David Lawrence Belding

NSA Honored Life Member - 1967

David L. Belding is considered a giant among shellfish biologists. Anyone who has studied scallops, oysters, or clams (hard or soft-shelled) has most likely begun with Belding's manuscripts. But Belding was more than "just" a shellfish biologist. He was also a medical doctor, bacteriologist, pathologist, parasitologist, professor, and family man.

David Belding was born in 1884 in Dover Plains, New York, and graduated from the Riverview Military Academy in Poughkeepsie, NY. He attended Williams College in western Massachusetts, where he first became interested in biology and natural history. His honors included induction into Phi Beta Kappa and winning the biology prize in his senior year. Shortly after graduating from Williams in 1905 at age 21, he took a job with the Massachusetts Commissioners of Fisheries and Game to conduct studies of commercial shellfisheries in the Commonwealth. Most of his work was done on Cape Cod, mainly in the town of Wellfleet, where he set up a seaside laboratory. In 1915, he married Vassar graduate, Isabel Wheeler. The couple made their home in Watertown, MA and later moved to Hingham, MA. They had three daughters between 1916 and 1921. The eldest became a medical doctor, and the youngest married a pediatrician who began his practice out of the Belding family home.

During the time he worked for the Commissioners, Belding wrote his seminal treatises on bay scallops (1910), quahogs and oysters (1912), and soft-shell clams (1915). Not only were these extraordinary in his time, but they haven't been matched since then. For example, the hand-drawn stages of the bay scallop development from egg to pediveliger are exquisite. In addition, his photographs documented the tools and techniques used in shellfishing during the early years of the twentieth century. Belding was also one of the first to recognize that shellfish such as quahogs were being over-harvested in New England, to the point that they had to be imported from southern states to fill the demand for littlenecks (1-2" size). He also was one of the first to emphasize the need for artificial culture of oysters to supplement declining wild stocks in New England. But oyster aquaculture did not become established until the mid-1900s. Belding also was concerned about the effects of pollution on shellfish growing areas,

and understood that the "Tragedy of the Commons" always leads to over-exploitation of the resource. He was a proponent of local control of shellfish beds in order to address this issue.

David was not only a fishery biologist. He was also a well-known medical doctor, specializing in bacteriology, parasitology, and pathology. After his time with the Commissioners, he attended Harvard University, where he earned both a Master's degree and an MD, and then another MD from Boston University, this time in Homeopathic Medicine. In 1917, the Massachusetts Homeopathic Hospital in Boston, where Belding served as a pathologist, was commissioned as an Army Base Hospital. The entire medical staff was transferred to New Jersey, and then to Pougues-les-Eaux, a resort town close to the front in France, for the duration of the First World War. Belding began his stint with the Army Medical Corps as a First Lieutenant, served as hospital laboratory director in France, and was then was promoted to Captain in 1919 at the end of the war. David carried a draft registration card in 1942, but by that time he was 57 years old and wasn't called to serve in World War II.

David Belding's medical science career was wide-ranging. He wrote or co-wrote three books in the 1930s, two on parasitology and one on medical bacteriology. By then, he had also written several articles that were published between 1920 and 1951 in medical journals including the New England Journal of Medicine. These spanned topics such as the Wasserman test for syphilis, laboratory analysis of diphtheria cultures, tularemia in domestic rabbits, and a review of medical microbiology. In 1947, he was honored by being elected to the National Academy of Arts and Sciences. Belding completed a long career as Professor of Bacteriology and Experimental Pathology at the Boston University School of Medicine when he retired in the early 1950s. He was a long-time Mason, member of the YMCA Board of Directors, the Harvard Medical School Alumni Association, the Alpha Sigma Medical Fraternity, and the American Institute of Homeopathy.

Dr. Belding did not lose his passion for marine biology in those later years. On the contrary, he continued to do research on the soft-shelled clam at the Woods Hole Oceanographic Institution and served as a consultant for the U.S. Fish and Wildlife Service. In the summer of 1952, Belding joined another researcher, H.J. Turner, to investigate the

possibility of growing clams in artificial ponds, where conditions could be controlled and predators excluded. The ponds were constructed in nearby Cotuit, but apparently the experiment failed. Later that year, the pair studied the intertidal flats in Boston Harbor, which still had plenty of clams. They were particularly interested in determining the major predators of the soft-shelled clams (horseshoe crabs and conchs), and concluded that clams could not be grown commercially on open tidal flats because of intense predation.

Belding died of cancer in 1970 at the age of 86, and was buried in the Hingham town cemetery. Fifty years later, his legacy continues.



David Belding during World War I

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