Black Sea Bass Management:

What's Best for the Fish *and* the Fishermen?

By Peter Clarke, Senior Fisheries Biologist

Arguably one of the most popular recreational fish pursued by anglers along the New Jersey coast is the black sea bass. Anchoring the spring and fall fishery for boat fishermen and providing shore-based anglers the opportunity to bring fine table fare back from a day of fishing, black sea bass are abundantly available from the coastal jetties and beaches to offshore reefs, wrecks and rock piles.

Having a unique life-history strategy, black sea bass are protogynous hermaphrodites, meaning that most individual fish begin their life as females but can switch their gender to male when the number of males in the population declines. While it is unknown what proportion of females make this gender shift, it is certain that this strategy helps to safeguard the population by securing the future reproductive success of the species.

With an extensive distributional range, recent years find black sea bass from the Gulf of Mexico up through Maine, although they are most abundant in the mid-Atlantic region—particularly off our Jersey coast where they provide anglers with countless opportunities for success. Recent stock assessments place black sea bass at the top of their population abundance curve, with their spawning stock biomass at its 30-year peak.

Management efforts naturally lag behind population abundance for this species. As the black sea bass population doubled and tripled, regulatory constraints tightened, largely due to angler success. It can be difficult *not* to catch a black sea bass when a baited hook is dropped in the water—they are just that plentiful. The result: because angling success is so high, harvest regulations are now quite conservative.

The cause of this abundance is the extremely large 2011 year-class that entered the fishery as 12- to 14-inch fish over the past several years. When a year class of baby fish is spawned at record numbers, within four or five years those fish "recruit" into the recreational and commercial fisheries, meaning they grow to a size that makes them available to harvest. To compound this sea bass management dilemma, the 2011 year-class is now part of the overall spawning stock biomass and has provided an equally-or possibly stronger—2015 year-class as detected in fisheries survey data like the New Jersey Ocean Trawl Survey and the National Marine Fisheries Service Bottom Trawl Survey. As the available black sea bass biomass and size of fish from the 2015 year-class increases, anglers will continue to see regulations that prevent surpassing the recreational harvest limit.

To address this dilemma, the Atlantic States Marine Fisheries Commission, Mid-Atlantic Fishery Management Council (Council), National Marine Fisheries Service and partner states like New Jersey

Sonar is used to detect what lies beneath the water's surface. This display reveals the prevalence of sea bass in New Jersey's waters.

initiated two new addenda (31 and 32) to the Black Sea Bass Fishery Management Plan. These two addenda follow many others that have similarly attempted to address management of the black sea bass fisheries.

Draft Addendum 31 is aimed at allowing "conservation equivalency," meaning that states would have increased flexibility when crafting measures that still constrain that state to recreational harvest limits, but do not require following closely to established federal regulations. Draft Addendum 32 addresses management strategies based on distribution of the resource stemming from coastal changes of black sea bass abundance and distribution. Options included in this addendum would allow the fisheries management boards and Council to act in a more progressive nature based on biomass and fishery performance.

Through these addenda, New Jersey is optimistic that as biomass increases within the black sea bass population, coastwide management will not fall behind, but instead will use real-time and accurate indicators of the stock and the fishery to craft sensible measures for both the fishermen and the fish.



Henry Clarke enjoys fishing for black sea bass, along with his brother Jack Clarke shown on the Contents page.

