IN MEMORIAM / NÉCROLOGIE

William Edwin Ricker, OC, FRSC, LLD, DSc

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In 1973, Bill Ricker retired at the age of 65 from his responsibilities with the Fisheries Research Board of Canada. He had worked 27 years for the "Board", 11 years at Indiana University, and 1 year at the International Pacific Salmon Commission. Over this period and through to his death on 8 September 2001, he produced an amazing array of scientific publications that improved our understanding of nature and helped to found a science needed to manage the developing world fisheries (Fig. 1).

It is difficult to know Bill Ricker. With considerable work, it is possible to identify his many and varied scientific accomplishments. In his personal life, he appeared to be a very private individual. Discussions with his sons and grandchildren produce an understanding of his love for his wife Marion, who predeceased him, and of his devotion to his children and their interests. Bill had a partiality towards young people all his life and this kept him young. He particularly enjoyed being part of the adventures of his sons and their friends, which caused Bill to be very active in the Scouting movement in the 1950s. It seems that this spirit of adventure combined with a love of nature guided a young Bill Ricker into a life of discovery.

Bill Ricker's life is an inspiration to any young biologist contemplating a career in aquatic sciences. Few could hope to make as many contributions, but most could learn from his approach to science. He knew the scientific literature, no matter where it was published. He was clear about his assumptions. He was meticulous and applied good common sense and sound logic. He developed his concepts using simple examples. But most importantly, he communicated the results of his studies to his colleagues. A compilation of his publication includes 296 published papers and books, 238 published translations, and 148 scientific or literary manuscripts (K. Ricker 1998; customercare@accutype.net). Among his publications were 38 papers on stoneflies, which described about 88 new species, including some from outside North America as well as one fossil species. To Bill, every day was a good day to discover something new.

In fisheries, Bill Ricker focused on issues that were vitally important to Canada's commercial fisheries and to the science needed to manage them. However, he also found time

Fig. 1. William Edwin Ricker, 1908–2001.



to become a world authority in the taxonomy of stoneflies. In fact, it has been noted that some scientists believed that there were two W.E. Rickers as the contribution of the entomologist W.E. Ricker was exceptional for any one person. Bill Ricker described 81 of the total of 617 stoneflies now listed in North America. His interests in stoneflies extended into their zoogeography and evolution. Bill recognised distinctions within accepted genera, which he partitioned into subgenera in his classifications. These subgenera were later considered to be distinct genera. In fact, about one-third of the 101 genera currently recognised in North America were originally identified by Bill Ricker. Fellow entomologists

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Fig. 2. Bill Ricker on the Canadian research vessel named after him in 1986 with his granddaughter, Andrea, wearing his Order of Canada medal, which he also received in 1986.



Fig. 3. The windswept pine tree atop Mount Benson near Nanaimo, B.C., where the ashes of Bill and Marion Ricker were placed.



wrote that his system of classification was a thing of beauty and simplicity that made evolutionary sense.

In fisheries, he is best known for his 1954 paper on stock and recruitment and his *Handbook of Computation for Biological Statistics of Fish Populations*, first published in 1958. There were 36 of his own papers referenced in the 348-page handbook. His handbook became the standard reference for students and professionals around the world. It is still used in China as the standard text for Fisheries Science. Bill was appointed Editor of the Journal of the Fisheries Research Board in 1950, and during his 12-year tenure, he turned what was a parochial journal into perhaps the world's most

influential fisheries science publication. He was a meticulous, but supportive editor. The credibility of the journal was so universal that having a paper accepted was a mark of accomplishment, even before the content was read. It is important to put Bill Ricker's life into perspective. He had one assistant as Editor and did not have other staff to help him collect, store, retrieve, and analyse data. It was during this period as Editor that he wrote some of his most famous papers. One paper that Bill enjoyed writing and believed was important seems to have been forgotten. In his 1969 paper, "Food from the sea", he reasons that the quantity of food available from the sea would be 150–160 million tonnes or

2.5 times the level in 1968. He shows that other estimates of 100 million tonnes are low and 200 million tonnes too high.

Bill was aware of the accomplishments of the famous Russian fisheries scientist, Feodor Baranov. Bill taught himself Russian while at Indiana University so that he could read Baranov's original papers. He created an awareness of Russian fishery science in the English-speaking community through his published translations and his 428-page Russian–English dictionary on terminology in hydrobiological science for students of fisheries and aquatic biology (Ricker 1973). This dictionary remains the only specialised text on fisheries terminology.

He received about 27 medals and awards including the Flavelle Medal (1970), the Professional Institute of the Public Service of Canada Gold Medal (1966), and the F.E.J. Fry Medal (1983). In 1969, he was honoured by the American Fisheries Society for his superb and original contributions to fisheries science and received their first Award of Excellence. The Society later established the William E. Ricker Resource Conservation Award, which was given to the Pacific Biological Station in 2001. It was a recognition that greatly pleased Bill. Dr. Bill Ricker received honorary doctoral degrees from the University of Manitoba, Dalhousie University, and the University of Guelph. The recognition that he particularly cherished was the naming of the Canadian Fisheries Research Vessel the W.E. Ricker in 1986 (Fig. 2), the same year in which he was appointed to the Order of Canada.

On 10 November 2002, family and friends placed the ashes of Bill Ricker under a weathered pine tree on top of Mount

Benson just outside of Nanaimo, B.C., the same place where Bill had placed the ashes of his beloved wife Marion (Fig. 3). A small plaque honouring Bill and Marion is mounted on a rock nearby.

Bill Ricker was an unassuming, gentle, humble man. Through his pervasive curiosity and his ability to retain knowledge, he charted a course for fisheries science that opened areas for discovery all around the planet. This was Bill's gift to the young and young at heart. He will be missed but never forgotten.

Acknowledgments

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References

Ricker, W.E. 1954. Stock and recruitment. J. Fish. Res. Board Can. 11: 559–623.

Ricker, W.E. 1958. Handbook of computations for biological statistics of fish populations. Fish. Res. Board Can. Bull. No. 119.

Ricker, W.E. 1969. Food from the sea. *In* Resources and man, a study and recommendation report of the Committee on Resources and Man, U.S. National Academy of Sciences, Preston Cloud (Chair). Chap. 5. W.H. Freeman and Co., San Francisco, Calif. pp. 87–108.

Ricker, W.E. 1973. Russian–English dictionary for students of fisheries and aquatic biology. Fish. Res. Board Can. Bull. No. 183.