

Migration and Spawning Habits of the Striped Bass; For the Fisherman Magazine **By DJ Muller**

The striped bass is an intriguing species no doubt. Understanding where to find them and how to be proficient in catching them can take a lifetime in and of itself. Understanding how they migrate and reproduce will also give you greater understanding into the complex world of the striped bass and will give you an edge on planning an approach to how you want to target your bass.

Let us begin by finding the stripers while they are sitting still, where they winter. There are basically three major places where bass hold in the winter time; off the coast of North Carolina, in the Chesapeake Bay and its tributaries, and in the Hudson River.

As the water warms in the spring and days become longer the bass then begin to move or migrate, this is where it becomes rather complex.

There are two types of migrations that striped bass part-take in early in the year, a coastal migration, in which they head north along the coast, or a spawning migration, where they move up into the fresh water of rivers to spawn, after which they begin the coastal migration.

The Coastal Migration.

This migration is simple and easy to comprehend. The bass move north along the coast in the spring, eating along the way, fattening up from a winter's slumber. They will stop moving north when they reach a comfort zone, water temperature in the mid-60's to 70, and when they find a sustainable bait supply. The majority of the bass summer in Rhode Island and Massachusetts. In the fall as the water temperatures cool and the days begin to shorten, the bass, following the great bait schools (also migrating), will begin a return trip down along the coast heading back from where they came. At this point their instinct tells them that they need to fatten up, so they eat every thing in sight. This they need to do for both for the energy for long journey south, and for the winter lay over once they arrive to the wintering grounds.

Thus we have the spring and fall migrations of the striped bass each year; both give the striper fisherman along the coast, from Maine to Hatteras, an opportunity for some prime striper fishing.

Migrating stripers will travel between 600 and 1,600 miles a year. The large majority of stripers call the Chesapeake Bay their home. The Chesapeake Bay/North Carolina fish are the fish that travel the longest distances. The Hudson River fish are much more restricted in their travel. The furthest they will travel is usually Cape May to the south and Block Island or Cape Cod to the north. Most stripers migrate, however there are strains of bass that will not leave a bay or river system for their entire life.

The Spawning Migration.

As the spring waters warm something deep within the striped bass call them to reproduce. Male bass reach sexual maturity at the age of two or three. The female bass can not reproduce until the age of about 4 years, and not commonly to about 6. The size of a six year old female is about 28 inches and this is why many of the regulations are set at a 28" minimum. The justification here is that the females will get at least one good

spawning year before being terminated. Stripers are anadromous, which means they live in saltwater but spawn in freshwater. Stripers when they spawn return to the same river to lay eggs every year they spawn, similar to salmon, the only difference being that stripers don't die after laying their eggs. Not all stripers spawn every year, especially older ones that may spawn every four or five years. It is estimated that a 12 pound bass will lay approximately 850,000 eggs per spawn, whereas a 50 pound bass will lay roughly 4-5,000,000 eggs per spawn.

There are some very important things that need to happen in order for an egg laying session to go well and for the spawn to be successful. *Good water quality* is vital. It has to be fresh and clean, slight salinity can be useful. *Good water movement* is also important; once the eggs are laid they need to be mixed well with the sperm or milt from the male and the moving water helps make this happen. The good water movement also keeps the eggs off the bottom where they can become silt covered and die. Probably the most important variable is *water temperature*. The optimum range is between 57 and 71 degrees with around 65 being the most desirable.

It has been said that the best spawning years have followed extremely cold winters.

The Reproduction Act.

When it comes time to spawn the females and males will move up the rivers, some times more than 100 miles. The smaller males arrive on the scene first, sometimes a couple weeks before the cows. When a good area is found, an area that meets all of the previously mentioned criteria, the spawning ritual begins.

The process, which is described by those that have seen it, is an amazing event. Locals on the Nanticoke River call them "rock fights" because it looks like the fish are fighting on the surface. The egg-laden female swims up river giving off her scent which in turn attracts the male bass. When she is ripe, or ready to lay her eggs some times 10-20 male bass, depending on the size of the female, will hit against her body and stomach in an effort to help her release the eggs. The males at the same time will swim around releasing milt or sperm. The entire ordeal takes place on the surface where there is thrashing and splashing and it could last for hours. The female releases a mixture of eggs and oils, these eggs mix with the males milt and the eggs get fertilized.

The fertilized eggs will then drift in the currents for 36 to 72 hours before hatching. At this point they are very vulnerable to predators and mortality is very high.

At the end of the following winter the small stripers will be about 4-5 inches long and feed on small crustaceans and worms. By the end of one full year, they will reach a length of 10-12 inches. Striped bass do not migrate the first two years of life but soon they will be ready to join their older brothers and sisters in the yearly coastal migration.

Well there you have it striped bass migration and spawning in a nutshell. The spawning process of large female stripers is a beautiful and very important ingredient in the circle of life of a striped bass. It would be worth serious consideration when deciding on keeping or releasing a large bass especially for no other reason than bragging rights. In regards to the migration, you now have a clearer understanding of how and why stripers move along our coastlines and you can now have a better idea as to how and when to

target these fish. Fish hard, enjoy yourself, but please respect the resource while you are doing it.
See you out there!