

Striped bass are not overfished! They are Underfed!

by BEV LANDSTREET



The ASMFC has determined (again!) that the number of spawning Atlantic Striped Bass is below the required threshold to maintain proper recruitment (newborn) and therefore, sustainable population abundance. The logical conclusion would be to restrict activities that reduce abundance, such as commercial and recreational fishery catch limits. It's a pretty simple formula, right?

$$(Existing\ Stock) - (Fishing) = (Abundance)$$

So, less fishing = more abundance.

But, how simple is it?

The left side of this equation contains two factors: (*Existing Stock*) and (*Fishing*). One represents the *Supply* (or production) of fish in the water, the other represents the *Demand* for fish to be taken out of the water. If one believed that the *Supply* was constant and only looked at *Demand*, one would conclude that stripers are overfished (relative to *Existing Stock*). So, the ASMFC solves for *Abundance* by reducing demand.

But what about increasing the existing stock?

It's apparent that recreational fishermen have room to improve their release techniques. Instead of "catch and release", maybe we should call it "**catch and release alive.**"

But, is that all? The release mortalities have not been increasing *per se*, and the commercial fishery has not significantly increased their catch by enough to account for the depletion. No matter the regulation, ASMFC seems to swing between *Abundance* and *Depletion*, Excitement and Panic.

Fishermen are asking: "Didn't we fix that, last time?" There is a lot of blame to go around, but what's the real reason why stripers are not increasing in abundance and can we do anything about it?

Why is abundance so low?

Is it a *Supply* problem or a *Demand* problem? Is it fishing pressure? Inconsistent regulatory policy? Is it environmental? Or even competition from other species?

Regulators seem to focus on the demand for fish, under the assumption that the existing stock will rise to meet demand. By only looking at *Demand*, the ASMFC has one solution: over fishing. But they miss key parts of the equation, namely, the supply of *Existing Stock*.

Perhaps a better question might be: *How much Existing Stock can the current habitat sustain, and what can we do about it?*

Conservation organizations like Ducks Unlimited, Trout Unlimited, Tall Timbers, and TRCP have shown that **improved habitat** increases the Existing Stock. Habitat has as much or more to do with abundance as hunting or fishing pressure does. We've done a lot for the ocean environment over the last few decades by cleaning up water and governing catch limits for both commercial and recreational fishermen. So, we should certainly be experiencing the benefits of that clean-up, by now.

Then, what is the problem, and can we do anything about it?

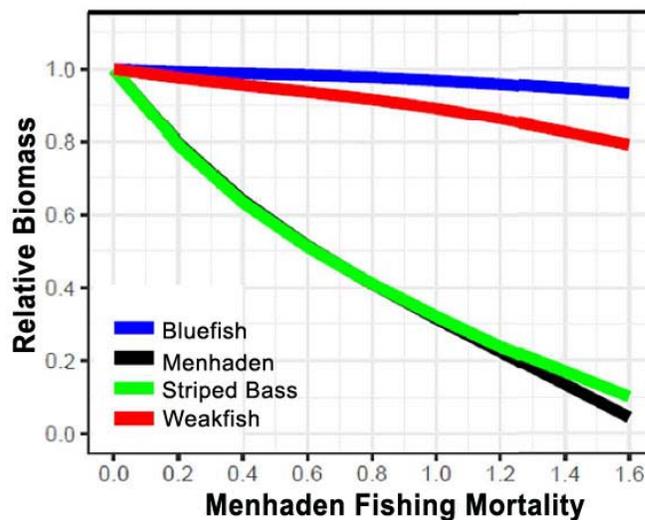
The problem is not clear until one looks the competitive forces involved in both parts of the equation. Let's start by looking at the stripers' habitat.

Water quality is improving in estuaries like the Chesapeake Bay, where about 70% of all striped bass are raised. Other estuaries on the East coast, like the Hudson, the Connecticut and Long Island Sound are constantly improving. So, if not water, then what is the limiting factor?

How about their food sources?

The chart below shows the relative stock biomass (abundance x weight) of various game fishes, relative to one forage fish: **Atlantic Menhaden**. Note the strong relationship between menhaden abundance and stripers. Both recreational and commercial fishermen have long seen and understood this interdependent relationship between menhaden and striped bass. So, let's look at what's happened to menhaden abundance.

A recent scientific study showed that the menhaden reduction fishery has lowered striped bass abundance by about 30% by depleting the striper's key food source (see chart).



This may be a shocking finding, but Cooke Inc., the owner of Omega Protein, purse seines hundreds of millions of pounds of menhaden on the East Coast and in the Chesapeake Bay. They are literally starving striped bass in their largest East coast nursery, the Chesapeake Bay. Source: ([Evaluating Ecosystem-Based Reference Points for Atlantic Menhaden](#), Andre Buchheister, July 31, 2018).

So, while regulating the recreational and commercial catch of striped bass is necessary, it is likely more important to reel in the catches of the industrial menhaden fishery. Just think how many bass we would have if you compounded that 30% additional striped bass over five or ten years! **(to page 9)**