

In Memory of Fred S. Conte

1940-2021



Fred S. Conte, UC Davis Cooperative Extension Aquaculture Specialist, passed away on February 19, 2021.

Dr. Conte was born March 10, 1940 in Houston, Texas to Dr. Raphael and Etta Conte. He has one older brother, Frank. He met his wife, Elisabeth “Beth” (Bailey) Conte of Galveston, Texas while she was attending the Texas A&M Marine Lab. They were married shortly after Beth graduated from college in June, 1967 in Sacred Heart Church, Galveston, Texas.

Fred received his B.S. in 1963 in Biology from Lamar State College of Technology, and his M.S. and PhD, in 1966 and 1972, in Zoology, and Invertebrate Biology with a Biological Oceanography minor, from Texas A&M University (TAMU), respectively.

Fred’s professional career in aquaculture began at TAMU in 1971 where he served as an Extension Mariculture Specialist, covering saltwater aquaculture. He was involved in building the Corpus Christi, TAMU Shrimp Mariculture Research Facility, at the Barney Davis Power Plant, conducted research on shrimp culture, and managed the facility.

Fred joined the Department of Animal Science, University of California-Davis (UCD) and University of California Division of Agriculture and Natural Resources as California's first Extension Aquaculture Specialist in 1977.

Dr. Conte's programs covered production technology and governmental issues that impacted both large and small aquaculture enterprises. He developed and extended knowledge and information on warm- and cold-water finfish and shellfish production, including such topics as reproduction, hatchery management, water quality, markets, nutrition, harvest, transport, sanitation, aquatic animal welfare, pond and lake management, and farm assistance programs. Recently he also began providing information about the rapidly growing industry of aquaponics (the culture of fish and plants together in a recycle system). His research and outreach efforts resulted in well used production manuals and factsheets, podcasts, flash videos and newsletter articles.

During his early years, Dr. Conte emphasized writing, to extend aquaculture information to clientele. He edited the World Mariculture Society (1978-1980) and the California Aquaculture Newsletters (1980-1989). During the 1990s Dr. Conte embraced web-based information dissemination to his diverse clientele by developing an Aquaculture Web Site as a one-stop location for aquaculture information requests. His continuous upgrading of California Aquaculture Web Site served people around the globe with thousands of visits, and downloads from his library of pdf publications, every month. He also launched the California Aquaculture Facebook in 2011, as a companion to the website. The Facebook page had an international audience and featured media stores addressing regional, national and international aquaculture and fisheries related media coverage.

In the early 1980s California growers and UCD scientists established sturgeon as the newest aquaculture species in the West. Dr. Conte's significant contribution to this achievement was the production of a manual which is still considered the gold standard for sturgeon hatcheries nationally and internationally: *The Hatchery Manual for the White Sturgeon, Acipenser transmontanus Richardson, with application to other north American Acipenseridae* (1988). He continued to provide the outreach for numerous white sturgeon research projects, that

spanned 40 years at UCD, and California is now the largest producer of sturgeon meat and caviar in the U.S.

Another major accomplishment for Dr. Conte was the initiation of the shellfish sanitation modelling research program at UCD in the 1990s. The development of improved methods of evaluating sanitation conditions in shellfish growing areas in coastal waters was instrumental in opening shellfish sales post rainy weather. Research funded through several Western Regional Aquaculture Center (WRAC) projects resulted in three shellfish sanitation models: “Aquarius” (2009), “Pearl” (2013), and “Mermaid” (2017); and numerous ancillary shellfish software programs used to evaluate and manage shellfish growing areas. These complex and comprehensive models provided more sensitive and accurate analyses of sanitation conditions in shellfish growing areas, especially when making adjustments in rules for opening and closing areas for harvest thereby improving food safety and reducing unneeded economic hardships on farmers.

Throughout his career Dr. Conte served on numerous Department and campus committees, most notably on the Aquaculture and Fisheries Program Executive Committee during its reorganization into the Center for Aquatic Biology and Aquaculture (CABA) and then serving as acting and interim director (1999-2001). He also contributed to classroom instruction as an invited lecturer on various aquaculture topics, in the Department’s aquaculture productions courses.

Dr. Conte was a prominent figure as the UC aquaculture industry extension representative (1986-2017) to the California Aquaculture Association’s (CAA), Aquaculture Development Committee. He provided science-based information for policy development and worked with CAA leadership and members on numerous projects. He was also a science advisor to the CAA Board (1999-2019), providing his expertise on aquaculture science and the relationships between the aquaculture industries, research at UC, and various government agencies. He also served on numerous committees of the California Farm Bureau, California Department of Fish and Wildlife, and the California Department of Health Services.

At the regional level, Fred was instrumental in the WRAC outreach efforts since its inception in 1986. He led the Strategic Planning Committee in major revisions of the Manual of Operations, to emphasize the importance that WRAC must place

on both sound, relevant science, and transfer of that information to the industry. He was a member of the Board of Directors, the Publication Committee, and the Technical Committee. He authored numerous WRAC outreach publications and conducted frequent workshops. His outreach products were also used for conveying the economic impacts of WRAC's investment to federal agencies and congressional appropriations committees.

At the national and international level, Fred was active on many committees of the National Aquaculture Association (NAA) and the World Aquaculture Society (WAS), including service as the President of the World Aquaculture Society (1984-1985). In recognition of his website development Dr. Conte was appointed to the USDA National Library Electronic Database, Aquaculture Steering Committee (1997-2008) and some of his more recent work led him to be a member of the USDA-NIFA Organics Standard Committee, Animal Welfare and Humane Slaughter Subcommittee (2006-2015).

Dr. Conte has authored or jointly authored numerous peer-reviewed articles and outreach publications, and has presented and/or chaired sessions at hundreds of conferences. He also frequently organized and conducted aquaculture workshops and short courses. Dr. Conte was always a well-known figure at conferences and was so highly sought after for discussions, to the point that he would often develop laryngitis, from voice overuse.

Dr. Conte's accomplishments were recognized through several awards: the CAA Presidents Service Award (1983), the WAS Distinguished Service Award (1985), the CAA Distinguished Service Award (1987), the US Department of Agriculture, Cooperative States Research Extension and Education Service Award (2004), for outstanding contributions to the growth and development of aquaculture in the US through extension programs with national impact. And in 2016, Dr. Conte received the highly prestigious NAA Joseph P. McCraren Award for Lifetime Contributions to the Aquaculture Industry.

Dr. Conte retired from UCD on October 30, 2020 after 43 years of service. His legacy includes originating and implementing innovative and sustained research and outreach programs resulting in growth and development of aquaculture in the US and throughout the world. He exemplified the role of the extensionist bridge between growers, academia, science, and government.

Dr. Conte was gentle and unassuming. He cherished family, valued friends and colleagues and often developed lifelong friendships with growers and leaders within aquaculture. He was known for his subject matter excellence, perseverance and was driven to provide scientifically sound information to clientele. He embraced use of technology and delivered captivating stories. You can listen to Fred talking about oysters and aquaculture in a series of podcasts at: <https://dcbsp.ucdavis.edu/x/aqua/Podcast/download.htm>. These are probably the only recordings left behind from Fred. He is gone but he can still talk with us. He will be dearly missed.

Fred had two passions in life: his work and his family. He was devoted to his wife, and always took an active interest in the lives of his children. He took care of his family, and he was ready to give aid any time there was a need. In his spare time, Fred enjoyed watching movies, reading books, and the art of fly tying.

Fred is survived by his wife of 53 years Elisabeth “Beth” Conte, son Samuel E. (Alex) Conte of Seattle, WA, and daughter Claire S. (Bobby) Moon of Hermitage, TN; granddaughters Bailey Moon, and Maggie Conte, brother Frank Conte, nieces Barbara Conte and Nell Gutierrez, nephew Michael Conte and numerous colleagues and friends he considered family. He was preceded in death by his son Mark S. Conte.

In lieu of flowers, a donation can be made to the U.C. Davis Arboretum or a charity of your choosing. A private memorial will be held when the family can gather.

Contributors: Joel Van Eenennaam, Deanne Meyer, Abbas Ahmadi, Claire Moon, and Beth Conte.