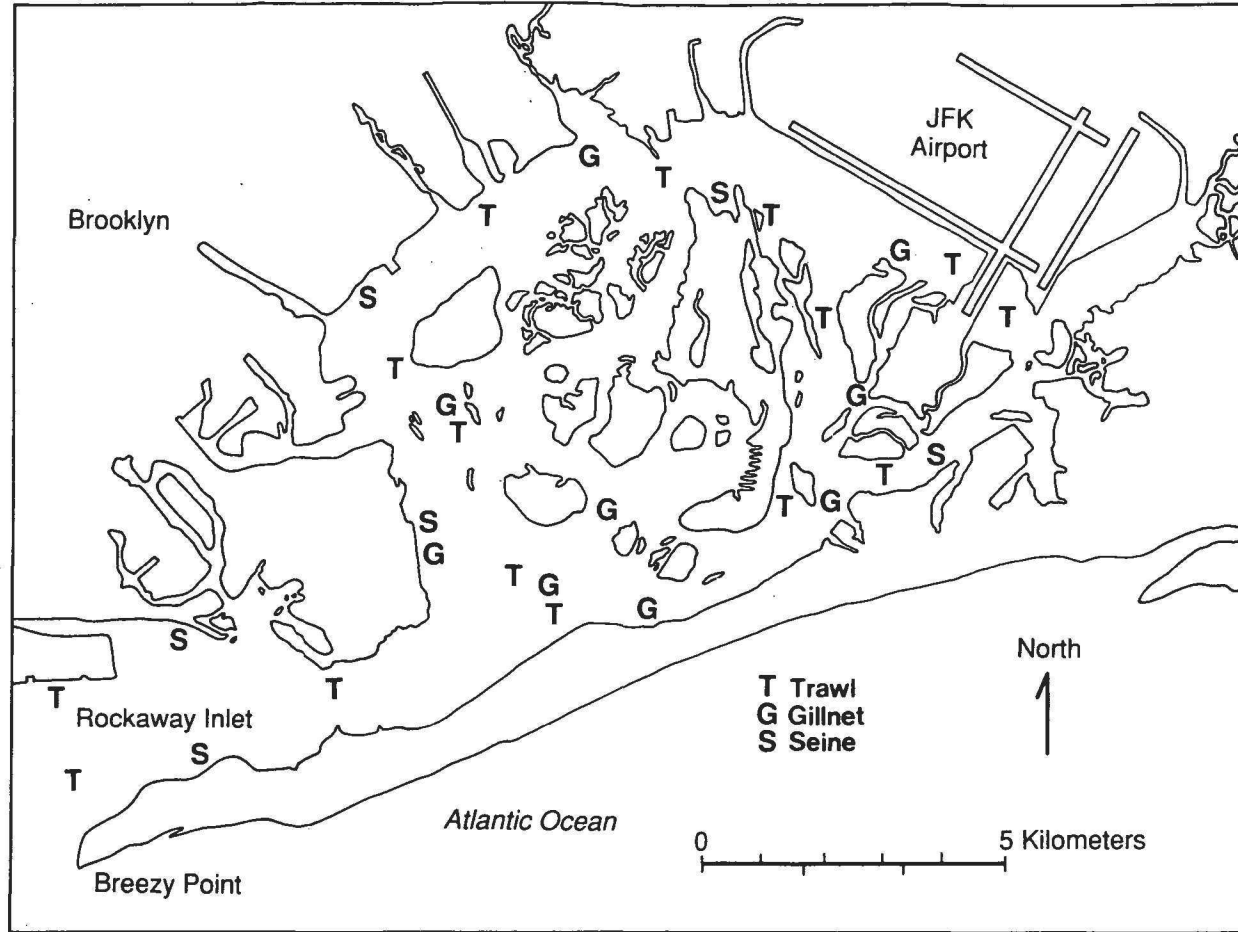


Sampling Stations — Jamaica Bay Finfish Inventory



Total Number of Each Fish Species Captured by Otter Trawl, Gill Net, and Beach Seine in Jamaica Bay, November 1985 to October 1986

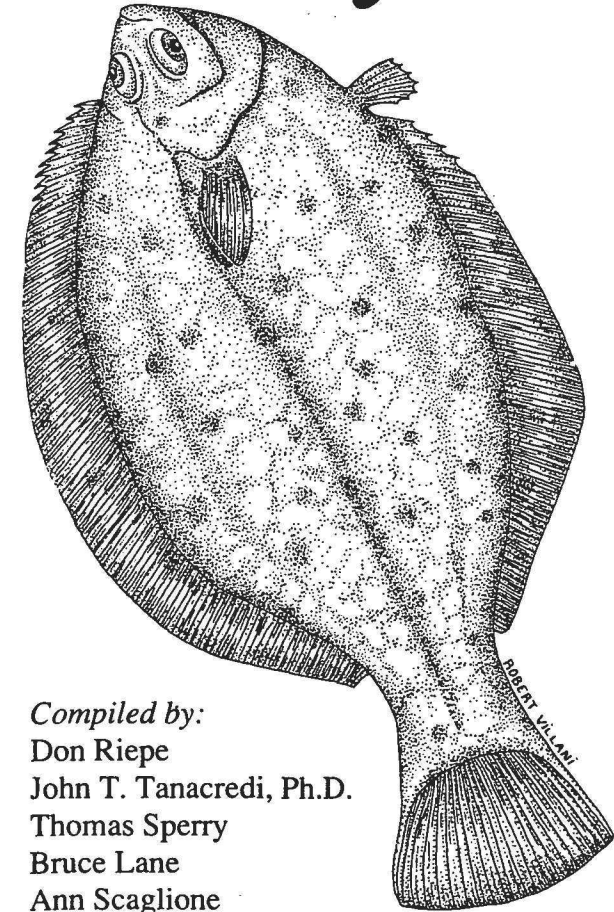
Smooth dogfish	37	White hake	2	Yellow jack	1	Butterfish	12
Little skate	2	Mummichog	210	Crevalle jack	2	Striped searobin	71
Cownose ray	1	Striped killifish	700	Lookdown	2	Grubby	29
American eel	5	Atlantic silverside	5,476	Scup (porgy)	229	Smallmouth flounder	22
Blueback herring	68	Fourspine stickleback	12	Weakfish	119	Summer flounder	110
Alewife	6	Bluespotted cornetfish	1	Spot	1	Fourspot flounder	15
American shad	3	Lined seahorse	56	Northern kingfish	43	Windowpane	114
Atlantic menhaden	551	Northern pipefish	59	Spotfin		Winter flounder	1,075
Bay anchovy	306	Striped bass	2	butterflyfish	3	Planehead filefish	1
Oyster toadfish	19	Black sea bass	40	Tautog (blackfish)	32	Northern puffer	3
Atlantic cod	46	Bluefish	82	Cunner	21	Striped burrfish	1
Silver hake	5			White mullet	19		
Red hake	12			American sand lance	8		
Spotted hake	64			Rock gunnel	21		
				TOTAL		9,719	

Recreational Fishing Survey Gateway National Recreation Area: 1985-1986

Based on interviews of 450 fishermen, fishing the shores or bridges of Jamaica Bay:

1. The average number of years fished Jamaica Bay : 13 years.
2. When asked importance of "fishing for food" as a reason to fish on Jamaica Bay; 46 respondents said it was very important, 86 important, and 206 not important. 112 persons did not respond.
3. When asked, "Do you eat fish caught in Jamaica Bay," 304 persons said Yes, 139 said No, and 7 did not respond.
4. People who eat fish from Jamaica Bay indicated that an average of 2.4 family members also eat Jamaica Bay fish.
5. The 304 persons who said they consume fish from Jamaica Bay were asked which species of fish they eat. The respondents answered as follows: bluefish, 89; winter flounder, 88; summer flounder, 77; porgy, 57; blackfish, 22; weakfish, 11; striped bass, 6; American eel, 5; black sea bass, 5; menhaden, 1; herring, 1.

Finfish of Jamaica Bay



Compiled by:
Don Riepe
John T. Tanacredi, Ph.D.
Thomas Sperry
Bruce Lane
Ann Scaglione
Wayne Stempler

Acknowledgments

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Text: Don Riepe

Design, illustrations, map: Robert Villani



Gateway National
Recreation Area



Background

Of Gateway National Recreation Area's 26,000 acres, more than half comprise the open waters and marshlands of Jamaica Bay. The bay has long been known for its bird populations; a total of 326 species has been recorded at the Jamaica Bay Wildlife Refuge over the past 35 years. More recently, however, the National Park Service has turned its attention to the health, diversity, and distribution of the bay's finfish resource.

Surveys

A total of five separate surveys have been conducted in the bay in the last 15 years: Texas Instruments (1974); New York Aquarium (1983, 1985); U.S. Fish and Wildlife Service (1985-1986); and National Park Service (1988, 1989). A total of 81 species were recorded using otter trawl, gill net, and seine methods. Fish were counted, measured, noted for breeding activity and evidence of disease. At each of 15 sample stations, levels of dissolved oxygen, pH, salinity, and temperature were recorded.

Research in the Bay

Currently, the National Park Service is conducting research on a variety of the bay's ecological parameters, including water quality, fish migration, amphipods, plankton, winter flounder, and toxic contaminants. For information about these studies and other concerns contact Dr. John Tanacredi, Chief, Office of Resource Management and Compliance, Gateway NRA, Floyd Bennett Field, Brooklyn, New York, 11234, (718) 338-3796.

List of Fish Species

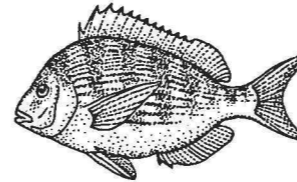
Common Name	Scientific Name
Sand tiger	<i>Odontaspis taurus</i>
Smooth dogfish	<i>Mustelis canis</i>
Spiny dogfish	<i>Squalus acanthias</i>
Little skate	<i>Raja erinacea</i>
Clearnose skate	<i>Raja eglanteria</i>
Cownose ray	<i>Rhinoptera bonasus</i>
Atlantic sturgeon	<i>Acipenser oxyrhynchus</i>
American eel	<i>Anguilla rostrata</i>
Conger eel	<i>Conger oceanicus</i>
Blueback herring	<i>Alosa aestivalis</i>
Alewife	<i>Alosa pseudoharengus</i>
American shad	<i>Alosa sapidissima</i>

Atlantic menhaden (bunker)	<i>Brevoortia tyrannus</i>
Atlantic herring	<i>Clupea harengus</i>
Bay anchovy	<i>Anchoa mitchilli</i>
Inshore lizardfish	<i>Synodus foetens</i>
Oyster toadfish	<i>Opsanus tau</i>
Atlantic cod	<i>Gadus morhua</i>
Atlantic tomcod	<i>Microgadus tomcod</i>
Silver hake	<i>Merluccius bilinearis</i>
Red hake (squirrel hake)	<i>Urophycis chuss</i>
Spotted hake	<i>Urophycis regia</i>
White hake	<i>Urophycis tenuis</i>
Halfbeak	<i>Hyporhamphus unifasciatus</i>
Atlantic needlefish	<i>Strongylura marina</i>
Mummichog	<i>Fundulus heteroclitus</i>
Banded killifish	<i>Fundulus diaphanus</i>
Striped killifish	<i>Fundulus majalis</i>
Spotfin killifish	<i>Fundulus luciae</i>
Inland silverside	<i>Menidia beryllina</i>
Atlantic silverside	<i>Menidia menidia</i>
Bluespotted cornetfish	<i>Fistularia tabacaria</i>
Fourspine stickleback	<i>Apeltes quadracus</i>
Threespine stickleback	<i>Gasterosteus aculeatus</i>
Lined seahorse	<i>Hippocampus erectus</i>
Northern pipefish	<i>Syngnathus fuscus</i>
White perch	<i>Morone americana</i>
Striped bass	<i>Morone saxatilis</i>
Black sea bass	<i>Centropristis striata</i>
Bigeye	<i>Priacanthus arenatus</i>
Short bigeye	<i>Pristigenys alta</i>
Bluefish	<i>Pomatomus saltatrix</i>
Cobia	<i>Rachycentron canadum</i>
African pompano (threadfin)	<i>Alectis ciliaris</i>
Yellow jack	<i>Caranx bartholomaei</i>
Creville jack	<i>Caranx hippos</i>
Bigeye scad	<i>Selar crumenophthalmus</i>
Lookdown	<i>Selene vomer</i>
Scup (porgy)	<i>Stenotomus chrysops</i>
Northern kingfish	<i>Menticirrhus saxatilis</i>
Spot (lafayette)	<i>Leiostomus xanthurus</i>
Weakfish	<i>Cynoscion regalis</i>
Spotfin butterflyfish	<i>Chaetodon ocellatus</i>
Tautog (blackfish)	<i>Tautoga onitis</i>
Cunner (bergall)	<i>Tautoglabrus adspersus</i>
Striped mullet	<i>Mugil cephalus</i>
White mullet	<i>Mugil curema</i>
Northern sennett	<i>Sphyaena borealis</i>
Northern stargazer	<i>Astroscopus guttatus</i>
Rock gunnel	<i>Pholis gunnellus</i>
Ocean pout	<i>Macrozoarces americanus</i>
American sand lance	<i>Ammodytes hexapterus</i>
Naked goby	<i>Gobiosoma boscii</i>
Seaboard goby	<i>Gobiosoma ginsburgi</i>
Butterfish	<i>Peprilus triacanthus</i>
Northern searobin	<i>Prionotus carolinus</i>
Striped searobin	<i>Prionotus evolans</i>
Grubby (sculpin)	<i>Myoxocephalus aeneus</i>
Longhorn sculpin	<i>M. octodecimspinosus</i>
Summer flounder (fluke)	<i>Paralichthys dentatus</i>
Fourspot flounder	<i>Paralichthys oblongus</i>
Gulf stream flounder	<i>Citharichthys arcifrons</i>
Smallmouth flounder	<i>Etropus microstomus</i>
Windowpane	<i>Scophthalmus aquosus</i>
Winter flounder	<i>Pseudopleuronectes amer.</i>
Hogchoker	<i>Trinectes maculatus</i>

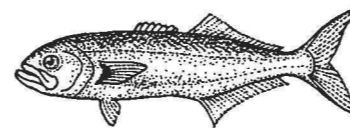
Orange filefish
Planehead filefish
Smooth trunkfish
Northern puffer
Striped burrfish

Aluterus schoepfi
Monacanthus hispidus
Lactophrys triqueter
Sphoeroides maculatus
Chilomycterus schoepfi

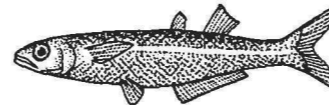
Some Common Fish Species of Jamaica Bay



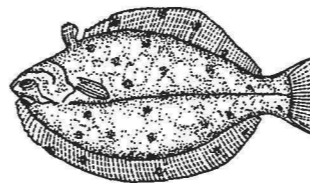
Scup (*Stenotomus chrysops*)
Known locally as "porgy," it is valued both commercially and for sport. It is a bottom-feeder that congregates in large schools. Common in summer months.



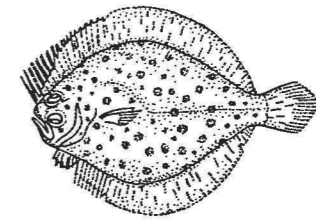
Bluefish (*Pomatomus saltatrix*)
A popular marine gamefish and aggressive carnivore. Young fish, called "snappers," are common in summer in the bay. The world record on rod and reel is 31 lbs. 12 oz. taken at Hatteras Inlet, North Carolina in 1972.



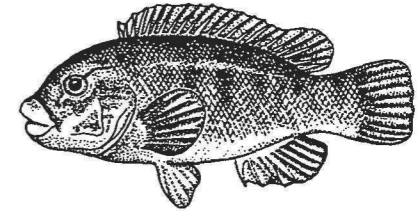
Atlantic Silverside (*Menidia menidia*)
Very abundant in shallow waters in summer, this small fish is sold commercially as bait. They have excellent food value when deep-fried.



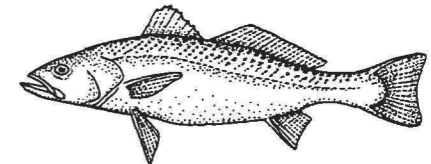
Winter Flounder (*Pseudopleuronectes americanus*)
Found in every month but most abundant November through June. A right-eyed flounder with a small mouth. Well-known to fishermen, this species occurs from Labrador to Georgia.



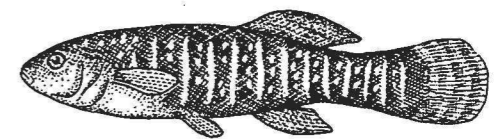
Windowpane (*Scophthalmus aquosus*)
This translucent flounder with beautiful markings is edible but not commercially important because of thinness. Caught in trawl net every month of the year.



Blackfish or Tautog (*Tautoga onitis*)
Commonly found around wrecks, pilings, and mussel beds, this good-eating fish is another favorite of fishermen in the bay. The young of the year are bright green in color resembling the sea lettuce in which they hide.



Weakfish (*Cynoscion regalis*)
Sold commercially as "sea trout," this gamefish appears to be increasing in numbers in the bay in recent years. Good numbers of juvenile fish were caught in 1988 trawls.



Mummichog (*Fundulus heteroclitus*)
Small fish of salt marshes and tidal creeks. Its range extends from Gulf of St. Lawrence to northeast Florida. Mummichogs are a hardy and adaptable species, able to survive extremes of temperature, salinity, and oxygen levels. Commonly used as bait.