

A Tire Reef, "Ghost" Sea Worms, and Abalone Protection

. . . . **Alexander Malahoff, an expert in marine geology and geophysics**, has been named chief scientist of the National Ocean Survey, a NOAA agency. Malahoff thus becomes principal advisor to the NOS Director in geophysical and oceanographic matters, including program planning, budget, research and evaluation of techniques, and scientific analysis and study. Since 1970, Malahoff has been the program director of Marine Geology and Geophysics Program in the Office of Naval Research. . . .

. . . . **A "ghost" sea worm, once known only from its empty** sea-bottom tunnels, was found in a sediment core taken in 4,000 meters (13,000 feet) of water southeast of Hawaii during a Scripps Institution of Oceanography expedition last year. The 9.5-cm (3¾-inch) semitransparent, green, echiurid has no eyes or other distinct sense organs; it depends on isolated sensory receptors in its skin. Discovery of the specimen means that researchers can apply knowledge of the behavior of their shallow-water relatives to learn how they affect the mixing of sediments, the Institution notes. . . .

. . . . **Concern over long-term abalone depletion led** California's Fish and Game Commission to tighten restrictions on commercial abalone diving permits and to close a southern California area to the commercial taking of that mollusk in February, according to the Department of Fish and Game. The action followed imposition of tighter controls on the sport take of abalone late last year. Permits are now limited to divers active during the previous season and to an additional 5 percent annually. Eligibility requirements and testing procedures for new divers have also been set. The commission also closed mainland coastal waters from Palos Verdes Point (Los Angeles County) to Dana Point (Orange County), an area closed to the sport take of abalone last December. Commercial taking or possessing of black abalone within one mile of Anacapa and Santa Cruz Islands in the Santa Barbara Channel is also prohibited. . . .

. . . . **A "tire baler," making artificial reefs from old auto tires** along Texas' coast this summer, is expected to help

stimulate and improve fishing for bay anglers from Port Arthur to Corpus Christi, according to the Texas Parks and Wildlife Commission. For the first tire reef in a Texas bay, about 500 modules of 12 tires each were joined, forming a nearly one-acre reef about ¾-mile off Pleasure Island at the south end of Sabine Lake. The reef is 5-7 feet under water depending on the tide. Others were scheduled for off La Porte, Rockport, and Corpus Christi. Surf reefs were tentatively planned for waters off Freeport, Galveston, and Mustang Island, time permitting. . . .

. . . . **The Endeavor, a 177-foot steel hull research vessel**, has replaced the University of Rhode Island's first research vessel, the *Trident*. The new vessel has a 34-foot beam and a 17-foot, 6-inch draft and is capable of spending up to 30 days at sea



and travelling 10,000 nautical miles between ports. Her maximum speed is 15.4 knots. The vessel was financed by the National Science Foundation, as were its two sister ships, the *Oceanus* at the Woods Hole Oceanographic Institution and the *Wecoma* at Oregon State University. . . .

. . . . **Cold winter weather, combined with extremely low water** levels, caused a widespread fish kill in many coastal Louisiana parishes, according to J. Burton Angelle, Director of the Louisiana Wildlife and Fisheries Commission. Extent of the fish kill was not determined, but numbers of dead fish were reported in the shallow coastal marshes in the parishes of St. Bernard, Plaquemines, Jefferson, Terrebonne, and Lafourche early this year. Most were reportedly small forage fish, though some

dead commercial and sport fish, including large redfish and speckled trout, were also noted. All the fish in the shallow experimental ponds at the Commission's Marine Laboratory on Grand Terre Island also died. . . .

. . . . **Redfish in Texas' Lake Braunig grow about three times** as fast as their Texas bay counterparts, according to the Texas Parks and Wildlife Department. The species was stocked on 29 April 1976 at about 4-6 inches in length to see if saltwater fish could survive in the freshwater lake and take advantage of its abundant forage fish. In February, anglers began taking 4½- to 6-pound (20½- to 22¾-inch) redfish there. Typical of Texas lakes used to cool hydroelectric plants, Lake Braunig has a high ratio of rough or forage fish to game fish. Redfish used in the 1976 stocking were originally spawned at the National Marine Fisheries Service's Port Aransas Laboratory under light and temperature-controlled conditions. . . .

. . . . **Plans for expansion and reconfiguration of the LORAN-C radio** navigation service to the east coast of the United States have been published by the U.S. Department of Transportation. This starts the final step in providing all mariners with LORAN-C navigation coverage throughout the Coastal Confluence Zone of the continental United States and Alaska. LORAN-C system will provide 95 percent assurance that a vessel can fix its position to an accuracy of 0.25 nautical mile. The LORAN-C service will be expanded to the Gulf of Mexico and the southeastern part of the United States around 1 July 1978, and final reconfiguration of the east coast coverage will be completed about 1 July 1979. Coverage will expand to the Great Lakes around 1 February 1980. . . .

. . . . **The U.S. Coast Guard has awarded a multi-million dollar** contract for 41 medium range surveillance (MRS) aircraft to Falcon Jet Corp¹, Tetterboro, N.J. The new planes will replace the aging fleet of Coast Guard HU16E "Albatross" aircraft. Their primary duties will be law enforcement patrol of U.S. territorial waters and the new 200-mile Fishery Conservation Zone, pollution surveillance, and search and rescue. The contract totals \$204,846,291, and the first plane is scheduled for delivery in June 1979. . . .

¹Mention of trade names or commercial firms does not imply endorsement by the National Marine Fisheries Service, NOAA.