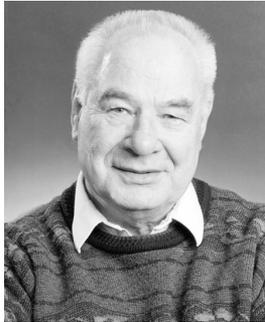


REMEMBERING DR. JAMES “JIM” EDWARD STEWART OF THE NSIS

PETER G. WELLS*

*International Ocean Institute – Canada,
Dalhousie University, Halifax, NS.*



James "Jim" Edward Stewart

The NSIS lost a long-time supporter, and dedicated marine scientist with the passing on March 1st, 2018, at age 89, of Dr. James “Jim” Edward Stewart. He was a member of NSIS for many years, President of NSIS from 1992 to 1994, and Editor of the PNSIS from 2000 to 2008. Jim was a prominent marine scientist who had a long career in Halifax and Dartmouth, NS. This short piece commemorates and records Jim’s many contributions to marine science. It includes a bibliography of his work, compiled by the author.

Born in Anyox, British Columbia (BC), Jim “paid his way through university by working as a logger in the coastal forests of British Columbia. He studied microbiology and biochemistry at the University of British Columbia and later at the University of Iowa.” (Halifax Today 2018). He began his career as a federal scientist with the Fisheries Research Board of Canada in 1958, based in Halifax, NS, and completed it as an Emeritus Scientist with the Department of Fisheries and Oceans (DFO) at the Bedford Institute of Oceanography (BIO), Dartmouth, NS. Jim spent many productive years in active research at the former Halifax Fisheries Research Laboratory, on Lower Water

* Author to whom correspondence should be addressed: oceans2@ns.sympatico.ca

Street. He then moved to BIO in 1986 as Director of the Biological Sciences Branch, responsible for freshwater and marine programs. He eventually returned to research and after formal retirement in 1996, continued to work at BIO.

I first met Jim in the mid-1970s to discuss a shared interest in lobster biology and the general responses of marine organisms to oil pollution. It was a few years after the *Arrow* bunker C spill in Chedabucto Bay, NS, where both of us had been briefly involved in assessing the impacts of that spill on local fisheries. I recall his great warmth and interest in what I was doing, being a young biologist at the time. Jim went on to assess the microbial degradation of that spill and the effects of oil spill dispersants on biodegradation (see the papers by Mulkins-Phillips and Stewart). Based on that work, he served on the US National Academy of Sciences 1973 oil pollution review group, contributing to the first extensive review of oil in the sea (NAS 1975).

Throughout his career, however, Jim's primary interest was on topics relevant to fisheries species and their management. His initial passion was research on the diseases and disease defense mechanisms of lobsters, as shown by his extensive publication record on this topic. He was an international expert on the bacterial pathogen, *Gaffkya homari*, and its pathogenicity to lobsters and other decapod crustaceans. His research greatly "contributed to the economic viability of the lobster fishery, through the replacement of wooden plugs with rubber bands, now used by fishermen to prevent movement of the claws of the captured animals; this change significantly reduced gaffkemia transfer and incidence" (M. Sinclair, pers.comm.). As Head of the Disease and Nutrition Section, Jim also investigated various aspects of lobster, molluscan and fish aquaculture, including the need to consider aquaculture within the broader framework of integrated coastal management (Stewart 2001). After moving to BIO and back into research, he returned to another interest, toxigenic marine algae, making major contributions very late in life (Stewart 2014).

Several colleagues have recollections of Jim. John Castell, a former DFO scientist now living in NB, recalls that "I was always impressed with Jim's interest and knowledge in a wide diversity of research programs. He was an inspiration to all of his research team" (pers. comm.). Bob Cook, former Director of the Biological Station at St. Andrews, NB, remembers that "Jim had established an incredible team of scientists and professionals in the fisheries disease and

nutrition field at the Halifax Laboratory” (pers.comm.). Mike Sinclair and Rene Lavoie, both of whom knew and worked with Jim at BIO, remember that “an additional feature of his management style was his focus on excellence and his encouragement of young scientists to publish their research findings; he was a demanding research manager but one who led by example” (pers. comm.).

As Editor of the PNSIS, Jim and a colleague (Stewart and Safer 2005) wrote a seminal article on the history of the Halifax Fisheries Research Laboratory, and edited a series of marine science essays recognizing the upcoming 50th anniversary of BIO (Stewart 2006). His broad interests and technical skills were quite extraordinary, exemplifying his capacity to address some key problems in marine and fisheries science as a whole.

In his personal life, Jim was devoted to his family and greatly enjoyed working outdoors. Living in Allen Heights at the Head of St. Margarets Bay, NS, he took “great pride and pleasure in landscaping and in harvesting and splitting his own firewood” (Halifax Today 2018).

In retirement, Jim routinely attended NSIS lectures; his presence there will be greatly missed. Above all, he will be remembered as a hard-working, dedicated and highly productive scientist, a wonderful model to all others in the marine sciences following in his footsteps.

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¹ Not having access to Dr. Stewart’s CV, this list was the result of searches in my personal marine science library and on the web. Although the aim was to be exhaustive, the listing should be considered representative rather than definitive of his many written contributions.

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Acknowledgements Additional information was received from Michelle Paon, Dalhousie University, Drs. Donald Gordon, John Castell, Michael Sinclair and Bob Cook, all formerly with DFO, and Linda Marks, NSIS, and was much appreciated.

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