

COASTAL FISH & WILDLIFE HABITAT ASSESSMENT FORM

Name of Area: **Lake Montauk**
Designated: **March 15, 1987**
Date Revised: **May 15, 2002**
County: **Suffolk**
Town(s): **East Hampton**
7½' Quadrangle(s): **Montauk Point, NY**

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 large, protected, coastal bay, bordered by much development; not rare in Suffolk County. 0

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: Freshwater tributaries feeding into the Lake have significant concentrations of spotted turtle (SC). Overwintering common loon (SC).
Calculation: $16 + (16/2) =$ 24

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: Commercial bay scallop fishery important on a level between New York State and Long Island. Commercial hard clam fishery and bait fishery of county-level significance. Calculation: $\sqrt{(16 \times 9) + (4/2)} =$ 14

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: Concentrations of wintering waterfowl, bay scallop, and winter flounder of county-level significance. 4

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] = 40

Significance = HI x R = 48

NEW YORK STATE
SIGNIFICANT COASTAL FISH AND WILDLIFE HABITAT
NARRATIVE

LAKE MONTAUK

LOCATION AND DESCRIPTION OF HABITAT:

Lake Montauk is located three miles west of Montauk Point on the South Fork of Long Island in the town of East Hampton, Suffolk County (7.5' Quadrangle: Montauk Point, NY). Lake Montauk was the largest freshwater lake on Long Island, but it has been estuarine since its inlet into Block Island Sound to the north was permanently opened in the 1920's. The approximately 900 acre lake had a healthy growth of eelgrass on the bottom. Presently, eelgrass beds are located only in the northern and western portions of the lake. The fish and wildlife habitat also includes a small freshwater pond (Stepping Stones Pond) off the southwest shoreline of the lake. The lakeshore has been extensively disturbed by residential, commercial and marine development. The water quality is progressively deteriorating due to chronic runoff, boat wastes and increasing subsurface wastewater contributions from shoreline development.

FISH AND WILDLIFE VALUES:

Lake Montauk was a rare ecosystem when it was freshwater but as a coastal embayment, with a maintained inlet and extensive shoreline development, it is not unusual in Suffolk County. Despite the development, Lake Montauk remains a high quality estuary supporting significant populations of fish and wildlife. A comprehensive study of the lake found nearly fifty species of birds, primarily shore and water birds, feeding, nesting, or roosting along the lake shore. Over-wintering waterfowl include common loon (SC), American black duck, red-breasted merganser, Canada goose, white-winged scoter, scaup, goldeneye and bufflehead. During the 1987-1996 period, the annual average number of waterfowl observed was 153 individuals; a peak value of 477 birds was observed in the early 1990s. Other wildlife includes the spotted turtle (SC) which resides in the freshwater tributaries and the small freshwater pond adjacent to Lake Montauk.

The Lake Montauk area provides a variety of marine and estuarine habitats for a wide diversity of fish and invertebrates. The commercial bay scallop fishery is significant on Long Island and other regions of New York State. The hard clam and bait fisheries are significant in Suffolk County. Portions of this habitat area are closed to shellfishing between April 1 and December 14, and between May 15 and October 15. The lake is also the only enclosed embayment on the South Fork supporting a large lobster population.

Fish species that reside and are harvested in the area include bluefish, weakfish, fluke, flounder, blowfish, white bait and striped bass. Lake Montauk is an important commercial fishing port on the South Fork (in 1989 Montauk Harbor was the largest commercial fishing port in the state with respect to landing and number of vessels); the concentration of bait fish is important to this fleet.

In the vicinity of Stepping Stones Pond, the New York Natural Heritage Program has documented several listed and rare plant species, including: coast flatsedge (*Cyperus polystachyos* var *texensis*), long-tubercled spikerush (*Eleocharis tuberculosa*, T), and the best example in New York State of salt marsh spikerush (*Eleocharis halophila*).

IMPACT ASSESSMENT:

Any activity that would further degrade the water quality in Lake Montauk would adversely affect the biological productivity and viability of the commercial fishery in this area. All species of fish and wildlife may be affected by water pollution, such as chemical contamination (including food chain effects), oil spills, excessive turbidity, waste disposal (including boat wastes) and stormwater runoff. Use of pumpout facilities in the no-discharge zone should be encouraged and enforced. Existing sources of pollution, both point and non-point, should be identified and then eliminated or reduced so as to improve water quality in Lake Montauk. The fringing wetlands around Lake Montauk have been impacted and/or lost by increased development along the lake shore. Restoration of wetlands in and around this area should be explored to reduce water pollution in the lake. Restoration opportunities may exist at this site for eelgrass beds, but improvement of water quality may be required before this is possible.

Unrestricted use of motorized vessels including personal watercraft in the protected, shallow waters of bays, harbors, and tidal creeks can have adverse effects on aquatic vegetation and fish and wildlife populations. Use of motorized vessels should be controlled (*e.g.*, no wake zones, speed zones, zones of exclusion) in and adjacent to shallow waters and vegetated wetlands.

Alteration of tidal patterns in Lake Montauk could have major impacts on the fish and wildlife communities present. Dredging to maintain the inlet and boat channels in the lake should be scheduled between September 15 and December 15 to minimize potential impacts on aquatic organisms and to allow for dredged material disposal when wildlife populations are least sensitive to disturbance. Dredging and its effects are a particular threat to submerged aquatic vegetation habitats, such as eelgrass, in Lake Montauk.

Elimination of salt marsh and intertidal areas through excavation, filling, or loss of tidal connection, would result in a direct loss of valuable habitat area. Construction of shoreline structures, such as docks, piers, bulkheads, or revetments in areas not previously disturbed by development (*i.e.*, natural beach, tidal flat, or salt marsh), may result in the loss of productive areas which support the fish and wildlife resources of Lake Montauk. Alternative strategies for the protection of shoreline property should be examined, including innovative, vegetation-based approaches. Control of invasive nuisance plant species, through a variety of means, may improve fish and wildlife species use of the area and enhance overall wetland values.

Also, the increasing resident mute swan population in this area may contribute to nutrient loading in small or enclosed waterbodies, and may affect usage by other waterfowl species. Mute swan control or removal may be beneficial to native waterfowl use of these waterbodies.

KNOWLEDGEABLE CONTACTS:

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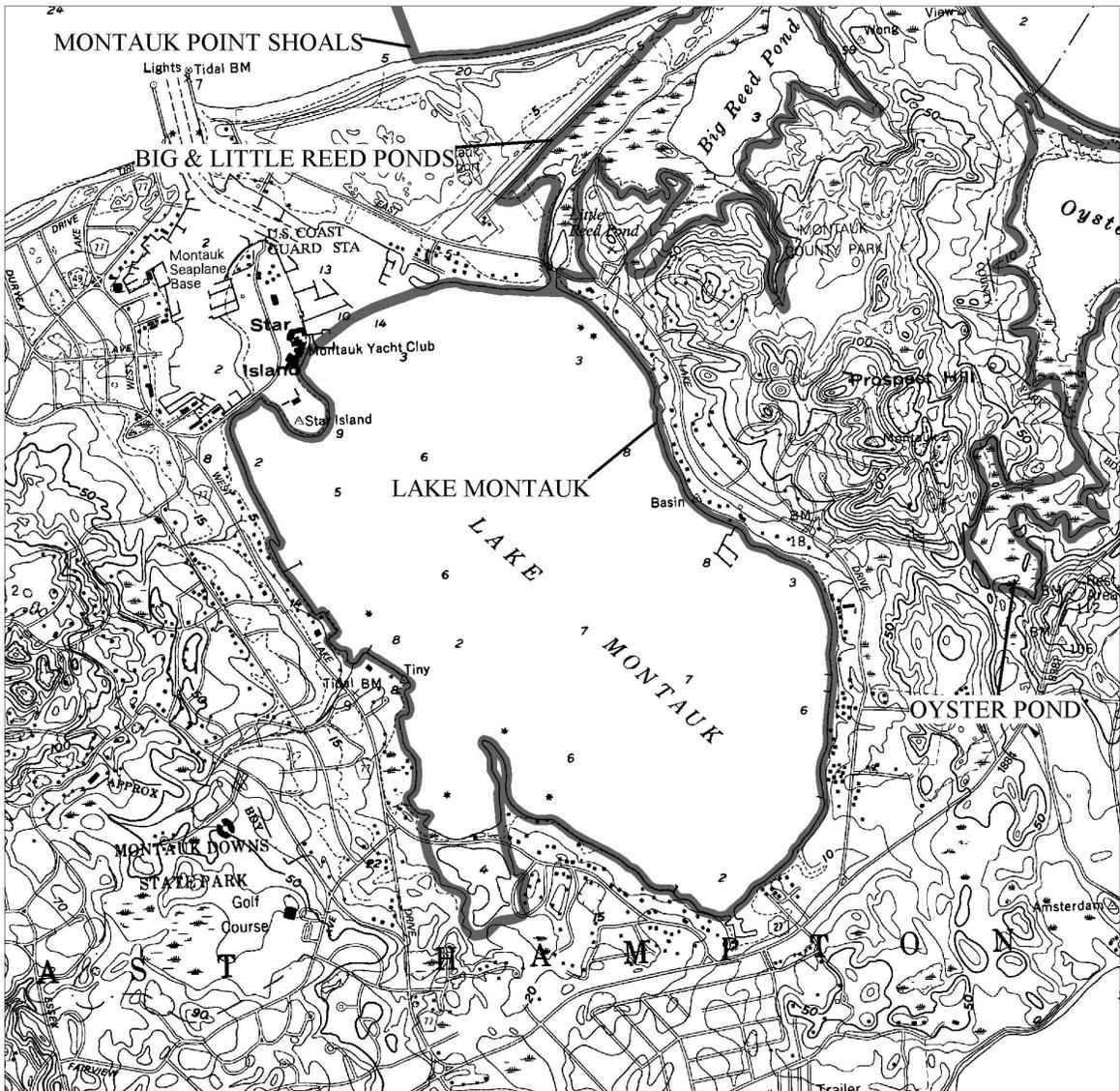
The Nature Conservancy
Long Island Chapter
250 Lawrence Hill Road
Cold Spring Harbor, NY 11724
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Group for the South Fork
P.O. Box 569
Bridgehampton, NY 11932
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East Hampton Dept. of Natural Resources
Town of East Hampton
300 Pantigo Place, Suite 105
East Hampton, NY 11937-2684
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Office of Ecology
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Significant Coastal Fish and Wildlife Habitats



Lake Montauk
Big and Little Reed Ponds (In part)
Montauk Point Shoals (In part)
Oyster Pond (In part)

