IN BRACKISH WATER
CATFISH CULTURE STUDIES IN LOUISIANA

Dr. James W. Avault, Jr. received a B.S. degree at the University of Missouri in 1961 and M.S. in 1963 and Ph.D. in 1966 at Auburn University. Currently he is an assistant professor of fisheries at Louisiana State University where he also conducts research in fish culture. Dr. Avault has worked in fish culture for thirteen years and has published over thirty articles. He is a member of numerous professional organizations and is listed in Who's Who for: Leaders in American Science, American Men of Science, 2,000 Men of Achievement. Royal Blue Book and Dictionary of International Biography. Currently he is secretary-treasurer of the World Mariculture Society. Practical experience in fish culture was obtained at National Fish Hatcheries in Florida, Louisiana, and Kentucky.

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He received his B.S. degree in biology from Northeast Louisiana in 1964, and his M.S. degree in fisheries from Louisiana State University in Baton Rouge, Louisiana in 1966.

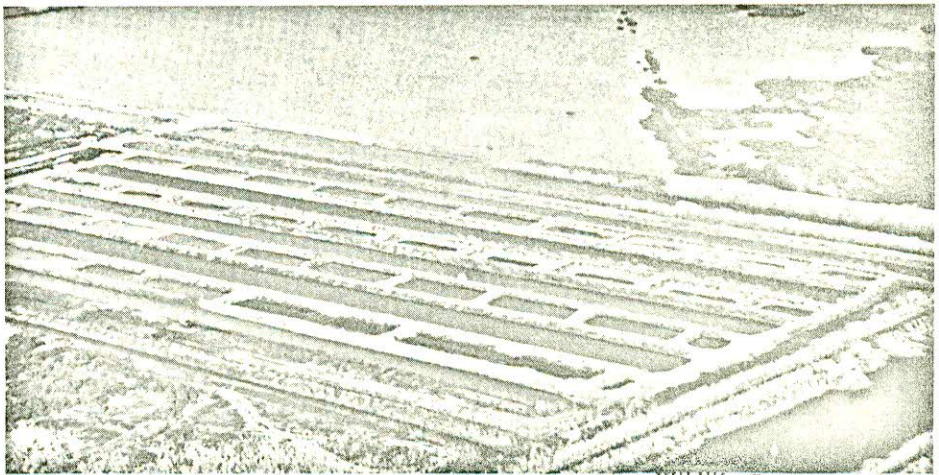
He has been with the Louisiana Wild Life and Fisheries Commission since his graduation and he has conducted research and published several articles relating to the ecology and culture of various estuarine species. Most of his work has been in the coastal marshes of Southeast Louisiana.

By W. GUTHRIE PERRY and JAMES AVAULT

Three years ago the Refuge Division of the Louisiana Wild Life and Fisheries Commission began research relating to the ecology and culture of various estuarine species. A total of 51 ponds were constructed on Rockefeller Wildlife Refuge in Grand Chenier, Louisiana for these studies. Research was not limited to salt water or marine fish, but also included fresh-water fishes. Catfish, pompano, crawfish, mullet and croaker projects are currently under study in these ponds.

The coastal prairie marsh ponds range in size from 0.1 acre to 5.0 acres. Average depth of the ponds was four feet and the bottoms were high in organic matter. Water had to be pumped to and from the research ponds as the levees were still settling and would not permit the placement of permanent water lines. Gravity drainage was impossible since many of the older ponds were below sea level. The construction is in such a manner as to allow salt water collection from a tidal saline bayou leading to the Gulf of Mexico or freshwater from a canal draining the freshwater marshes.

Many persons located along the coastal waters of Louisiana have expressed interest in catfish culture and have asked our advice as to the possibilities since the advent of the re-



A total of 51 ponds have been constructed on the Rockefeller Wildlife Refuge for fishery studies. These ponds, ranging in size from 0.1 to 5.0 acres, are constructed in such a manner as to allow salt water collection from a tidal bayou leading to the Gulf of Mexico or fresh water from a canal draining the fresh water marshes. Marsh pond construction is unlike any other. Note the dragline on mats.