

BILLFISH

Swordfish have been severely overfished. Most billfish

and released.

still caught recreationally off New York are tagged

Conservation Note: Billfish populations have decreased throughout their range and are caught with much less frequency off New York than in past years.

white Marlin—a seasonally-migratory schooling fish of tropical and subtropical waters. It can reach a size of nine feet and 180 lbs, but averages 50-80 lbs off New York. The white marlin has a conspicuous, single lateral line along its sides, rounded dorsal, pectoral and anal fins, and the front lobe of the first dorsal fin exceeds the height of the body. It eats small pelagic fish, crustaceans and squid. Anglers catch this

fish by trolling with strips of natural baits and artificial lures, or by

casting lures or small live baits on light tackle.

Blue Marlin—a migratory fish of tropical to warm temperate waters. It can reach 14 feet and 2,000 lbs in size, but averages 300-500 lbs off New York. It has a cobalt blue top, silver sides and belly with light blue or lavender bars on the sides, and a large, pointed anal fin. The pointed front lobe of the dorsal fin is less than the height of the body, and the inconspicuous lateral line is a network of hexagons covering the sides. The blue marlin eats pelagic fish and squid. It is caught by anglers trolling with large whole natural baits or artificial lures.

Atlantic Sailfish—a migratory fish of tropical and subtropical waters. It can reach eight feet and 128 lbs in size, but averages 60-80 lbs off New York. The first dorsal fin is high and saillike, hence the name. The Atlantic sailfish has a deep gray or cobalt blue first dorsal fin with black spots. On the sides, there are pale blue bars or rows of spots and a conspicuous single lateral line. Adults feed near the surface, eating small pelagic fishes, octopus and squid. Only rarely caught off New York, this sailfish is taken by anglers trolling with strips of natural baits or artificial lures, or by casting with small live baits on light tackle.

Swordfish (a.k.a. broadbill)—a migratory fish of tropical to temperate waters. It can reach 15 feet and 1,300 lbs in size, but averages only 50-80 lbs off New York. It has a dark brown, black, blue, purple or bronze upper body, shading to light brown on the belly.

The dorsal fin is high, pointed, and concave on the rear margin. The swordfish uses its long flattened bill to stun or kill prey, which includes mid-water to deep sea pelagic fishes and squid. A once popular sport-

fish esteemed for its delicious flesh, the swordfish is now virtually unavailable to the New York recreational angler. Fishing methods include trolling natural baits or drifting at night using natural baits.

Artwork by Diane Rome Peebles (art not to scale). Copyright October 2000



SPONSORED BY Federal

Federal Aid in Sport Fish Restoration
Division of Fish, Wildlife & Marine Resources

SHARKS

Conservation note: Many sharks have been overfished throughout their ranges and are caught with much less frequency off New York than in past years. Most sharks caught recreationally off New York are tagged and released.

Shortfin Mako—a solitary migratory

shark of tropical to warm temperate waters. It can reach 12 feet and 1,200 lbs in size, but averages 200-400 lbs off New York. Its cobalt blue back shades to light blue on the sides, and the first dorsal fin starts just behind the pectoral fins. The shortfin make has long, narrow, curved teeth with no cusps at the base and no serrations on the edges. It eats pelagic fishes including swordfish and tunas. This shark makes an excellent meal and

is caught by trolling with whole, large natural baits or artificial lures, and by chumming or drifting live baits.



Blue Shark—a migratory shark of cool temperate waters. It can reach 12 feet and 600 lbs in size, but averages 150-300 lbs off New York. Found alone or in packs, it is indigo blue on the back, shading to bright blue on the sides, and the first dorsal fin begins midway between the pectoral and pelvic fins. The blue shark has a long slender snout with large curved teeth in the upper jaw. Both edges of the teeth are serrated, and the front edge is convex, the rear edge concave. This shark eats squid, sea birds and pelagic fishes, including other sharks. Considered only fair tasting, it can be caught by chumming with live or dead baits, or by trolling.

White Shark (a.k.a. great white shark)

—a solitary migratory shark of cool temperate waters. It can reach over 26 feet and 5,000 lbs in size, but averages 1,000 lbs and larger off New York.

It is gray/brown, dull slate blue, or almost black above, shading to dirty white below. The rear edges of the dorsal and caudal fins are darker, and there may be a black spot near the pectoral fin. The great white's caudal peduncle* is strongly keeled and flattened; the anal fin is far to the rear. It uses its large, triangular, sawedged teeth to eat fish, squid, sea turtles, marine mammals and sea birds.

*see glossary on last page

Thresher Shark—a solitary migratory shark of warm to cool temperate waters. It can reach 20 feet

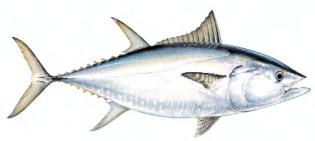
> and 1.000 lbs in size, but averages 150-400 lbs off New York. It is brown to gravish brown on its back and sides, and the upper lobe of its caudal fin is longer than the rest of its body. It has a very short snout with slightly curved small teeth that have no cusps or serrations. The thresher shark eats pelagic fishes and squid. It makes an excellent meal and can be caught by trolling with whole live or dead natural baits and artificial lures, or by still fishing with live bait or whole and chunked dead baits.



Scalloped Hammerhead—a migratory shark of tropical to warm temperate waters. It can reach 14 feet and 800 lbs in size, but averages 200 lbs off New York. It is easily identified by its "hammershaped" head with the eyes situated at the ends of broad flat projections on the side of the head and snout. The leading edge of its snout is evenly scalloped, its back is brown, shading to light brown or gray on the belly, and the upper lobe of the caudal fin is much longer than the lower (but not nearly as long as the thresher shark). This hammerhead eats fish, including small sharks and stingrays. It is considered a good meal and can be caught by slow trolling, drifting or chumming with oily natural baits.

TUNAS, MACKERELS AND OTHER PELAGIC SPORTFISH

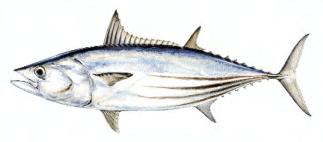
Conservation note: The bluefin tuna is an ocean traveller, migrating across to both sides of the Atlantic Ocean. Strict international quotas, size and catch limits are in place to try to rebuild the severely overfished Atlantic population.



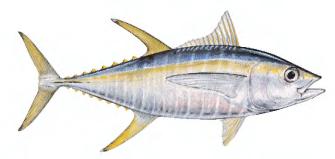
Bluefin Tuna—a highly-migratory schooling fish of subtropical and temperate waters. It can reach 14 feet and 1,500 lbs in size, but averages 350-450 lbs off New York. The anal fin and finlets are a dusky yellow with black margins, and the pectoral fins extend to about the middle of the first dorsal fin. The bluefin tuna eats pelagic fishes, crustaceans and squid. It makes a tasty meal and is popular for sashimi, or raw fish. Bluefin can be caught by trolling with live or dead natural baits and artificial lures, or by still fishing with live bait or whole or chunked dead baits.

Albacore (a.k.a. longfin tuna)—a seasonally-migratory fish of tropical to warm temperate waters. It can reach over four feet and 90 lbs in size, but averages 30-60 lbs off New York. It has large eyes, a white margin on the caudal fin and finlets, and the pectoral fins extend beyond the base of the anal fin. The albacore eats small pelagic fishes, crustaceans and squid. A highly-prized food fish, the albacore can be caught by trolling with artificial lures, or by casting or drifting whole or live baits on light tackle.



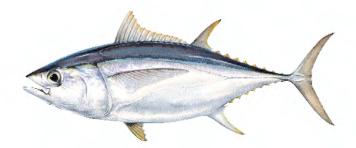


Skipjack Tuna—a seasonally-migratory schooling fish of tropical and subtropical waters. It can reach over three feet and 75 lbs, but averages 5-15 lbs off New York. The skipjack has silvery sides and belly with 4-6 dark stripes extending from mid-body to near the tail, short pectoral fins and small conical teeth. It eats small pelagic fishes, crustaceans and squid. Considered fair tasting, this tuna is caught by trolling with strips of natural baits or artificial lures, or by casting lures or small live baits on light tackle.



Yellowfin Tuna (a.k.a. Allison tuna)—a seasonally-migratory fish of deep, warm temperate waters. It can reach seven feet and 400 lbs in size, but averages 40-80 lbs off New York. It has a blue back, silver sides and belly with a golden-yellow or iridescent-blue stripe often present on the sides. It gets its name from the yellow dorsal fins and finlets. The yellowfin tuna eats small pelagic fishes, crustaceans and squid. It is excellent to eat and is taken by anglers trolling with strips of natural bait, small whole bait or artificial lures, or by chumming with live bait.

Bigeye Tuna—a seasonally-migratory schooling fish of warm temperate waters. It can reach nearly eight feet and 435 lbs, but averages 50-150 lbs off New York. It has large eyes (hence, the name), a short, blunt head and a bronze stripe on the sides. The pectoral fins extend to just under the second dorsal fin. The bigeye tuna eats small pelagic fishes, crustaceans and squid. It makes an excellent meal and can be taken by trolling deep with rigged natural baits or artificial lures.





Atlantic Bonito — a migratory schooling fish of tropical to temperate waters. It can reach three feet and nearly 20 lbs in size, but averages 5-15 lbs off New York. The Atlantic bonito has silvery sides and belly, a low first dorsal fin that slopes evenly toward the tail, and dark stripes on its blue/blue-green back. It eats small pelagic fishes and squid, usually feeding near the surface. Good tasting, anglers catch the Atlantic bonito by trolling with strips of natural baits and artificial lures, or by casting lures or small live baits on light tackle. Flyfishing is another method of catching this fish.



Little Tunny (a.k.a. false albacore)—a

migratory schooling fish of tropical to warm temperate waters. It can reach well over two feet and nearly 40 lbs in size, but averages 5-15 lbs off New York. The little tunny is common inshore and can be identified by the dark wavy lines that run from mid-body to the tail on the upper back, and the dark spots found on the sides between the pectoral and pelvic fins. It feeds near the surface, eating small pelagic fishes. Anglers catch this fish by trolling with strips of natural baits and artificial lures, or by flyfishing or casting (sometimes from shore) lures and small live baits on light tackle.



Spanish Mackerel—a migratory schooling fish of tropical to warm temperate waters. It can reach three feet and over 10 lbs in size, but averages 2-5 lbs off New York. The Spanish mackerel has a bluish back that quickly fades to silver on the sides and belly. There are many bronze oval spots on the sides, and the first dorsal fin's front is blackish. The Spanish mackerel eats small pelagic fishes and crustaceans. Excellent table fare, this fish is caught (sometimes from shore) by a variety of methods including: flyfishing or casting with small jigs and spoons on light tackle; live bait fishing with small fish and shrimp; and by trolling with spoons and feathers.

King Mackerel (a.k.a. kingfish) —a migratory schooling fish of tropical to subtropical waters. It can reach over five feet and 100 lbs in size, but averages 25 lbs off New York. The blue-gray back fades to silver on the sides and belly, and the lateral line dips sharply below the second dorsal fin. Although young kings have spots similar to Spanish mackerel, these fade with age. The King mackerel eats pelagic fishes. It make an excellent meal and is caught by trolling with small whole baits, strips of natural bait and artificial lures. Live baiting, drifting with natural baits and casting with lures also work well.



Wahoo —a seasonally-migratory fish of tropical to warm temperate waters. It can reach seven feet and over 180 lbs in size, but averages 40-50 lbs off New York. Its back is a deep metallic blue, and there are many light blue vertical bands on the sides, though these are sometimes faded or missing in older specimens. The lateral line dips noticeably after the midpoint of the first dorsal fin. The wahoo uses its moveable upper jaw and many strong sharp teeth for eating pelagic fishes and squids. Excellent eating, anglers catch wahoo by trolling with artificial lures and whole or strip natural baits, or by drifting with live baits or kite fishing.



GLOSSARY:



Dolphin — a migratory schooling fish of tropical to warm temperate waters. It can reach over five feet and 85 lbs in size, but averages 5-25 lbs off New York. A colorful fish, it is brilliant blue to blue-green above, golden yellow with many dark and light spots on the sides, and silvery or yellow on the belly. It has a single, long blue dorsal fin and a long yellow or silvery anal fin. A male dolphin fish has a high, blunt forehead; the female's is rounded. Attracted to floating objects, it makes an excellent meal and is caught by trolling with rigged natural baits and artificial lures, or by live-bait fishing or casting near floating debris or seaweed.



Cobia —a migratory schooling fish of tropical to warm temperate waters. It can reach six feet and 150 lbs in size, but averages 5-25 lbs off New York. The cobia has a long, broad, depressed head, a dark brown back with alternating stripes of light brown or bronze, dark brown and white. The first part of the second dorsal fin is higher than the rest of the fin and triangular in shape, giving a cobia on the surface a shark-like appearance. The cobia eats crustaceans, small fishes and squid. Excellent to eat, it is attracted to floating objects, buoys and pilings, and is caught by trolling with natural baits and artificial lures, or by bottom fishing, jigging, chumming or casting.

lateral line—a tubular sensory organ that runs along the side of the body caudal peduncle—region of body between end of the anal fin & beginning of caudal fin

pelagic—of, or relating to, the open ocean
 pectoral fin—paired fins located towards head/gills

 on the side of the body.

 pelvic fin—paired fins located on the underside of the body.