

lined seahorse



bay scallop



UNDER THE SEA

—a photographic sampling of New York's marine life

By Chris Paparo

As a native Long Islander, I have been exploring the wilds of Long Island for more than 30 years. My passion for coastal ecology, and especially fishing, keeps me captivated with the area. Through my photography, writing and lecturing I am able to bring public awareness to the diverse aquatic life that calls the island home.

Here is just a small sampling of some of the many marine creatures you can find in New York's waters.

Lined Sea Horse

Probably one of the most fascinating fish found in New York waters is the lined seahorse. With its vertical orientation, long snout, armor-plated skin, and a grasping tail that looks more typical of a monkey than a fish, it is hard to believe that it is in fact a true fish. Even more intriguing is the manner in which it reproduces. The female seahorse transfers its eggs into the pouch of a male where he will then fertilize them. After a gestation period of about two weeks, the male can give birth to as many as 1,500 young.

Forbes Sea Star (see back cover)

Although commonly called starfish, sea stars are not fish. Rather, sea stars belong to a group of spiny-skinned animals known as echinoderms, which also includes sea urchins, sea cucumbers and sand dollars. Preferring to eat bivalves such as clams, mussels and oysters, a Forbes sea star has hundreds of suction-cup, tube feet that it wraps around its prey to pull it open. It then pushes its stomach through its mouth and into the shell of its prey, secreting digestive enzymes into the open shell. The prey is turned into a "soup" and is absorbed by the sea star's stomach until all that is left is the empty shell.

Bay Scallop

In addition to being a favorite among seafood lovers, the bay scallop is also the state shell of New York. Scallops have approximately 18 pairs of bright, beautiful blue eyes located along the margin of their shells. These eyes are capable of detecting the movements of potential predators. When threatened, scallops can "swim" to safety by clapping the two halves of its shell together. This clapping motion is created by the scallop's single, large abductor muscle. Unlike with other bivalves (clams, mussels, oysters), this muscle is usually the only part eaten by people; generally the rest of the scallop is discarded.

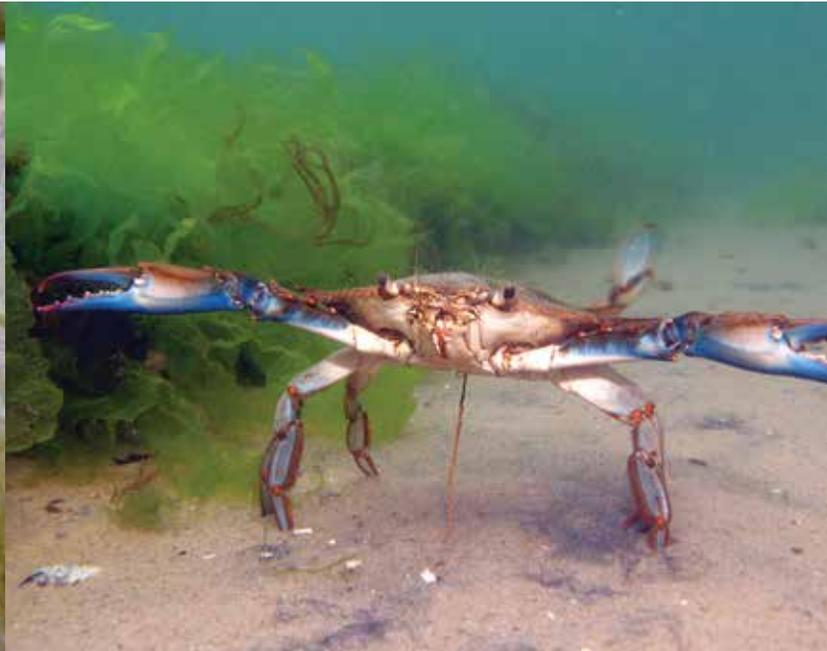
Northern Puffer

Also called a blowfish, the northern puffer gets its name from its unusual defense mechanism: when threatened, it will blow up like a balloon by pulling water into its stomach. While the puffer's increased size limits its mobility, it makes it difficult for a predator to consume it. Once the danger passes, the puffer quickly deflates, and goes about its business.

summer flounder (fluke)



blue crab



spotfin butterflyfish



northern puffer



Summer Flounder

One of the most popular marine game fish in New York is the summer flounder. Better known as fluke, they are found inshore during summer months, making them easily accessible to both the shore and boat angler alike. Similar to a chameleon, fluke are capable of changing their color in an instant to match their surroundings. As an ambush predator, this allows them to lie in wait for an unsuspecting baitfish to swim within reach of their large, toothy mouth.

Blue Crab

There is no better way to describe the blue crab than with its Latin name, *Callinectes sapidus*, which translates to “Beautiful savory swimmer.” These crabs are opportunistic scavengers and also aggressive predators. With powerful claws and paddle-like rear legs that are excellent for swimming, blue crabs are capable of feeding on clams, mussels, snails, worms, fish and even other crabs. The blue crab pictured here was even aggressive towards me, lunging at me several times before retreating to deeper water.

Spotfin Butterflyfish

Flowing north along the east coast of America, the Gulf Stream current brings warm ocean water from the tropics to our area, and with it, many tropical fish, including the spotfin butterflyfish. Arriving by early July, these tropical visitors find suitable habitat among the jetties and eel grass meadows along the south shore of Long Island. Many of these tropical fish thrive throughout the summer, only to perish once winter arrives, as they are incapable of migrating the great distance back to the tropics.

hermit crab



striped sea robin



northern star coral

Hermit Crab

Unlike other crabs, hermit crabs lack a hard shell to protect their abdomen. Instead, their body is soft and almost worm-like. To avoid predation, hermit crabs find empty snail shells to live in. Pictured is a flat-clawed hermit crab that has taken residence in the empty shell of a northern moon snail.

Striped Sea Robin

This local fish has many unique features. Large, round pectoral fins look more like the wings of a bird than fins of a fish. Modified pelvic fins that are finger-like in appearance are used to sift through the substrate to locate small fish, squid, crustaceans and bivalves to feed on. As these fish sift along the bottom, it appears that they are walking rather than swimming. Sea robins have large bony heads with spines along the gill covers that provide protection from predators. In addition, this fish can make a grunting sound, especially if caught while fishing.

Northern Star Coral

Although most people associate coral with tropical regions, New York is home to a species of coral known as the northern star coral. This species of coral does not grow into large branching structures typical of species found in the Caribbean; rather it encrusts hard substrates. A strict filter feeder, it prefers areas with good water flow. Strong currents bring plenty of food which the coral catches in its stinging tentacles.



Christopher Paparo is the manager of Stony Brook Southampton's Marine Sciences Center. He has a BS in marine biology, and is an avid outdoorsman who enjoys fishing, hunting and photography (check out Fish Guy Photos).