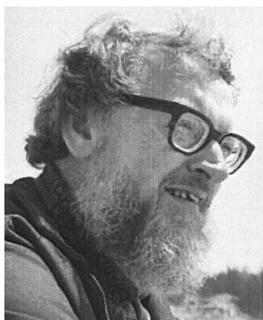


OBITUARY

PETER JOHN WANGERSKY (1928-2007)



Peter John Wangersky passed away on January 7, 2007 at the age of 79 after a brief bout with cancer. His wife, Eleanor, and their three sons were at his side.

Pete was born in Woonsocket, Rhode Island and spent his childhood there and in Lynn, Massachusetts. He entered Brown University at age 16 under a wartime accelerated program, majoring in chemistry. His university career was interrupted by service in the U.S. Army, after which he returned to Brown and completed his degree. After Brown he worked briefly at the Scripps Institution of Oceanography and the U.S. Fish and Wildlife Service. He then went to Yale University for a graduate program, earning his doctorate in zoology under the polymath zoologist G. Evelyn Hutchinson, who probably was the inspiration for his own wide-ranging scientific interests. He taught briefly at the University of Miami, where he met and married Eleanor, and then at the Bingham Oceanographic Laboratory at Yale University. In 1965 he accepted an offer to join the Dalhousie Institute of Oceanography, and was joined there by Gordon Riley, who became the chairman after the retirement of F. Ronald Hayes. Under their leadership the Institute grew and evolved into a full Department of Oceanography. Pete later served two terms as chairman. Pete remained on the Dalhousie faculty until his retirement in 1993 when he and Eleanor moved to Victoria, British Columbia, where Pete accepted an adjunct professorship position at the University of Victoria.

Pete was a very broad and diverse researcher; he was a theoretical ecologist as well as a chemical oceanographer long before either of these 'interdisciplinary' fields became accepted as intellectually respectable. He published in fields as disparate as the organic chemistry of seawater, algal physiology, and mathematical modelling of population dynamics. A paper on lag effects in population cycles, published when he was a graduate student in 1956, is still widely cited. He also held two patents on chemostat design. He loved to go to sea and participated in numerous oceanographic cruises. Pete served as advisor to about 25 PhD students at Dalhousie and was a friend and casual mentor to almost all of the other oceanography graduate students during his tenure. He was known for his breadth, wisdom, willingness to help anyone seeking advice and his warm personality.

Assisted by Eleanor, he helped to create a collegial atmosphere at the Department of Oceanography. Students, staff and friends were all invited to stop by the Wangersky home on Sunday afternoons for coffee, sweets and stimulating conversation. He was a quick and voracious reader with eclectic tastes. His favorite hobbies included photography and fishing.

In 1974 Pete took over as the second editor, from volume 2, of the journal *Marine Chemistry*, initially as a temporary fill-in, and then served as editor-in-chief for the next twenty years. His stewardship of the journal took it from a new, relatively unproven forum, to the well-established authority that it is today. He was noted for encouraging a wide variety of research subjects and new ideas. A special issue of the journal was published in 1997, containing mainly papers based on presentations by former students and close associates at a symposium organized in his honor in 1994.

In retirement he continued on the editorial boards of *Scientia Marina* (Barcelona) and *Environmental Science and Pollution Research*, although he gave up similar duties for *Marine Ecology Progress Series* in 1998. In response to a request from *Limnology and Oceanography* in 1998, he volunteered to help foreign authors with English usage, and received many such calls over the years. He also organized and edited two volumes of The Springer-Verlag series "Handbook of Environmental Chemistry"; *Marine Chemistry* (2000) and *Estuaries* (2006), and served on the advisory board for the series. He was a 50-year member of Sigma Xi. An active member of the Nova Scotian Institute of Science, he served as its President for the 1974/75 term.

Pete was a true pioneer of many disciplines, and his mind remained active and razor-sharp, spinning off more research ideas, spanning many fields, right until his death. Oceanography, marine chemistry, and population ecology have each lost one of their most innovative and productive workers.

His ashes were scattered at sea at Station Papa in the North Pacific on June 11, 2007.

Prepared by Jonathan Sharp, Sifford Pearre, Donald Gordon, Eric Mills and Carl Boyd.

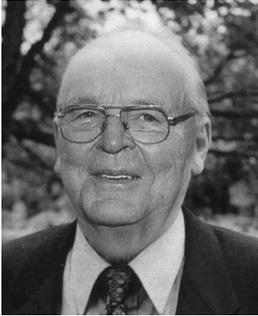
OBITUARY

HARRY CLEVELAND FREEMAN

Scientist, sawmill operator, inventor

Born Greenfield, Queens Co., March 9, 1925

Died Greenfield, April 27, 2007



Acid rain has decimated Nova Scotia's Atlantic salmon fishery and the province is the most heavily impacted area of North America in percentage terms of fish habitat lost. Much of what is now known about the damage acid rain has wreaked on our rivers and streams is a result of research conducted by Harry Freeman and his team of scientists working for the Fisheries and Oceans Department on the 1980s. His work was carried out on the Medway and Westfield Rivers, where he had first observed the movement of salmon as a youth in the 1930s long before the acid-rain threat was discovered. Gloria Sangalang, a research biochemist who worked with Freeman on the salmon project, says theirs was the definitive study that confirmed that acid rain had an impact on the reproductive capacity of Atlantic salmon.

"He was project driven, stubborn in the face of adversity, never shy and would not give up until the job was done", says a former colleague. He felt his greatest scientific achievement was developing sublethal testing procedures on fish while others were concerned only with the lethal effects of toxins. He recognized that healthy fish would disappear if they couldn't reproduce. Freeman's determination and a deep curiosity served him well during the 35 years he spent as a federal government research scientist in Halifax. He wrote, co-wrote and refereed many papers in leading scientific journals and pioneered many laboratory techniques still used today. As a loyal Nova Scotian, he gave his support to many local institutions including life membership in the Nova Scotian Institute of Science.

At 17, he joined the RCAF and, with his strong mechanical skills, won his class gold medal as an aero engine mechanic. He was promoted to crew chief at 19. After his discharge in 1945, he enrolled at Acadia University, where he earned his bachelor's and master's degrees in science. But his family says, "he lived and breathed the forest industry."

He became involved in the family business in 1957, when he helped his father replace the sawmill that had been demolished by floods the previous year in Greenfield, a community synonymous with the Freeman family name since 1832, when Gorham Freeman built a sawmill there. When his father died in 1982, Harry continued to build the business after hours and on weekends, while at the same time carrying out scientific work at a lab

in Halifax. His sons, Charlie and Richard, also joined the business. "He had sawdust in his veins" says his widow, Freda.

Having grown up in the village of Greenfield, he had a lifelong affection for the community. His daughter, Charalyn, says he wanted the children there to have more than he did while growing up. He wanted Greenfield to be able to attract young families to keep the community alive. "Twenty years ago, when the Greenfield Elementary School was closed, Dad worked tirelessly to have it reopened," she said in her eulogy. "He lobbied politicians, purchased textbooks, desks, a school bus and even arranged for teacher, a bus driver and a mechanic." He negotiated to get the community's ball field property and then cleared it, helped build the Greenfield United Baptist Church and recreation centre, the cenotaph, First Settler's Place and sports court.

He had many hobbies, but they almost always involved work, says his daughter. Tree grafting engendered a determination to save traditional Nova Scotian apple varieties by grafting them onto wild trees. "He grafted with a vengeance, both in his own orchard and for others. He once almost missed a flight to Europe because he was busy grafting trees for a friend. His loyal grafting apprentice would proclaim 'the mad grafter strikes again.'" Whether divining for water, restoring antique cars or hitting the bull's eye at the annual Turkey Shoot, Harry succeeded.

When the community turned out for his memorial service, his antique cars were parked outside the Greenfield Baptist Church and the choir sent him off with *You Are My Sunshine*, the song a young Freda was singing when he first set eyes on her.

Prepared by John Soosaar (soosaar@ns.sympatico.ca) from contributions by the Freeman family and colleagues. This obituary (now slightly altered) was printed first in the Halifax Daily News, May 13, 2007.