

SELECTED PROFESSIONAL ACTIVITIES RESUME

MICHAEL F. MCMASTER

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Biographical Sketch:

Mr. Michael F. McMaster currently is president of Mariculture Technologies International, Inc., (A Florida Corporation established in 1984). A Marine Biologist and is a well-known and respected practitioner of mariculture technologies with 48 years' experience in the field. Forty-five of those years has been in private practice. Primary focus has been in the integrated warm water marine finfish mariculture (marine farming) business.

McMaster was instrumental in the design, building and operation of the first two large commercial tropical marine finfish and brine shrimp farms in the Western Hemisphere (OMI, Inc. Dominican Republic and Ocean Farming Systems, Inc., Florida). He has raised in excess of 50 different marine species for both the pet, bait and seafood industries worldwide. McMaster has been actively involved in projects in: The Dominican Republic, Belize, Panama, Barbados, The Grenadines, Columbia, Nicaragua, Puerto Rico, Egypt, Bahamas, Pennsylvania, and Oak Hill, Florida. McMaster has been published on numerous occasions and is a member of several professional associations.

Currently engaged in Consulting Services.

CERTIFICATIONS

Utah State University (BS) *Fisheries Management*, 1969

Southwestern College (AS) *Biology*, 1966

American Fisheries Society – granted- *Certified Fisheries Scientist*, 1974

The American Institute of Fishery Research Biologists – granted

Certified Fishery Research Biologist, 1980

United States Coast Guard – *Master Captain Licenses –250 ton*, 1986

National Association of Underwater Instructors – *Granted -*

Dive Master Certification, 1985

Environmental Assessment Association – *granted-*

Certified Environmental Inspector, 1991

Judge: *Aquaculture Business Plan Assessment for FISH 2.0*, Stanford University, Calif., 2018

PROFESSIONAL EXPERIENCE RELATED TO FISHERIES BIOLOGY & BUSINESS

- United Nations Division of Food and Agriculture Organization, Rome, Italy invitation with Honorarium, to author as their world expert, the history and methods for the farming of the Florida Pompano, 2016. See list of citations and publications for more information.
- Ten-year member (appointed) of the Coral Advisory Panel for the South Atlantic Fisheries Management Council, Department of Commerce (Federal). Duties centered around review of fisheries management proposals and comment on their impact on living coral and coral habitats. Recent contributions include planning and site location of proposed “*set aside no take zones*” as a model for fish stock recovery (MPA’s). (2000 to 2010)
- Extensive experience and applied research in the artificial propagation of 50 different species of marine finfish, invertebrates, and phytoplankton’s for the goal of commercialization.
- Conducted research on the pathways, accumulation, and concentration factors of DDT in the marine food chain. Work performed at U.C.S.D., San Diego, Scripps Institute of Oceanography, 1968 to 1970.
- Conducted Research on development of culture methods for marine larval fish. Work performed at the National Marine Fisheries Service (now NOAA) Southwest Fisheries Center, La Jolla, Ca., 1969 to 1971.
- Continuation of research and development into the understanding of the Life Histories of many economically important marine species. Funding of this research has been through my own private corporations and has been ongoing for 48 years. No government grants have ever been received.
- Fifty-Five years of field experience in the marine environment (Pacific Ocean, Atlantic Ocean and the Caribbean Sea) which includes over 8,000 scuba dives. Extensive field observations on the *niche* biology of many tropical marine species. Conducted coral habitat surveys and coral reef fish surveys in many areas of the southern Antilles and its barrier islands. As a consultant, conducted numerous site surveys for potential mariculture business projects from Florida, throughout the Caribbean, Central America and northern South America.
- Small business experience included the founding, financing and management of ten successful corporations since 1974 (Ocean Farming Systems, Inc., Mariculture Technologies International, Inc., Maritrop, Florida Bay Brine Shrimp, Inc., Florida Brine Shrimp, Inc., Little Ocean, Inc., Reef Displays, Inc., Northeast Brine Shrimp, Inc., Reef Resources, Inc., Pompano farms, LLC). All have been sold for a profit except for Mariculture Technologies International, Inc. and Pompano Farms, LLC. which are currently in business.
- Information Technologies experience includes the owner and manager of two internet stores (www.LiveBrinesShrimp.com & www.LiveMarineBaitFish.com) sold in 2017. Own and managed three websites (www.MaricultureTechnology.com & www.ReefResources.com & www.PompanoFarms.com).
- Authored many popular articles over the last 48 years and most notably served as a contributing editor for ten years to Freshwater and Marine Aquarium Magazine (1976 to 1985).

- Authored and Co-Authored numerous business Prospectus, Business Plans, Mariculture Business Financing Plans for a wide variety of target species.
- Authored and Co-Authored numerous technical papers (listed below).
- Designed, constructed and performed as General Contractor for numerous aquaculture/mariculture farms and facilities.

TECHNICAL PUBLICATIONS:

Coburn, J.F., 2007, M.F. McMaster and T.C. Kloth. An Economic and Operational Model for the Grow-out of Florida Pompano in Sea Cages. World Aquaculture Society 2007, San Antonio, Texas.

Coburn, J.F., 2007, M.F. McMaster and T.C. Kloth. An Economical and Operational Model for the Grow-out of Florida Pompano in Recirculation Aquaculture Systems. Sustainable Marine Fish Culture Conference Harbor Branch Oceanographic Institution.

Coburn, J.F., 2008. M.F. McMaster and T.C. Kloth. Pompano Farming: Investment Criteria and Analysis. World Aquaculture Society, Aquaculture America 2008, Orlando, Florida.

McMaster, M.F. 1988. Pompano Aquaculture: Past success and present opportunities. Caribbean Aquaculture and Trade Expo & Conference. Puerto Rico. Aquaculture Magazine 14 (3): 28-34.

McMaster, M.F., 2003, T.C. Kloth and J.F. Coburn. Prospects for Commercial Pompano Mariculture – 2003. Aquaculture America 2003, February 18-21, 2003 Louisville, Kentucky.

McMaster, M.F., 2004, T.C. Kloth and J.F. Coburn. Pompano Mariculture – 2004. World Aquaculture Magazine 30(4): 25-29.

McMaster, M.F., 2005, T.C. Kloth and J.F. Coburn. Pompano Mariculture in Low Salinity Ponds. 2 nd International Sustainable Marine Fish Culture Conference and Workshop. Harbor Branch Oceanographic Institution, Fort Pierce, Florida, October 19-21. Proceedings in press.

McMaster, M.F., 2006, T.C. Kloth, J.F. Coburn and N.E. Stolpe. Florida Pompano *Trachinotus carolinus* is an Alternative Species for Low Salinity Shrimp Pond Farming. Aquaculture America 2006, February 14, 2006 Las Vegas, Nevada. World Aquaculture, Dec. 2007, Vol.38, No. 4, pp. 50-54.

Theilacker, G.H. & M.F. McMaster, 1971. Mass Culture of the Rotifer (*Brachionus plicatilis*) and its Evaluation as a Food for Larval Anchovies. Marine Biology 10, No. 2, 183 – 188.

McMaster, M.F, 1973. Pompano Mariculture Methodology. Inhouse Confidential Report, 230 pp. last revised Nov., 2018.

McMaster, M.F., 1975. A First Food – *Brachionus plicatilis*. Marine Hobbyist News, Vol. 3, No. 10, page 1.

McMaster, M.F., 1977. A Diversified Marine Farm. Marine Hobbyist News, Vol. 7, No. 7, pp 6-7.

T.C. Kloth & M.F. McMaster, 1978. Invertebrates: A Beginning. Freshwater and Marine Aquarium Magazine, (3 parts) Vol. 1, No. 3 & Vol. 1, No. 4 & Vol. 1, No. 5, pp. 20.

Sokol, Joh & R. Winterbottom & M.F. McMaster, 1984. Tropical Aquarium Fish from the Caribbean. Redma Consultants LTD. Special Report, Commissioned by C.A.L.A., C.A.I.C. & funded by Canadian International Development Agency, 66 pp..

McMaster, M.F., 1987. The Aquarium Trade. New Jersey Marine Science Consortium, annual report, 1987, 8 pp.

McMaster, M.F. and Gopakumar, G. 2016. Cultured Aquatic Species Information Programme, *Trachinotus carolinus* and *T. blochii*. In FAO Fisheries and Aquaculture Department (online), Rome

McMaster, M.F., 2015. A REAL SILENT SPRING. In House Report, Mariculture Technologies International, Inc. (access) www.MaricultureTechnology.com

McMaster, M.F., 2013. Pompano (*T. carolinus*): A Sustainable Eco-Pond Approach To Profitable Farming. A FISH 2.0 competition entry, Published Stanford University, Stanford, California.