

MES is installing 225 medium sized Reef Balls (Bay Balls) at oyster reef sanctuaries under DNR sponsorship. These installations are field testing the technology's capability to support the oyster recovery program. Building on these initial applications, MES and the Reef Ball Development Group (RBDG) are working cooperatively to introduce Reef Ball technology to the artificial fishing reefs.

Organizations and individuals interested in assisting with the artificial reef program through funding support and volunteer efforts are welcome contact the MES Artificial Reef Coordinator at 410-974-7261, Ext. 315, for additional information.

Maryland Artificial Fishing Reefs

Twenty artificial fishing reef sites are located throughout the upper Chesapeake Bay. Suitable materials of opportunity have been placed in varying quantities and scale at each of the sites up through large concrete bridge sections. A new objective is to install biologically designed reef structures at the fishing reef sites to expand habitat value, fisheries resources and fishing opportunities.

The artificial fishing reef program in the Maryland waters of the Chesapeake Bay is managed by the Maryland Environmental Service (MES). The reef sites are administered under a permit issued by the Baltimore District, U.S. Army Corps of Engineers.

The reefs were originally installed by the Maryland Department of Natural Resources (DNR). The permit was transferred to MES in June 1997 to maintain an artificial fishing reef program in Maryland when appropriated funding for administering the program was discontinued. Cost recovery to maintain the program and oversee the placement of suitable materials and structures into the reef sites in compliance with permit criteria is accomplished through the application of fees for services provided by MES. The program is managed in consultation with DNR's Fisheries Service.



Bay Ball with hatchery-set oyster spat that was installed at Memorial Oyster Reef by MES for DNR

Check the MES website at **www.menv.com** for additional information about the Maryland Environmental Service and the agency's environmental restoration work involving oyster recovery, the Poplar Island Environmental Restoration Project, Hart-Miller Island South Cell Habitat Development, and artificial fishing reefs. Information about Reef Balls can be found at **www.reefball.com**.





Memorial Reef Installation & Technology Field Test

DNR Oyster Reef Program

Alternative reef foundation materials such as rock are being field tested as are reef structures designed to achieve biological objectives. The field tests are examining the extent to which these materials and structures can be used effectively in oyster recovery efforts and also to help reduce the demand on natural shell resources. The Maryland Environmental Service (MES) is assisting the Maryland Department of Natural Resources (DNR) in installing alternative reef foundation materials and Reef Balls of suitable size for use on oyster reefs. MES, with assistance from the Oyster Recovery Partnership and the University of Maryland Center for Environmental Studies Horn Point Oyster Hatchery, conducted an innovative field test to assess the feasibility of attaching oyster spat directly to "Bay Balls" and by attaching plugs and shell with spat set in the hatchery. Installation has been completed and field inspection is planned. MES is also installing Reef Balls at multiple Mid-Bay oyster sanctuaries to assist DNR in assessing the natural spat set potential of this innovative artificial reef technology.



Mill Hill Oyster Sanctuary Installation & Field Test



C Mid-Bay Reef Ball Field Test Spring/Summer 2003

Horn Point Oyster Hatchery Reef Ball Field Test

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