



Neil F. Bourne
Honored Life Member

Neil was born August 11, 1929 in London, Ontario, Canada. He began his elementary school education there, and it was in London, mainly through the influence of his father, that he became interested in natural history and particularly bird watching, a hobby and passion that have continued to the present. It was this interest in natural history that eventually led him to become a biologist. The family moved to Hamilton, Ontario in 1939, where he completed his elementary and high school education. By the time he moved to Hamilton, he had over 150 bird species on his life list! He entered McMaster University in Hamilton in 1948 and graduated with a BSc in biology in 1952. In 1953, he completed a MSc degree at McMaster under an Ontario Research Scholarship and in 1953–54 spent a year in Germany, where he undertook studies in limnology at the Freshwater Institute in Ploen and marine biology at the University of Kiel. He returned to Canada in 1954, entered the University of Toronto, and graduated from there with a PhD in 1959. His thesis was entitled, "Determination of carbon transfer from *Chlorella vulgaris* Beyerinck to *Daphnia magna* Strauss using radioactive carbon (C14) as a tracer." Three years of his studies were supported by National Research Council of Canada scholarships.

On completion of his PhD in March 1959, Neil joined the staff of the Fisheries Research Board of Canada at the Biologic Station in St. Andrews, New Brunswick working under the direction of the late Dr. J. C. Medcof, a former Honorary Member of NSA. At St. Andrews, he was in charge of the sea scallop investigation that included investigations of the basic biology and ecology of sea scallops, dynamics of sea scallop populations on Georges Bank and in the Bay of Fundy, scallop gear efficiency trials, and exploratory work to locate sea scallop resources in other areas along Canada's Atlantic coast. While at St. Andrews, Neil spent two weeks at Dr. V. Loosanoff's laboratory in Milford, Connecticut studying bivalve breeding technology. Thus began a life-long commitment to shellfish aquaculture. He used knowledge gained at the Milford laboratory to begin initial attempts to culture sea scallops and was successful in conditioning and spawning adults and raising larvae to the mature stage.

In 1965, Neil transferred to the Pacific Biologic Station in Nanaimo, British Columbia, first working for the Fisheries Research Board of Canada and later with the Department of Fisheries and Oceans. Initially, he worked with the late Dr. Dan B. Quayle, another former Honored Member of NSA, and remained at the Pacific Biologic Station until his retirement. During his career at the Pacific Biologic Station, Neil undertook research studies on a wide range of molluscan subjects, including the basic biology of several Pacific coast molluscan species, population studies of commercially important clams, harvesting gear efficiency, and studies to develop techniques to culture several species. He developed techniques to predict Pacific oyster spatfall accurately for the industry, a service he continues to provide. He undertook extensive surveys of bivalve resources in B.C. and, in particular, followed the dispersal of Manila clams northward along the coast. As a result of these studies, a fishery for Manila clams became established in the central coast of B.C.

As a result of previous work and the influence of his stay at the Milford laboratory, Neil remained intensely interested in bivalve culture and continued studies in this field. Initial studies were undertaken to investigate the potential of butter and littleneck clams and

abalone. He undertook studies with Manila clam culture that were important in establishing the Manila clam culture industry that exists in B.C. today.

From 1981 to 1991 Neil led a program to investigate the feasibility of scallop culture in B.C. Several species were studied, but the decision was made to work with the Japanese scallop, *Mizuhopecten yessoensis*, and methods were developed to produce juveniles in a hatchery and raise them to commercial size within a period of two years. Much of the information culminated in the publication, *A Manual for Scallop Culture in British Columbia*, which continues to be used by many to the present day. Results of the work led to a private company building a scallop hatchery and beginning commercial scallop culture in B.C. He continues to serve as an advisor to this industry.

Neil has been active in foreign aid work, assisting at Universities and has been involved with several scientific societies. He worked for the Canadian International Development Agency for 1 1/2 years in Fiji, where he served as Director of a Fisheries Training Program at the University of the South Pacific in Suva. He undertook an assessment of the Cuban oyster industry for the Department of Fisheries and Oceans and advised on a joint Canada-Cuba program to expand oyster culture in Cuba. He worked for the United Nations Food and Agriculture Organization in the Peoples' Republic of China and continues to serve as a volunteer advisor to the Canadian Executive Service Organization. He served on the Aquatic Resources Subcommittee of the Science Council of British Columbia from 1987-2002 and was chairman from 1991 to 2002.

He is an affiliate professor at the University of Washington, School of Fisheries and has been a committee member for over 20 graduate students, mostly at the University of Washington, but also at the University of Victoria, the University of British Columbia, and Simon Fraser University.

Neil served on the executive boards of the Canadian Society of Zoologists, the World Aquaculture Society, the Aquaculture Association of Canada, serving as President of the latter Society from 1987-1988. He joined the National Shellfisheries Association (NSA) in 1961 and has been active in the affairs of the society since then. He served on the Executive Committee of the Association from 1974-1983, including tenure as President in 1981-1982; he was the first Canadian to serve as President of NSA. He has been a member of the editorial board of the *Journal of Shellfish Research* for many years. He was made an Honored Life Member of the Association in 1990 for his exemplary service to NSA and the profession. In 1991, he received the David H. Wallace award for promoting understanding, knowledge, and cooperation among industry members, the academic community, and all levels of government and for his outstanding success in bringing together shellfish scientists and industry officials for the benefit of shellfisheries.

Neil received an Award of Merit from the Department of Fisheries and Oceans in 1993 for an exceptional and distinguished contribution to the effectiveness and efficiency of the Public Service and the Department, particularly for contributions to the aquaculture industry of British Columbia. Neil retired from the Department in March 1994.

In May 2000, Neil was presented with an Honorary Lifetime Achievement Award from the Aquaculture Association of Canada. The selection board cited long-time service to the Association, the research community, industry, and young scientists as exemplary examples of the goals of that organization. He was the first recipient of this award.

Neil lives in Nanaimo and continues to work at the Pacific Biologic Station as a volunteer Scientist Emeritus, publishing results of past and current work and encouraging young scientists in their careers. He still has time to enjoy his grandchildren, hike, work around the house, and undertake other activities. He is keenly interested in golf and is a rabid bird watcher with the distinction of having birded on all seven continents. One activity in his retirement is to compile his bird life list, he believes he has seen about 2,500 species of birds! Those who have golfed with him have noted that he never lets golf interfere with birding although the opposite has occurred on occasion.

Kenneth Chew
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