



I believe in the imagination. What I cannot see is infinitely more ...

**DeNunzio's**  
BRICK OVEN PIZZA & GRILLE  
Sea Isle City

36<sup>TH</sup> ST. & THE BOARDWALK  
FREE DELIVERY  
(609) 263-2600

*Raising Your Standards One Slice At A Time*

**\$2 OFF**  
Any Large Pizza

## N.J. Artificial Reef Program OLD & OBSOLETE LEADS TO NEW LIFE

By Sandi Schwartz

It may be surprising to learn that dumping old ships, concrete debris, rock, obsolete military tanks and chunks of concrete into the ocean can actually benefit the environment. Since 1984, the New Jersey Department of Environmental Protection's (DEP) Artificial Reef Program has been successfully creating a network of artificial reefs along the New Jersey coast to provide a home for fish, shellfish and crustaceans. New Jersey has one of the most extensive artificial reef programs in the country, with 15 different sites totaling 25 square miles of sea floor. The reefs are located between 2 and 25 nautical miles offshore along 12 navigable inlets from Sandy Hook to Cape May. Most states on the East Coast plus California have an artificial reef program, but New Jersey has been recognized as the most successful, leading the other states on the amount of reef material used.

### GOALS OF NEW JERSEY'S ARTIFICIAL REEF PROGRAM

- Construct hard substrate habitat for marine fish and invertebrates.
- Provide spawning, nursery, refuge and feeding area for marine life.
- Increase diversity and abundance of marine life.
- Create fishing grounds for hook and line fishermen.
- Provide underwater structure for scuba divers.
- Provide economic benefits for recreational fishing and diving industries.

Eight million cubic yards of reef material have been placed so far, said Hugh Carberry, DEP's reef coordinator. DEP restricts material to rock, steel and concrete because they have been proven to be durable enough to last in the harsh saltwater environment and are heavy enough to remain in place during storms.

One unique aspect of the program is that there is a lot of demolition concrete available from projects going on throughout the state. Reef program officials coordinate with the U.S. Army Corps of Engineers to obtain the concrete to use as reef structure.

"This is also an important recycling program in the state," Carberry said.

The materials are rigorously cleaned – no chemicals are used – before placed underwater. The cleaning process must pass Coast Guard inspections.

Within all the reef sites, which range in size from 1/2 to more than 4 square miles, numerous patch reefs (or micro reefs) have formed. A patch reef is a 1/2- to 5-acre area where one barge load of material has been

deployed. In total, more than 4,000 patch reefs have been constructed on the state's 15 reef sites since the program began.

Once material is sunk, it soon becomes a home to fish and marine life ranging from coral to crabs, a fishing ground for anglers and an underwater attraction for scuba divers.

"Most of the seafloor off the coast of New Jersey consists of sand," Carberry said. "We place hard manmade structures on the sea floor, and everything that occurs afterwards is part of the natural process."

Ocean blue mussels, barnacles and sponges look to attach to hard materials in order to grow, Carberry said. Once the animals attach to the reef structure, which takes about a year, the vertebrates like crab, shrimp and lobster move into the area. Then the fish show up after about two years.

The reefs are 800 times more productive than the sandy floor, with 150 species found on New Jersey artificial reefs. This includes bottom fish such as tautog, schooling fish such as menhaden and open-water fish such as mako sharks. Fishermen and divers now use reefs extensively to catch sea bass, blackfish, porgy and lobster.

Most of the reefs are a short boat ride from marinas, making them popular with local charter companies and divers. Capt. Bob Rush of StarfishBoats.com, who is also treasurer for the United Boatmen of New Jersey and a board member of the National Association of Charter Boat Operators (NACO), said the artificial reef program had been successful throughout the years for both the recreational and commercial sectors.

"The reefs are an essential part of our fishing trips," he said. "They add more places for fishermen to catch fish. The fishing areas also allow the divers to dive on wrecks and possibly catch lobsters and sea bass."

The Townsends Inlet artificial reef site, one of the newest sites in the program, is located 3.8 nautical miles off the coast of Sea Isle City. There is a total of 8,400 cubic yards of reef material at this location, including 5 vessels and 500 reef balls made of fiberglass and concrete that are 4 feet high by 3.5 feet wide. Another area has culverts, similar to septic lines, constructed of concrete.

The total area of the reef is half a mile. It is broken into two areas: one for fishing boats only and the other for the vessels. In the second area, both scuba diving and fishing directly above the vessels are permitted.

In mid-June, the state sank a 90-foot barge over the Townsends Inlet site. The sinking was dedicated to Howard Preston Bahnsen, a summer resident of Avalon and avid fisherman, who died in November.

The family decided to donate to the reef program and raised funds for the barge. The family paid about \$4,000 to Northstar Marine of Dennis Township for the old deck barge and to have it cleaned.

## CAPTURE SUMMER MEMORIES Forever WITH A FAMILY BEACH PORTRAIT



Mention this ad for a  
**FREE**  
8x10\*

\*Not valid with any other offer. Subject to minimum purchase.

**Foschi**  
Studio

By appointment only  
(609) 927-3044

1037 SHORE ROAD, LINWOOD, NJ 08221

[www.foschiphoto.com](http://www.foschiphoto.com)

... important than what I can see.  
-Duane Michals



(From L to R) Bill Maxwell and Hugh Carberry of the NJ Reef Program pass the T.I. Reef Cup plaque from one tournament sponsor, Jim Moran of Moran's Dockside in Avalon (far right), to the other, Jeff Peltier of Sunset Pier in Sea Isle.



(From L to R) Last year's winner Joe Reese of Avalon passes the individual award for heaviest fluke to this year's winner, Rich Schad of Sea Isle.

## T.I. REEF TOURNAMENT AND CEREMONY

Sea Isle City took the Townsends Inlet Reef Cup back from Avalon this year at the June 5 tournament. An award ceremony on June 23 celebrated the team and individual wins.

"The tournament is basically a fundraiser to enhance the T.I. Reef," said new tournament sponsor Jeff Peltier, owner and operator of Sunset Pier, where the cup plaque will hang for the next year.

Donations from the tournament benefited the 4-year-old reef – a bed of flounder, bass and other fish just 3.8 miles from Townsends Inlet that provides a convenient fishing destination for local residents and visitors. This year's tournament raised \$1,810, with more than \$10,000 generated for the reef during the past five years, said tournament sponsor Jim Moran of Moran's Dockside in Avalon.

Many items used in the reef program have been dedicated to people who spent their time fishing off the reefs. The state keeps a log of these donations.

A 68-foot trawler vessel is slated to be deployed during August. Funds were raised to purchase the vessel during a local fishing tournament. Finally, dredge rock from an Army Corp of Engineers project in the New York Harbor is expected to be delivered to the reef program later this summer.

*Sandi Schwartz is a member of the National Association of Science Writers & D.C. Science Writers Association and occasionally writes on issues pertaining to science and weather for the Seven Mile Times and Sea Isle Times.*

The combined weight of the heaviest fish caught by each of the five members per team determines the winner. The tournament also awards a trophy to the individual who catches the heaviest fluke.

Rich Schad of Sea Isle caught the heaviest fluke this year, and last year's winner, Joe Reese of Avalon, attended the ceremony to present Schad with the trophy. New Jersey Reef Program coordinator Hugh Carberry and technician Bill Maxwell of the New Jersey Division of Fish and Wildlife also came to Sunset Pier to present the plaque to Peltier.

The winning Sea Isle team included Schad, Mike Shaak, Andrew Heivli, Mike Mally and John Mair. The Avalon team – which leads the series 3-2 – included Chet Johnson, Bill Collins, Chris Gould, Jim Lutz and Frank Breakell.

### HOW YOU CAN HELP

The local community's involvement and the frequency of visitors have made the Townsends Inlet site the most popular reef. There are several ways to contribute to the program:

- Participate in the annual fishing tournament where proceeds are used for reef construction.
- Contribute to the Adopt a Reef program.
- Recognize a loved one through the memorial program.

For more information, please contact Hugh Carberry at 748-2022 or Hugh.carberry@dep.state.nj.us.

Q: What's cool and warm at the same time?  
A: Our wonderful family beach house!

**DON'T MISS OUR ANNUAL AUGUST SALE!**  
15-70% OFF ♦ QUANTITIES LIMITED



Q: Who is our favorite source to make it happen?  
A: The happy staff at Charles Harvey!

**LOTS OF IN STOCK INVENTORY**  
**IMMEDIATE DELIVERY OR SPECIAL ORDER**  
**WE DELIVER TO PA WEEKLY!**

**Charles Harvey**   
**HOME FURNISHINGS**

[WWW.CHARLESHARVEYFURNITURE.COM](http://WWW.CHARLESHARVEYFURNITURE.COM)

31<sup>ST</sup> & DUNE DR.  
AVALON, NJ  
609-967-1800

LINCOLN & NEW JERSEY AVES.  
WILDWOOD, NJ  
3.5% Sales Tax  
609-522-7900