

## **New York State Department of Environmental Conservation Bureau of Marine Resources Artificial Reefs Overview**

### General Overview

The New York State Department of Environmental Conservation (DEC) was created on July 1, 1970 to combine in a single agency all state programs designed to protect and enhance the environment. Our mission is "To conserve, improve and protect New York's natural resources and environment and to prevent, abate and control water, land and air pollution, in order to enhance the health, safety and welfare of the people of the state and their overall economic and social well-being." DEC's goal is to achieve this mission through the simultaneous pursuit of environmental quality, public health, economic prosperity and social well-being, including environmental justice and the empowerment of individuals to participate in environmental decisions that affect their lives.

The [Bureau of Marine Resources](#) is responsible for the management of living marine resources and their habitats within the Marine and Coastal District of New York State. The mission of the Bureau of Marine Resources is to manage and maintain the state's living marine, estuarine and anadromous resources, and to protect and enhance the habitat upon which these resources depend, in order to assure that diverse and self-sustaining populations of these resources are available for future generations.

Consistent with such stewardship, and in recognition of the intrinsic value of productive marine ecosystems, the Bureau will manage the state's living marine, estuarine and anadromous resources to achieve optimum benefit by providing for the broadest range of uses including commercial and recreational harvest, human consumption, natural forage and observation and appreciation.

Optimizing benefit may include:

- managing, restoring and enhancing indigenous marine, estuarine and anadromous resources and their habitats;
- regulating the harvest of these resources to optimize yield;
- assuring that living marine, estuarine and anadromous resources available for harvest and human consumption meet public health guidelines;
- providing enhanced public access to waters of the marine and coastal district; and
- promoting public awareness of the value and benefits of diverse and productive marine, estuarine and anadromous resources and habitats and the function of resource management in securing such value and benefits.

The Bureau of Marine Resources is comprised of three Sections: Finfish and Crustaceans, Marine Habitat and Shellfisheries. The Artificial Reef Program is in the Marine Habitat Section.

Artificial reef construction in New York State began in 1962 under the New York State Conservation Department. The New York State Department of Environmental Conservation now holds the reef permits required for reef construction and is the sole entity in New York State that can improve designated reef sites. Reef construction is conducted under specific guidelines established in the National Artificial Reef Plan and the New York State Artificial Reef Plan.

New York State artificial reefs were developed to increase fisheries habitat and provide additional

fishing and diving opportunities. Artificial Reefs provide marine fish and other organisms additional opportunities for shelter and foraging and may increase productivity in the areas where they are placed. Anglers visit artificial reef sites to benefit from the increased fishing opportunities they provide. Divers also visit our reefs for nature observation, photography, and to pursue fish and lobsters. You may find fish, crustaceans, molluscs, sponges and even temperate corals on New York artificial reefs.

Artificial reefs are built out of hard, durable materials such as rock, concrete, and steel, usually in the form of surplus or scrap materials that are “recycled” to enhance the local existing marine habitat (e.g. vessels, dredge rock, and military vehicles etc.). Harmful substances are removed from the materials before deployment on the reef sites.

Not long after the material settles on the sea floor, the reef structure begins to fill with marine life. “Structure associated” species such as blackfish, black sea bass, scup, fluke, hake, and cod move in to check out the new structure. Lobsters and crabs take up residence, and encrusting organisms like barnacles, sponges, anemones, corals, and mussels cling to and cover the deployed material. Over time, the structure teems with sea life, creating a habitat very similar to a natural reef.

There are 11 artificial reef sites in New York’s Marine and Coastal District that are managed by the DEC Marine Artificial Reef Program. A [map, \(location\) coordinates and other details](#) for each reef site including GPS coordinates, and the materials deployed on each reef site are available for you to use to plan your trip to a New York State reef site.

You can share your reef experiences with the DEC Artificial Reef Program after fishing or diving on the New York Artificial Reefs by completing and submitting a *Volunteer Reef Angler Log* (<http://www.dec.ny.gov/outdoor/9211.html>) or *Volunteer Reef Diver Log* (<http://www.dec.ny.gov/outdoor/9210.html>). Your observations will help the DEC Reef Program determine how the reefs are functioning and also provide useful information for future reef construction.

### Dataset Description

This data set includes a locator map and location coordinates of the NYSDEC Marine Artificial Reefs where materials are deployed on permitted sites under specific national and state guidelines. Deployed materials serve to enhance underwater marine habitat through the introduction of structure on reef sites. Material placement creates additional angling and SCUBA opportunities for local fishermen and divers.

### Data Collection Methodology

The data is a result of the environmental permitting process which determines specific areas for reef site locations where materials can be deployed. Coordinate data is reported in Global Positioning System coordinates. Depth measurements are collected from bathymetry surveys.

### Statistical and Analytical Issues

The dataset is primarily static and requires revision if site boundaries are changed or new sites added.

Limitations of Data Use

Dataset contains the boundary coordinates of each reef site.