

New Jersey Division of Fish, Game and Wildlife

Excerpts from REEF NEWS 1998

OBJECTIVES OF THE REEF PROGRAM

New Jersey's Reef Program is administered by the DEP's Division of Fish, Game 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.

THE RISE AND FALL OF THE "BILLY D"

The preparation of the 85-foot tug, "Billy D", was unusual in that it involved raising the sunken hull from the Shrewsbury River and then towing it offshore to sink it a final time on the Shark River Reef. The Billy D, abandoned at a Church State dock in the Shrewsbury River, eventually sank when winter ice floes piled ice onto its deck. Diesel fuel bubbled up from its tanks creating a large slick in the estuary. The Coast Guard quickly responded to this environmental hazard, raised the vessel and had it pumped free of oil. But, left on its own, the tug once again filled with water and sank. This time it sat on the bottom for over a year until the Division volunteered to help in the deposition of this vessel.

Removing the vessel from the waterway was a big job that required a barge crane with a lifting capacity of 600 tons. Wire slings were placed under the sunken tug by divers. The crane then lifted the tug full of water to the surface where it was pumped dry. An oil cleaning company was then contracted by the Department of Environmental Protection's Bureau of Emergency Response to remove all of the oil-soaked debris and mud trapped in the engine and bunk rooms. Once clean, the Billy D was then towed to the Shark River Reef and sunk in a depth of 120 feet. All in all, a very involved and expensive operation, but one that not only removed an environmental hazard from the Shrewsbury River but also created a new home for New Jersey's marine life.

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?
- 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, Game & Wildlife
P.O. Box 418
Port Republic, NJ 08241
609-748-2020 or Fax: 748-2032

1997 REEF ADOPTIONS

"ROTHENBACH REEF I"

A 165' tanker barge sponsored by Barbara and Ron Rothenback was sunk on the Cape May Reef on June 11. "This vessel is dedicated to the memory of Harry and Elsie Rothenback -- loving parents and ardent fishermen whose love of fishing was never as great as their love for their son and daughter."

"BHMTc TANK III" and "BHMTc TANK IV"

Two M-48 tanks sponsored by the Beach Haven Marlin and Tuna Club were sunk on the Little Egg Reef on July 28.

"LTC JOSEPH P. CALLAHAN, SR."

An M-60 tank sponsored by the Callahan family was sunk on the Barnegat Light Reef on August 1. "In honor of a loving husband, father, father-in-law, grandfather and great-grandfather and for the love and support you have already given to us."

"ATLANTIC COUNTY FEDERATION OF SPORTSMEN'S CLUBS REEF"

A group of 5 tanks sponsored by the Atlantic County Federation of Sportsmen's Clubs was sunk on the Great Egg Reef on July 30.

"BUD EVANS REEF"

A group of 3 tanks sponsored by the Ocean City Marlin and Tuna Club was sunk on the Great Egg Reef on July 30.

"FRED ECKARDT REEF"

A group of 3 tanks sponsored by the Ocean City Marlin and Tuna Club was sunk on the Great Egg Reef on July 30.

"GOLDEN EAGLE"

An 80' commercial trawler sponsored by the friends and family of Eagle Pharo was sunk on December 19 on the Sea Girt Reef. "A tribute to Captain Eagle Pharo; he could always find the fish."

"CAPTAIN ED SCHMIDIGER"

An 165' navy tanker barge sponsored by Marine Schmidiger and Paul Donohoe was sunk on October 8 on the Axel Carlson Reef. "In memory of Captain Ed Schmidiger, beloved husband, father and good friend. An avid ocean sportsman. Ed chartered the 'Y-Knot' out of Manasquan River for many year and will be truly missed."

"OCEAN WRECK DIVERS III"

A 165' tanker barge sponsored by the Ocean Wreck Divers was sunk on October 8 on the Axel Carlson Reef.

"THE FISHERMAN"

A 242' tanker barge sponsored by The Fisherman Magazine was sunk on the Sea Girt Reef on August 7.

"COLONEL SAMUEL R. PROBASCO III"

A M-551 tank sponsored by the family was sunk on the Barnegat Light Reef on August 1. "Donated with love, admiration and respect."

NEW WRECKS IN '97

JESSIE C -- 65' crew boat sunk on the Little Egg Reef on February 12 at 26922.6 / 43101.4. Sponsored by Caldwells Diving Company.

BILLY D - 80' tug sunk on the Shark River Reef on July 27 at 26797.5 / 43481.7. Sponsored by the Artificial Reef Association.

ROTHENBACH I - 165' tanker barge sunk on June 11 on the Cape May Reef at 27019.8 / 42712.0. Sponsored by Barbara and Ron Rothenbach.

JERRY - 42' tug sunk on the Garden State North Reef on September 15 at 26870.4 / 43197.5. Sponsored by the Artificial Reef Association.

THE FISHERMAN - 242' tanker barge sunk on the Sea Girt Reef on August 7 at 26905.8 / 43508.3. Sponsored by The Fisherman Magazine and Spentonbush Red Star Company.

GOLDEN EAGLE - 80' commercial trawler sunk on Sea Girt Reef on December 19 at 26907.7 / 43511.2. Sponsored by friends of Eagle Pharo.

RESTORER - 62' tug sunk on December 19 on Sea Girt Reef at 26906.8 / 43509.0. Sponsored by the Artificial Reef Association.

OCEAN WRECK DIVERS III - 165' navy tanker barge sunk on October 8 on the Axel Carlson Reef at 26914.1 / 43435.1. Sponsored by Ocean Wreck Divers.

CAPTAIN ED SCHMIDIGER - 165' navy tanker barge sunk on October 8 on the Axel Carlson Reef at 26918.0 / 43447.9. Sponsored by Marine Schmidiger and Paul Donohoe.

LIBRA - 195' gravel barge sunk on June 12 on the Ocean City Reef at 27017.1 / 42907.5. Sponsored by Hays Tug and Launch and the Artificial Reef Association.

"WHAT'S IN STORE FOR 1998?"

The following structures are tentatively slated for deployment in 1998:

- Rothenbach II - 165' tanker barge
- Army tanks - 75
- Barges - 20 (135' gravel barges)
- Y0-230 - 165' Navy tanker

BIOLOGICAL REEF STUDIES

In October of 1996, 30 experimental habitats were placed on the Barnegat Light Reef as part of a study to investigate the colonization of New Jersey reefs by marine life. The habitats consist of a wire mesh cage placed in a truck tire filled with concrete. Layers of corrugated plastic panels and whelk shells inside the cage provides "cryptic" hiding places for juvenile fish, small lobster and other crustaceans. Attached to the top of the cage, 8 plates, 2 each of steel, concrete, rock and tire rubber (the 4 reef building materials), provide surfaces for the attachment of encrusting organisms, such as mussels, barnacles and sponges.

Every 2 years, divers will retrieve 3 of the habitats. Organisms will be trapped by encasing the habitats in fine-mesh nylon bags. All of the marine life living on the habitats will be removed, identified and weighed to obtain detailed information concerning the importance of reef structures in providing habitat for marine animals of all life stages.

ACCOMPLISHMENTS, 1984 - 1997

Since the inception of the state's Reef program in 1984, 1,117 patch reefs have been built on New Jersey's network of 14 ocean reef sites. A patch reef is a one-half to several acres reef created by sinking a ship or placing a bargeload of other material on the sea floor. In 1997, 102 patch reefs were constructed.

Reef Material	Patch Reefs Built in 1997	Total Patch Reefs Built 1984-1997
Tire units	4	227
Concrete	1	159
Vessels, barges	10	100
Army vehicles	85	226
Rock	2	392
Other	-	13
Total	102	1,117

GPS COORDINATES - WHO NEEDS THEM?

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 to 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. We expect the new charts to be available in the spring of 1999.

SOME GPS COORDINATES

Structure	Latitude	Longitude
Billy D	4006220	7341855
Jerry	3937757	7400828
The Fisherman	4007930	7355942
Ocean Wreck Divers III	4000587	7359555
Captain Ed Schmidiger	4001832	7359677
BHMTC III	3928816	7411545
BHMTC IV	3928444	7410349
LTC Callahan	3945368	7401321
Colonel Probasco	3944782	7401362

WE NEED YOUR HELP!

Much of the work accomplished by the Artificial Reef Program is supported by donations and the sale of [various items](#) which depict the program and marine life. Much of this work is accomplished by the Artificial Reef Association.

THE ARTIFICIAL 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