

# Black Sea Bass Facing The Future

by CHARLES WITEK

*Charles Witek, from Greenwich CT, has spent over 50 years on the water, and is a well-known author and blogger. Witek said, "I have realized that without strong fisheries laws and effective conservation measures, the future of salt water fishing, and America's living marine resources, is dim."*



A decade or so ago, black sea bass weren't on most anglers' minds, at least not in New York and New England.

There were a few hard-core wreck fishermen who targeted them during the summer, and a few party boats that made winter trips out to deep-water wrecks where the big knot-headed males could be found in abundance, but for most of us, black sea bass were something that we caught by accident while drifting for fluke, or that came up on mixed-bag for-hire trips, along with the fluke, maybe blackfish, and porgies.

Like a lot of our local species, black sea bass were badly overfished by the late '80s, but thanks to the Magnuson-Stevens Fishery Conservation and Management Act, with its prohibitions on overfishing and its rebuilding deadlines, the stock bounced back in a big way.

As the 20<sup>th</sup> Century drew to a close, the Mid-Atlantic black sea bass fishery was dominated by New Jersey, where the fish were actively targeted by the party boat fleet, and mostly prosecuted in the states between New Jersey and Virginia.

To give some idea of how dominant the southern Mid-Atlantic was at that time, in 2000 the four states of New Jersey, Delaware, Maryland and Virginia landed 83% of all the black sea bass harvested by anglers in the New England and Mid-Atlantic regions. New Jersey, alone, accounted for 54% of the recreational landings.

At that time, the fishery was still largely unregulated. Natural Resources Defense Council v. Daley, the lawsuit that first gave real legal teeth to the conservation and stock rebuilding mandates of Magnuson-Stevens, wasn't decided until 2000, and it took a while for the Mid-Atlantic Fishery Management Council to adopt management measures that complied with the Court's decision. However, once such measures were put in place—somewhat reluctantly, on the part of some Council members, and not without a lot of bitter debate—the stock began to rebuild.

That rebuilding was helped by something that, in most other respects, is viewed as bad news—the gradually warming climate, and its impacts on ocean temperatures.

Biologists have found that black sea bass recruitment—the number of young-of-the-year fish that enter the population—is highly dependent upon the conditions that they encounter during their first winter of life, spent near the edge of the continental shelf. Warm, salty water is conducive to juvenile black sea bass survival, so as the water warmed, more black sea bass began to appear at the northern end of their range.

The increase of fish in northern waters became so marked that in 2009, for the first time, anglers fishing off the four states between New York and Massachusetts accounted for the majority of recreational black sea bass landings. While, at 57%,

it was only a slim majority, it was the sign of permanent change; the southern states steadily gave ground from there. By 2016, the regions' roles were completely and exactly reversed from what they were in 2000. By then, it was the northern states that accounted for 83% of the landings; New Jersey's percentage had steadily fallen to only about 11.5%.

And the northern states achieved that dominance with a significant handicap, as states between New York and Massachusetts adopted smaller bag limits and a 15-inch minimum size in 2016, while states from Delaware south were allowed to maintain a 15-fish bag and 12 ½-inch size limit and New Jersey was allowed to adopt regulations that varied throughout the year, but featured a 12 ½- or 13-inch size limit throughout.

At the same time that the black sea bass fishery was improving, biologists' knowledge about the species was improving as well.

For many years, black sea bass were considered a “data poor” species; a 2012 benchmark stock assessment failed to pass peer review because the underlying data was deemed inadequate for management purposes. So for a while, fishery managers were flying blind, and were forced to adopt very restrictive management measures to avoid accidentally overfishing the stock.

But knowledge was slowly being developed. A cooperative tagging study conducted by National Marine Fisheries Service biologists between 2002 and 2004 determined that there were three substocks of black sea bass in the New England/Mid-Atlantic region, which remained isolated from each other during the summer, but mixed to some extent on the wintering grounds.

The study found that the northern stock summers between Massachusetts and, roughly, Moriches Inlet, New York; in winter, most migrate to the edge of the continental shelf near Hudson Canyon (about equidistant between New York and New Jersey), although some travel as far as North Carolina. The central stock summers between Moriches Inlet and the Eastern Cape of Virginia, and migrates in a generally southeasterly direction to winter at the edge of the continental shelf. The southern stock, summers between southern Virginia and Cape Hatteras, North Carolina, and moves into deeper waters during the winter, but most fish stop before reaching the edge of the shelf.

Additional biological information, which cast more light on how the black sea bass functions as a **protogynous hermaphrodite (which begins life as a female, and at some point changes over to become male)**, was also developed, and all of the new data was incorporated into a new benchmark stock assessment that, in early 2017, was judged suitable for management purposes. **(to page 30)**

