

MES and the Reef Ball Development Group (RBDG) are working cooperatively to introduce Reef Ball technology to the artificial fishing reefs. MES is also working with DNR and the RBDG to field test Bay Ball size units at oyster sanctuaries. MES is in the process of installing 225 Reef Balls at oyster reef sanctuaries under sponsored of DNR as part of a field test of the technologies capability to support oyster recovery. 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 Reef by MES





Memorial Reef Installation & Technology Field Test

Horn Point Oyster Hatchery Reef Ball Field Test

## **Oyster Reef Development**

Alternative reef foundation materials such as rock and enhanced by biologically designed reef structures are being field tested. The program is examining the extent to which these materials can be used effectively in oyster recovery efforts and also reduce the demand on natural shell resources. The Maryland Environmental Service (MES) is assisting the Maryland Department of Natural Resources in installing and field testing alternative reef foundations and Reef Ball technology. 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 Reef 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 spatiset potential of this innovative artificial reef technology.



Mill Hill Oyster Sanctuary Installation & Field Test



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

Check our 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.