

COASTAL FISH & WILDLIFE HABITAT ASSESSMENT FORM

---

Name of Area: **Great Gull Island**  
Designated: **May 15, 2002**  
County: **Suffolk**  
Town(s): **Southold**  
7½' Quadrangle(s): **Plum Island, NY-CT**

---

**Assessment Criteria**

**Ecosystem Rarity (ER)--the uniqueness of the plant and animal community in the area and the physical, structural, and chemical features supporting this community.**

ER assessment: Relatively small, undisturbed, rock island; unusual in Suffolk County. 9

**Species Vulnerability (SV)--the degree of vulnerability throughout its range in New York State of a species residing in the ecosystem or utilizing the ecosystem for its survival.**

SV assessment: Roseate tern (E) and common tern (T) nesting.  
Calculation:  $36 + (25/2) =$  48.5

**Human Use (HU)-- the conduct of significant, demonstrable commercial, recreational, or educational wildlife-related human uses, either consumptive or non-consumptive, in the area or directly dependent upon the area.**

HU assessment: Scientific research and monitoring of statewide significance. 16

**Population Level (PL)--the concentration of a species in the area during its normal, recurring period of occurrence, regardless of the length of that period of occurrence.**

PL assessment: The second largest nesting concentration of roseate terns in North America. The largest nesting common tern site in New York State. One of five haul-out sites in New York State for harbor seals. 36

**Replaceability (R)--ability to replace the area, either on or off site, with an equivalent replacement for the same fish and wildlife and uses of those same fish and wildlife, for the same users of those fish and wildlife.**

R assessment: Irreplaceable. 1.2

---

**Habitat Index = [ER + SV + HU + PL] = 109.5**

**Significance = HI x R = 131.4**

NEW YORK STATE  
SIGNIFICANT COASTAL FISH AND WILDLIFE HABITAT  
NARRATIVE

**GREAT GULL ISLAND**

LOCATION AND DESCRIPTION OF HABITAT:

Great Gull Island is located approximately 2 miles east of Plum Island along the underwater ridge running between Plum Island and Fishers Island, in the Town of Southold, Suffolk County (7.5' Quadrangle: Plum Island, NY-CT). The fish and wildlife habitat is a relatively small island, approximately 60 acres in size, consisting of exposed rock with low, sparse vegetation. The island is owned by the American Museum of Natural History and primarily used for scientific research and monitoring of colonial waterbirds.

FISH AND WILDLIFE VALUES:

Great Gull Island comprises a relatively small, but valuable, coastal habitat type that provides ideal conditions for roseate tern (E) and common tern (T) nesting. Isolation from predators and human disturbance may be the most important component of the Great Gull Island habitat, distinguishing this area from many other rock islands in Suffolk County.

Large numbers of nesting shorebirds have been well documented at Great Gull Island for many years. Average concentrations of nesting pairs of roseate terns and common terns over the ten year period from 1987 to 1996 were 1 128 pairs and 7245 pairs, respectively. In 1997, more than 1,900 pairs of roseate tern and 11,200 pairs of common tern nested at Great Gull Island. This represents one of the largest nesting concentrations of roseate terns in the United States, and the largest common tern colony in New York State.

In addition to these birds, a population of harbor seals have been regularly documented at Great Gull Island during the winter months (December - early May). The exposed rocks in this area provide an important "haulout" area, which seals use for resting and sunning. This location is one of five major haulouts around Long Island, serving as an activity center for seals feeding in the Great Gull/Plum Island area. Great Gull Island is also documented to be an active seal pupping site.

The island is the site of scientific research and monitoring as part of the Great Gull Island Project of the American Museum of Natural History. The colony is monitored and studied throughout the breeding season by researchers.

IMPACT ASSESSMENT:

Nesting shorebirds inhabiting Great Gull Island are highly vulnerable to disturbance by humans, especially during the nesting and fledgling period (March 15 through August 15). Significant pedestrian traffic or recreational vehicle use of the beach could easily eliminate the use of this site

as a breeding area and should be minimized during this period. Recreational activities (*e.g.*, boat and personal watercraft landing, off-road vehicle use, picnicking) in the vicinity of bird nesting areas should be minimized during this period. Predation of chicks and destruction of eggs or nests by unleashed pets (*e.g.*, dogs, cats) and natural predators may also occur, and predator control should be implemented where feasible. Fencing and/or continued annual posting of shorebird nesting areas should be provided to help protect these species. Control of vegetative succession, through beneficial use of dredged material or other means may improve the availability of nesting habitat in this area.

Any permanent alteration or human disturbance of the harbor seal haulout area, obstruction of seal migrations, or other disturbances when seals are in the area (December 1 through May 15) would have a significant adverse impact on the populations of these species in the Long Island region. Significant underwater noise, from dredging or other activities, could also preclude harbor seals from using the area.

KNOWLEDGEABLE CONTACTS:

Habitat Unit  
NYS Department of State  
Division of Coastal Resources  
41 State Street  
Albany, NY 12231  
Phone: (518) 474-6000

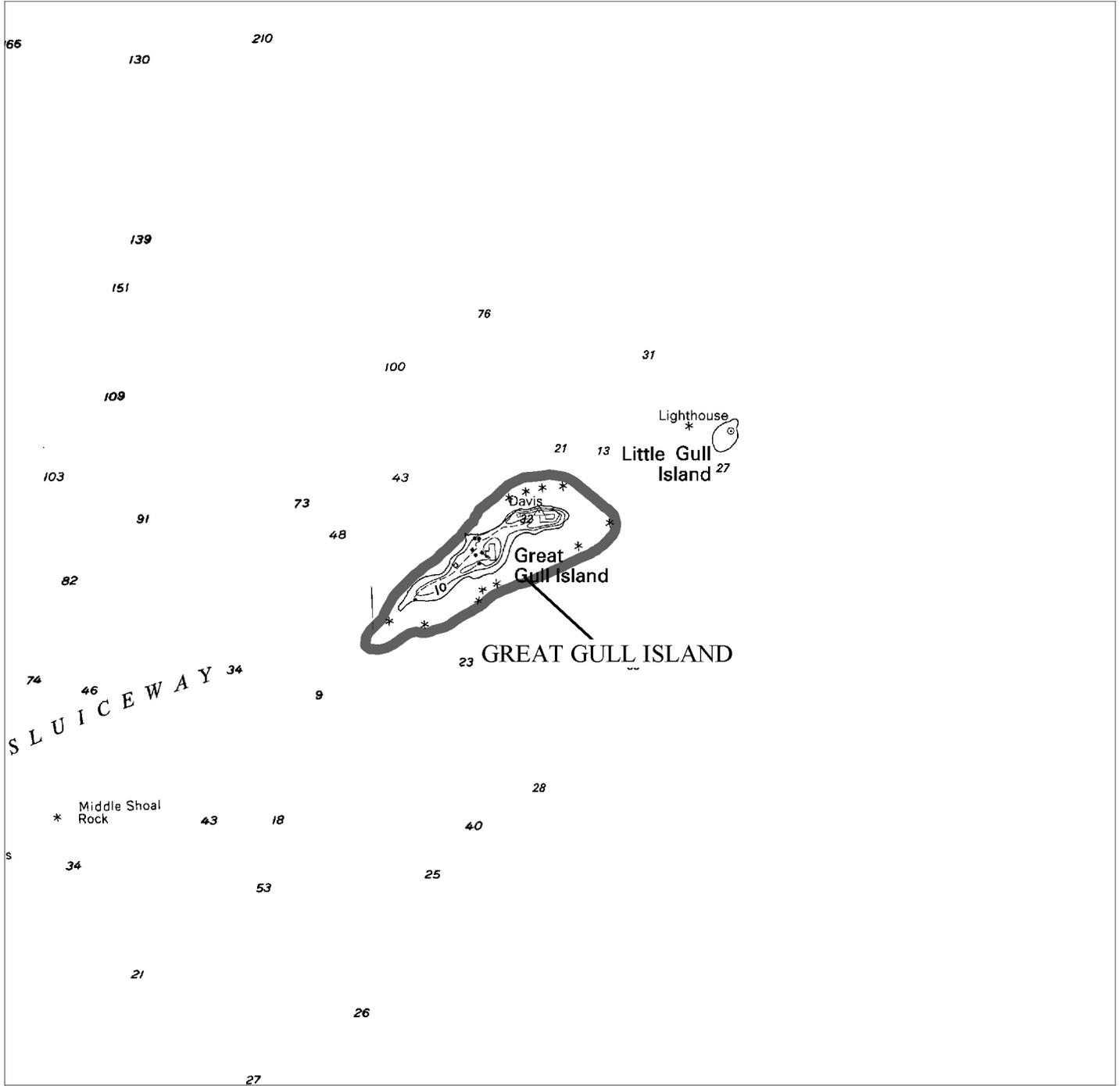
NYSDEC—Region 1  
State University of New York, Building 40  
Stony Brook, NY 11790-2356  
Phone: (631) 444-0354

Wildlife Manager  
NYSDEC—Region 1  
State University of New York, Building 40  
Stony Brook, NY 11790  
Phone: (631) 444-0310

Bureau of Marine Resources  
NYSDEC  
205 N. Belle Meade Road, Suite 1  
East Setauket, NY 11733  
Phone: (631) 444-0430

New York Natural Heritage Program  
Wildlife Resources Center  
700 Troy-Schenectady Road  
Latham, NY 12110  
Phone: (518) 783-3932

Office of Ecology  
Suffolk County Dept. of Health Services  
Bureau of Environmental Management  
County Center  
Riverhead, NY 11901  
Phone: (516) 852-2077



# Significant Coastal Fish and Wildlife Habitats

## Great Gull Island



New York State  
Department of State  
Division of  
Coastal Resources

