New Jersey Division of Fish and Wildlife

Excerpts from REEF NEWS 1999

OBJECTIVES OF THE REEF PROGRAM

New Jersey's Reef Program is administered by the DEP's Division of Fish and Wildlife. The objectives of the program are to construct hard-substrate "reef" habitat in the ocean for certain species of fish and shellfish, new fishing grounds for anglers and underwater structures for scuba divers.

WHAT DO ANGLERS THINK of the REEF PROGRAM?

In the 1997 edition of Reef News, anglers were asked to fill out and return a survey regarding their opinions of New Jersey's Reef Program. Reef fishing has grown rapidly in importance in New Jersey. For example, the percentage of wreck fishing effort of private boat anglers directed towards artificial reefs increased from 6.7 percent in 1970 to 41.6 percent in 1991 and 54.6 percent in 1995. With rising demand and competition for artificial reefs, information by reef users is a prerequisite to reducing conflicts and managing reef resources.

Seventy percent of the responding anglers said that reefs were an important component of their overall fishing activities. The most heavily fished reef sites included Sandy Hook, Sea Girt, Barnegat Light and Cape May. Ninety-two percent of the fishermen reported excellent or good fishing success on reefs. Respondents preferred shipwrecks for fishing, followed by concrete, rock and tire units. Sea bass, tautog and fluke were the favorite target species of reef anglers.

The attributes that fishermen most liked about New Jersey's reefs included:

- close to inlets
- numerous reefs
- numerous fish
- numerous species
- lots of action

The aspects they most disliked included:

- too far from inlets
- crowded
- lose fishing rigs
- too many fish traps

The most frequently cited recommendations for improving the Reef Program included:

- build more reefs
- closer to shore
- bigger reef structures
- recreational fishing only
- institute bag and size limits

REEF BALLS

A New Direction for the Reef Program

"Reef Balls" are concrete fish habitats designed by a firm in Sarasota, Florida and are used worldwide to build ocean artificial reefs. They are igloo-shaped and hollow and have over a dozen access holes for fish. Measuring 4 feet in diameter and 3 feet high, they weigh 1,400 pounds each.

Through a cooperative project between Southern State Correctional Facility, located in Delmont, and the Division's Reef Program, inmate laborers use fiberglass molds to fabricate Reef Ball habitats. The structures will be stockpiled until early summer, when over 600 of them will be barged offshore for placement on New Jersey reef sites.

These designed habitats are expected to maximize use by fish, especially those species, like tautog and sea bass, that hide under ledges or in caverns. The internal cavity will also provide juvenile fish refuge from larger, ocean predators. To further enhance their value as sanctuary habitat, the Reef Balls will be widely dispersed on the sea floor.

NEW WRECKS IN '98

ROTHENBACH II -- a 165' navy tanker sunk on July 10 on the Great Egg Reef at 26955.4 42950.0. Sponsored by Ron and Barbara Rothenbach.

OCEAN WRECK DIVERS IV -- the 85' bow section of a tanker was sunk on August 7 on the Sea Girt Reef at 26908.5 43506.7. Sponsored by Ocean Wreck Divers.

KING BARGE -- a 140' deck barge sunk on September 14 on the Sea Girt Reef at 26910.5 43193.4.

MAKO MANIA -- a 174' navy tanker sunk on July 16 on the Shark River Reef at 26794.7 43482.4. Sponsored by Greater Point Pleasant Charter Boat Association and Budweiser.

FRTC REEF -- An M-60 Army tank sponsored by the Forked River Tuna Club was sunk on the Barnegat Light Reef on August 21, 1998. Dedicated to the memory of the members of the Forked River Tuna Club who have crossed the bar.

CLIFFORD J. LIPKE, Sr. REEF -- Sixteen Army tanks sponsored by friends and family of Clifford Lipke were sunk on the Sea Girt Reef on August 21, 1998. In loving memory of an avid fisherman.

HARRY J. WHITE REEF -- An M-60 Army tank sponsored by friends and family of Harry J. White was sunk on the Barnegat Light Reef on August 21, 1998.

VHFC II -- An M-60 Army tank sponsored by the Village Harbour Fishing Club was sunk on the Barnegat Light Reef on August 21, 1998.

EXPLORER -- An M-60 Army tank sponsored by the Philadelphia Chapter of the Explorer's Club was sunk on the Axel Carlson Reef on August 21, 1998.

GEORGE GILBERT REEF -- An M-60 Army tank sponsored by friends of George Gilbert was sunk on the Barnegat Light Reef on August 21, 1998.

Adopt-A-Wreck

- Would you like to put your name, your company's name or your club's name on a New Jersey shipwreck or reef structure and join the other historic wrecks along the New Jersey coast?
- Would you like to build an underwater home for marine fish and shellfish?
- Would you like to create a new fishing ground and dive attraction for New Jersey sportsmen and women?
- Would you or your organization like to be remembered by fishermen and divers for the next 100 years? What a great memorial for an ardent saltwater sportsman or advertisement for a marine business.
- You can do all of these things through New Jersey's ADOPT-A-WRECK Program.

Vessels and reef structures currently available for adoption include:

- 100 Army tanks
- 200' barge
- 100' tugboat

For details on how you can adopt a wreck, contact:

Reef Program NJ Division of Fish & Wildlife P.O. Box 418 Port Republic, NJ 08241 609-748-2020 or Fax: 609-748-2032

"WHAT'S IN STORE FOR 1999?"

The following structures are tentatively slated for deployment in 1998: Reef Plans for 1999

- Coast Guard -- 157' Buoy Tender
- Army Tanks -- 50
- Reef Balls -- 600
- Tug -- 85'

REEF SITE STATISTICS

The table below provides information on reef size (in square miles), distance offshore (in nautical miles), depth range (in feet) and number of patch reefs.

Reef Site	Size (Sq Miles)	Distance Offshore (NM)	Depth Range (Ft)	Patch Reefs
Sandy Hook	1.4	1.4	40-60	519
Shark River	0.7	14.0	119-128	18
Sea Girt	1.3	3.5	60-75	86
Alex Carlson	4.0	2.1	66-82	53
Barnegat Light	0.9	3.0	46-58	100
Garden State North	1.1	6.5	66-83	79
Garden State South	0.6	5.1	57-63	42
Little Egg	1.5	3.8	48-60	40
Atlantic City	4.0	8.5	55-94	39
Great Egg	1.0	7.0	47-70	45
Ocean City	0.8	4.5	56-66	56
Deepwater	0.7	25.1	115-125	3
Wildwood	2.1	4.5	40-63	41
Cape May	4.5	8.5	50-73	125

GPS COORDINATES

With LORAN scheduled for eventual termination, every mariner will someday need GPS (Global Positioning System) coordinates. Most boaters are now buying GPS electronic navigation machines and unfortunately, they cannot find reef structures that are published as LORAN coordinates.

We are now systematically running from reef to reef to obtain GPS coordinates for each of our structures - over 1200 of them! The only way to get accurate GPS coordinates is to actually position a vessel over the structure. Mathematical conversions between GPS and LORAN that can be done by both LORAN and GPS computers are just not accurate enough of find a wreck on the sea floor.

Eventually, reef charts sold by the Artificial Reef Association will depict both LORAN and GPS grids and coordinates so you will be able to find the reefs no matter which navigational coordinates you use.

SOME GPS COORDINATES (Differentially Corrected)

Structure	Latitude	Longitude
King Barge	4006.40	7357.08
Rothenbach II	3914.498	7421.483
Mako Mania	4006.419	7341.460
Ocean Wreck Divers IV	4007.750	7356.345
Lipke Reef	4007.608	7356.650
Horseshoe Wreck	4008.203	7355.779
Morania Barge	4006.21	7357.26
Weeks 218	3937.628	7401.648
John Dobilas	3937.564	7401.341
Jerry	3937.757	7400.828
Pauline Marie	3913.763	7412.182
Francis Bushey	3914.203	7412.148
Boston	3915.444	7414.004

WE NEED YOUR HELP!

Much of the work accomplished by the Artificial Reef Program is supported by donations and the sale of <u>various items</u> which depict the program and marine life. Much of this work is accomplished by the Artificial Reef Association.

THE ARTIFICAL REEF ASSOCIATION

The non-profit Artificial Reef Association was founded in 1991 by a group of party and charter boat captains and marina owners. The goal of the ARA is to promote reef construction throughout the state's coastal waters. The primary function of the organization has been to raise money to help pay the costs of cleaning preparing and towing ships and barges destined for sinking on reef sites. So far the ARA has provided funds to sink 19 vessels.

The ARA has raised most of its funds through the sale of Reef T-shirts and Reef Charts. Donations from individuals and fishing and diving clubs are particularly helpful. If your club would like to sponsor the sinking of a vessel on a reef, contact:

ARA P.O. Box 16 Oceanville, NJ 08231

PARTICIPATING AGENCIES

The following agencies have helped make New Jersey's Reef Program a success:

Federal

- US Fish & Wildlife Service
- US Coast Guard
- US Army Corps of Engineers
- National Marine Fisheries Service
- US Navy and Reserves
- US Army and Reserves
- US Customs Service
- US Environmental Protection Agency

State

- NJ State Police
- NJ State Police, Marine Bureau
- State Agency for Surplus Property
- NJ Division of Land Use Regulation
- Southern State Correctional Facility
- NJ Army National Guard

County

- Ocean County Bridge Department
- Ocean County Dept. of Corrections
- Cape May Municipal Utilities Authority

Municipal

Atlantic City Police Bomb Squad

TO RECEIVE REEF NEWS IN THE MAIL

If you would like to receive the complete edition of Reef News, containing more information than available on-line, including graphics, additional articles and an order form for products sold by the Artificial Reef Association, please send a completed <u>form</u> to the Reef Program.