

Obituary

Dr. Joseph A. (Joe) Brown

Dr. Joseph A. Brown, professor, recent associate director and former interim director of Memorial University of Newfoundland, died Sept. 4, 2005 at the age of 58.

After graduating from high school in Grey, Maine, Joe came to Canada and completed a B.Sc. degree at St. Francis Xavier University in 1968. He then served for two years in the US Army at the invitation of Uncle Sam, after which he took advantage of the opportunity afforded by the G.I Bill and began graduate studies at Memorial University of Newfoundland. At Memorial he initially worked with Dr. John Lien on seagull behavior but soon became interested in the behavioral ecology of fish. Under the guidance of Dr. John Green, Joe studied aggression and territoriality in the Arctic shanny, and received his M.Sc. degree in 1976. Following two years working as a farm laborer, laboratory demonstrator and museum curator in Nova Scotia, Joe joined Dr. Patrick Colgan's research group at Queen's University and was awarded the Ph.D. degree in 1983 for his thesis on the behavioral ontogeny of centrarchid fish. He remained at Queen's for a further year as a post-doctoral research fellow, mentored by Dr. Peter Johansen, before returning to Memorial in 1984 to rejoin Dr. Green's laboratory as a Research Associate. Joe was appointed to the faculty of the Ocean Sciences Centre (then the Marine Sciences Research Laboratory) in 1985, and was promoted to the rank of Professor in 2000. He recently served a term as Associate Director and also a period as interim Director.

Joe's terms of reference on appointment were to set up a strong research program in his field, the behavioral ecology of fish, and to use that as a platform to support the emerging aquaculture industry in the Province.

He applied himself to the task with considerable energy and enthusiasm, and over the next 20 years established himself as one of Canada's leading researchers in fish behavior and an outstanding figure in aquaculture related research, authoring or co-authoring over a hundred articles in scientific journals as well as numerous reports and contributions to scientific conferences and workshops. Joe was one of those marine scientists who recognized the potential of fish farming to complement capture fisheries, and was totally committed to research and development in finfish aquaculture. His work on rearing the Atlantic cod has been instrumental in taking cod farming to the developmental stage in the field, and he was actively pursuing this research at the time of his death. Joe made sure that his aquaculture work was not conducted in the ivory tower, always seeking commercial applications for his research, and he worked closely with many partners in the private sector and government agencies. His ability to acquire research funding from a myriad of sources was legendary. He was an excellent communicator, a skill that he fully exploited as a tireless advocate of fish farming. Joe was frequently sought out by the media, and enjoyed a high profile both inside and outside the university.

Joe traveled widely, visiting Norway, Sweden, Brazil, Malawi and many other places, working with colleagues on theoretical and applied problems in fish behavior and aquaculture while sharing new cultures and making life-long friends. Although his work had a significantly international dimension, it was at home in Newfoundland and Labrador that Joe was most content, doing what he could to assist the aquaculture industry at both the provincial and the national level. His efforts and

achievements were recognized through awards from the Canadian Centre for Fisheries Innovation (Researcher of the Year, 1998) and the Aquaculture Association of Canada (Research Award of Excellence, 2001), and in 2002 the Canadian Foundation for Innovation formally recognized him as one of Canada's leading aquaculture scientists.

It was as an advisor and mentor of students, however, that Joe made his most enduring contribution. He was devoted to them, both undergraduates and graduates, and they to him. Students flocked to join his group, and his large "stable" of graduate students became one of the pillars of the Ocean Sciences Centre. He attracted many international students, especially from developing countries. He always had time for students, both in the laboratory and outside, and they were a central part of his lively social life. He encouraged them to attend scientific meetings, and made it possible for them to travel. Joe enjoyed teaching and played a leading role in several graduate programs at Memorial, especially the M.Sc. in Aquaculture and the M.Sc. and Ph.D. in Biology and in Cognitive and Behavioural Ecology.

To his colleagues, Joe was a tireless, consummate "team player" who did not shirk administrative tasks, serving on numerous departmental and university committees as well as those of national research programs such as AquaNet. He was President of the Aquaculture Association of Canada, Chair of the Ecological and Behaviour Section of the Canadian Society of Zoology, and sat on numerous review boards and panels. He played a major role in the establishment and operation of the Aquaculture Research and Development Facility at Memorial,

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Book Review

Pillay, T.V.R. and M.N. Kutty. 2005. *Aquaculture: Principles and Practices*. Blackwell Publishing, Ames, Iowa USA. 624 p. Hardbound. US\$99.99.

T.V.R. Pillay has been a household name in the aquaculture community for many years. He, along with his co-author, M.N. Kutty, have produced a second edition of *Aquaculture: Principles and Practices*, a book that was first published as a single-authored volume by Pillay in 1990. The book takes two of the three approaches that have been used by previous authors of aquaculture texts and combines them into a volume that is packed with information. Earlier aquaculture books have generally devoted their books to an individual species, discussed culture on a species-by-species or species group basis, or presented the principles of aquaculture and sprinkled in examples to show how application of the principles varies among species and species groups. Pillay and Kutty have combined the latter two approaches by dividing their treatise into two sections; the first being a sweeping description of aquaculture and the principles that guide the science and the second being basically a how-to manual for some of the more important aquaculture species groups. Some of the information presented comes from publications as recent as 2003.

Part I on principles of aquaculture contains 15 chapters which cover the topics that are pretty much standard for books that take that approach to discussing the topic. For example, there are chapters on the history of aquaculture, site selection, species selection, design and construction of facilities, nutrition and feeds, reproduction and genetic selection, health and diseases, harvesting and post-harvest

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which was no mean achievement, since it required close and effective liaison among the academic, government and private sectors.

Joe will be sadly missed, not only by his family but also by his wide circle of friends, colleagues, students and former students. His work, his friendships and his love of life will be his legacy.

The Dr. Joe Brown Scholarship has been established to honor Joe's memory. Donations, which are tax-deductible, can be sent to the Dr. Joe Brown Scholarship Fund, Alumni Affairs and Development, Memorial University of Newfoundland, St John's, NL. A1C 5S7 CANADA. On line donations can be made at www5.mun.ca/dir/viking.gv020.p001 (taken from www.mun.ca and following the links to "Alumni Affairs" and "Ways to Donate"). In the information box, state "Dr. Joe Brown Scholarship." Provide your name and address to expedite the tax receipt.

— Dr. Raymond J. Thompson
Memorial University

technology, marketing, economics and farm management. There is also a chapter on sustainability and environmental management, plus a few others.

Part II on aquaculture practices covers the culture of various groups of finfishes. There are chapters on carp, salmonids, catfish, eels, tilapia, mullet and milkfish, seabass and seabream, along with another chapter on miscellaneous finfish species that includes snakeheads, gouramis, groupers, rabbitfish and turbot. Missing are coverage on flatfishes other than turbot, several North American, Brazilian and Australian species that are currently under culture and, there is no coverage of aquarium species. (I recognize that some species of gouramis, tilapia, shrimp, crabs and so forth have a place in the aquarium trade, but Pillay and Kutty focus on foodfish and shellfish, not ornamentals). The chapters on invertebrates cover shrimp; crayfish and crabs; oysters and mussels; and clams, scallops and abalone. There is also a chapter on seaweed culture. Finally, in Part II is a chapter on integrating aquaculture and terrestrial crop and livestock production and one on enhancement stocking and ocean ranching. The chapter that discusses enhancement includes stocking of species sought by recreational fishermen.

Aquaculture: Principles and Practices is loaded with photographs, many of which depict aquaculture facilities or parts thereof, equipment, pathology and examples of aquaculture species from various parts of the world. I was pleased to see that a couple of photos from one of my books were included. The book is sprinkled with tables of information in the appropriate chapters. Written in a style that should be easily understandable by anyone with an interest in the topic, the book also provides numerous references at the end of each chapter to direct readers to the primary literature so they can delve more deeply if they desire to do so. An index is also provided.

T.V.R. Pillay died on 9 February 2005 as he was in the final stages of completing this second edition of his book. The volume is a capstone to a long and productive career and is one that should long serve as an excellent source of information on virtually every aspect of aquaculture: freshwater and marine, extensive and intensive, primary producer to top carnivore. For a book of its size and quality, it is very reasonably priced.

—Robert R. Stickney

Your help is requested ...

The World Aquaculture Society is requesting input from members on how to best serve and support our industry. We have posted a questionnaire on our web site dealing with image, industry perception, linkage with regional organizations, and critical long-term issues. The questionnaire takes about 10 minutes to complete and can be accessed at www.was.org.