields. p. 247–270. In: J. Bardach, J. Magnuson, R. May and J. Reinhart, J. (eds). *Fish behavior and fisheries management (capture and culture)*. Manila: ICLARM.

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Selected technical reports (by date)

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- Johannes, R.E. and J.W. Young. 1999. An appraisal of the commercial fishery potential of krill *Nyctiphanes australis* Sars, in Tasmanian waters. CSIRO Marine Laboratories Report 233. 27 p.
- Johannes, R.E. 1995. Review of the Crown-of-Thorns Starfish Research Program 1992–1995. Report to the Great Barrier Reef Marine Park Authority.
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