

Obituary—Dr Jim Lowry

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James Kenneth Lowry devoted his life and career to the study of the Amphipoda. He was born in Kansas City, Missouri on 2 October 1942 and grew up in Chuckatuck near Chesapeake Bay, Virginia. Living around Chesapeake Bay stirred Jim's interest in natural places, the sea and estuaries, and led to a BA majoring in Biology at the University of Richmond, Virginia.

Jim completed an MA in Marine Science at the College of William and Mary in Virginia in 1969. Much of this work was carried out at Palmer Station, a United States Antarctic research station on Anvers Island, where Jim studied the soft bottom benthic community of Arthur Harbour. Jim was recognized for his time at Palmer Station by having Mount Lowry (1,020 m a.s.l.) in the Pensacola Mountains, Antarctica, named after him.

Jim's interest in the Antarctic was central to his research for the next decade. He was enticed to the University of Canterbury in Christchurch, New Zealand, to undertake a PhD with Professor George Knox, who had extensive experience in studying Antarctic biology and established the Antarctic Research Institute. Jim studied the effects of latitude on marine soft bottom communities and was awarded his PhD in 1976 for his thesis "Studies on the macrobenthos of the Southern Ocean". Prof. Knox used his many contacts in Antarctic research to secure berths on ice breakers and other vessels to allow Jim to work in Antarctic and Sub-Antarctic waters, including Cape Bird, Campbell Islands, Auckland Islands and Stewart Island. Jim spent two winters at the New Zealand base on Ross Island near McMurdo Station.

Jim maintained his interest in the Antarctic and Sub-Antarctic when he joined the Australian Museum as Curator of Crustacea in 1976. Jim organized and led an expedition to Macquarie Island in the summer of 1977–1978 accompanied by Dr Donald Horning, Dr Gary Poore and Rob Rucker. The team performed 84 scuba dives, collecting 406 marine samples of invertebrates and algae. Although Jim had been collecting and studying the macrobenthos, by this time the Amphipoda had singularly captured his attention and they would hold his focus for the remainder of his career

at the Australian Museum (retiring as a Principal Research Scientist in 2015), and as a Senior Fellow of the museum until his death.

Jim was intrigued by the biogeography of the Sub-Antarctic islands of New Zealand and Australia. He worked on amphipod collections from The Snares, Auckland Islands, Campbell Islands and Macquarie Island and described the gammaridean Amphipoda in papers jointly authored with Helen Stoddart and Dr Graham Fenwick.

Jim's interest in biogeography and lysianassoid amphipods led to questions about the role of scavenging guilds along the Australian east coast. The result was the SEAS project (Scavengers of Eastern Australian Seas, 1993–1996): an ambitious project, to sample scavenging Crustacea using baited traps set from small fishing boats at six sites from Cairns (latitude 16°41'S) to Hobart (43°08'S) along cross-shelf transects from 50 m to 1000 m depth. Jim successfully sought funding for this project from the Fisheries Research and Development Corporation and collected 283 species of invertebrate scavengers represented by approximately 800,000 individuals, with almost 70% of the species new to science. The project revealed the complex composition of scavenging guilds in Australian waters.

In 2005 the amphipod fauna of the Great Barrier Reef was still poorly known and the Australian Museum's Lizard Island Research Station provided the perfect location to collect and describe the amphipod fauna. Jim and Dr Penny Berents raised funds and organized a workshop to bring together 20 Australian and international taxonomists at Lizard Island. Jim and Prof. Alan Myers encouraged and cajoled the workshop participants who documented and described 256 amphipod species from the Great Barrier Reef in a 930 page monograph published by *Zootaxa* (Lowry & Myers, 2009).

Jim was a taxonomist at heart, publishing his first taxonomic paper in 1972 on *Microprotopus*. His research focus for many years was to describe the Australian lysianassoids and revise the world families of Amphipoda. Much of this work was done with Helen Stoddart, and later

with Dr Lauren Hughes and Dr Niamh Kilgallen, resulting in more than 50 papers. Jim became interested in the taxonomy of cerapodine amphipods while studying in New Zealand and continued this work at the Australian Museum along with Dr Penny Berents in a project describing Australian and Indo-Pacific cerapodines resulting in 3 new genera and 16 new species. Jim later turned his attention to talitrid amphipods to describe the Australasian coastal talitrid fauna with Roger Springthorpe and Dr Lauren Hughes. He revised the world talitroid genera and developed a taxonomic catalogue and keys to world genera and species with Prof. Alan Myers. A lifetime studying the Amphipoda culminated in a revision of the higher classification with the first of a number of papers with Prof. Alan Myers published in 2017 (Lowry & Myers, 2017). Jim and Alan were still working on this project at the time of Jim's death. During his career, Jim described 31 ordinal taxa, 92 family-group taxa, 129 genera, and 548 species. He published on more than 770 species in total.

Jim was strongly influenced by his mentor and friend, the late Dr Jerry Laurens Barnard, of the National Museum of Natural History, Washington DC. Dr Barnard was the first person to make a serious attempt to collect and document the Australian amphipod fauna and was a frequent visitor to Australia from 1968 until his death in 1991. He collaborated with Australians who were trying to document the Australian fauna and set new standards for the descriptive work required for amphipod taxonomic studies. Jim continued where Jerry Barnard left off and did more to document the Australian amphipod fauna than anyone before him. Jim frequently referred to Jerry and to his unwavering dedication to good taxonomy. Jim adopted the same philosophy and standards. Jim was an early adopter of computer systems and software to assist with museum catalogues, taxonomic studies and large datasets. During his PhD studies in the early 1970s, Jim recognized the power of mainframe computer systems to handle his benthic community data. As Curator of Crustacea at the Australian Museum, Jim started the first database of crustacean type specimens in the museum's collections. Jim produced several checklists and catalogues including the massive *Zoological Catalogue of Australia* for the Amphipoda, Cumacea, and Mysidacea, jointly edited with Helen Stoddart (Lowry & Stoddart, 2003). He pioneered the use of the taxonomic database DELTA (DEscriptive Language for TAXonomy) in amphipod taxonomy and conducted workshops around the world to encourage taxonomists to adopt DELTA.

As an enthusiastic field biologist, Jim made extensive subtidal collections on scuba around the Australian coast and territorial islands including Western Australia, Norfolk Island, Christmas and Cocos Keeling, and in the Indo-Pacific (Papua New Guinea and New Caledonia). He was assisted

by colleagues and students on these trips, in particular, Helen Stoddart, Roger Springthorpe and Dr Lauren Hughes. Jim spent three summers at Madang Lagoon in Papua New Guinea collecting marine plants and animals for biodiversity studies.

Jim recognized the need for easy access to taxonomic literature and harnessed a team of keen volunteers at the Australian Museum to scan his extensive library and reprint collection. In conjunction with Dr Oliver Coleman, the scanning project has made more than 6000 books and articles available to taxonomists around the world. He was generous with his knowledge and always encouraged students and novice taxonomists, co-supervising 12 MSc and PhD projects on the ecology and systematics of amphipod and isopod crustaceans. From 1983 to 1998 Jim was the Editor of *Records of the Australian Museum* and introduced a new style and large format to update the journal.

Jim met Dr Lucia Fanini at the 14th International Amphipod Colloquium in Seville in 2010. They were married on Scotland Island in Sydney in 2012 and Rafael was born in Crete in 2013. Lucia joined Jim in Sydney for a time and in 2015 Jim moved to Crete where Lucia held a position at the Hellenic Centre for Marine Research. Jim and Lucia worked together on the ecology and systematics of talitroids and published five papers together.

In July 2021 the family moved to Lecce in Italy, where Lucia had been appointed to a position at the Università del Salento. On 4 November 2021, Jim died. It is hard to believe that his lifetime contribution to taxonomy, evolution, and biogeography has come to an end. His contribution to carcinology is immense and he is missed by his many colleagues, students, and friends. Jim is survived by his loving wife Lucia, his young son Rafael and adult son Ken.

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