BLACK SEA BASS CENTROPRISTIS STRIATA



MID-ATLANTIC FISHERY MANAGEMENT COUNCIL (MAFMC) - ESSENTIAL FISH HABITAT (EFH) PROFILE

1. Management Unit

The management unit for black sea bass (*Centropristis striata*) is U.S. waters in the western Atlantic Ocean from Cape Hatteras, North Carolina northward to the U.S.-Canadian border.

2. Stock Status

The stock is not overfished and overfishing is not occurring based on the most recent stock assessment (2021). For current stock status: https://www.fisheries.noaa.gov/national/status-stocks-reports

3. Current Text Designations

Source: MAFMC. 1999. Amendment 12 to the Summer Flounder, Scup, and Black Sea Bass Fishery Management Plan. Available at: www.mafmc.org.

Eggs: EFH is the estuaries where black sea bass eggs were identified in the ELMR database as common, abundant, or highly abundant for the "mixing" and "seawater" salinity zones. Generally, black sea bass eggs are found from May through October on the Continental Shelf, from southern New England to North Carolina.

Larvae: 1) North of Cape Hatteras, EFH is the pelagic waters found over the Continental Shelf (from the coast out to the limits of the EEZ [Exclusive Economic Zone]), from the Gulf of Maine to Cape Hatteras, North Carolina, in the highest 90% of all ranked ten-minute squares of the area where black sea bass larvae are collected in the MARMAP survey. 2) EFH also is estuaries where black sea bass were identified as common, abundant, or highly abundant in the ELMR database for the "mixing" and "seawater" salinity zones. Generally, the habitats for the transforming (to juveniles) larvae are near the coastal areas and into marine parts of estuaries between Virginia and New York. When larvae become demersal, they are generally found on structured inshore habitat such as sponge beds.

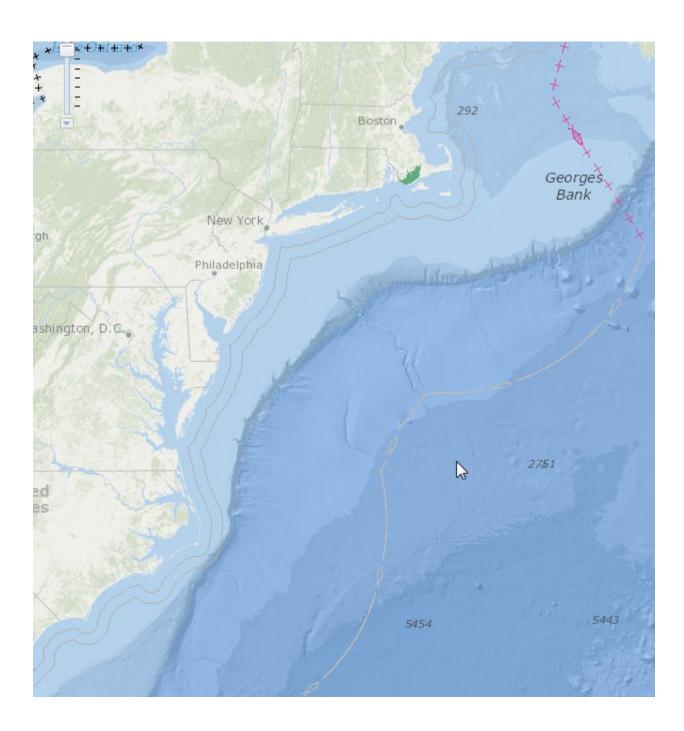
Juveniles: 1) Offshore, EFH is the demersal waters over the Continental Shelf (from the coast out to the limits of the EEZ), from the Gulf of Maine to Cape Hatteras, North Carolina, in the highest 90% of all the ranked squares of the area where juvenile black sea bass are collected in the NEFSC trawl survey. 2) Inshore, EFH is the estuaries where black sea bass are identified as being common, abundant, or highly abundant in the ELMR database for the "mixing" and "seawater" salinity zones. Juveniles are found in the estuaries in the summer and spring. Generally, juvenile black sea bass are found in waters warmer than 43 °F with salinities greater than 18 ppt and coastal areas between Virginia and Massachusetts, but winter offshore from New Jersey and south. Juvenile black sea bass are usually found in association with rough bottom, shellfish and eelgrass beds, man-made structures in sandy-shelly areas; offshore clam beds and shell patches may also be used during the wintering.

Adults: 1) Offshore, EFH is the demersal waters over the Continental Shelf (from the coast out to the limits of the EEZ), from the Gulf of Maine to Cape Hatteras, North Carolina, in the highest 90% of all the ranked ten-minute squares of the area where adult black sea bass are collected in the NEFSC trawl survey. 2) Inshore, EFH is the estuaries where adult black sea bass were identified as being common, abundant, or highly abundant in the ELMR database for the "mixing" and "seawater" salinity zones. Black sea bass are generally found in estuaries from May through October. Wintering adults (November through April) are generally offshore, south of New York to North Carolina. Temperatures above

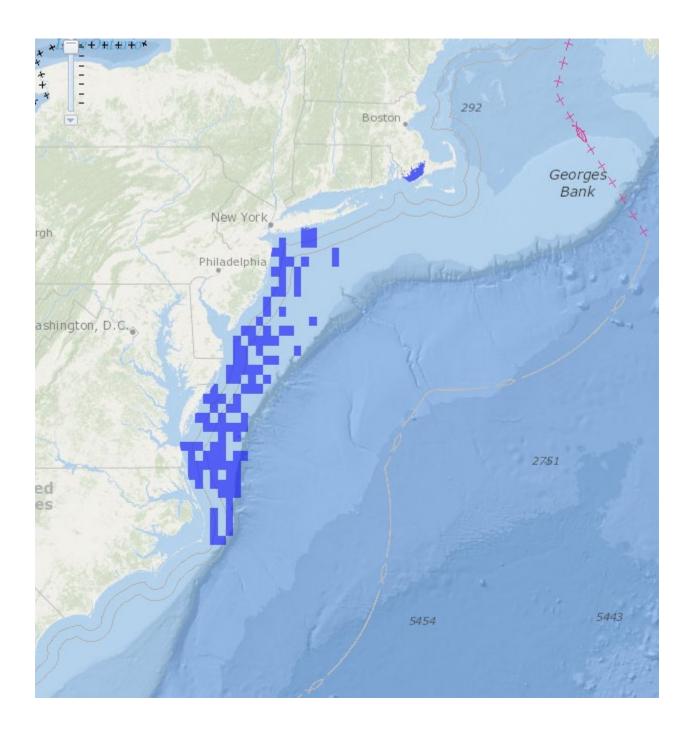
43 °F seem to be the minimum requirements. Structured habitats (natural and man-made), sand and shell are usually the substrate preference.

4. Current Map Designations

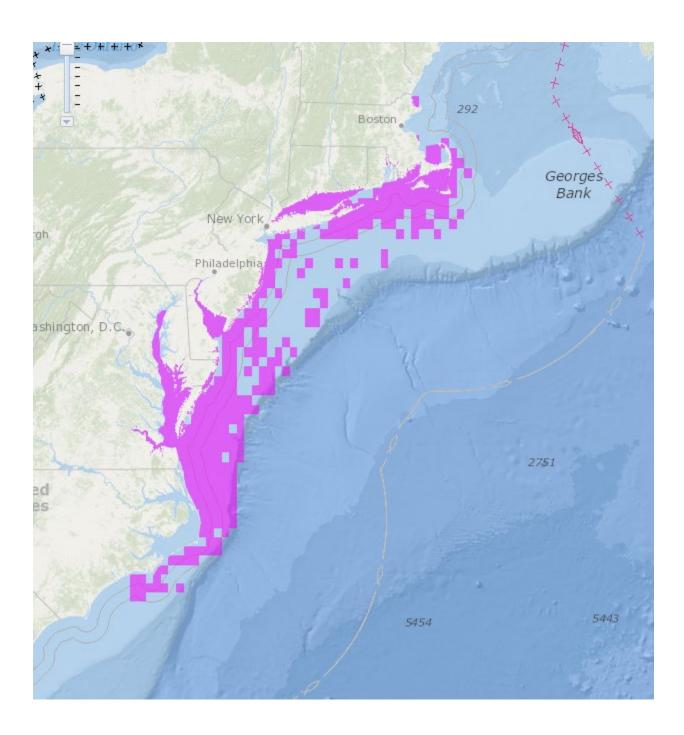
Eggs: EFH is the estuaries where black sea bass eggs were identified in the ELMR database as common, abundant, or highly abundant for the "mixing" and "seawater" salinity zones.



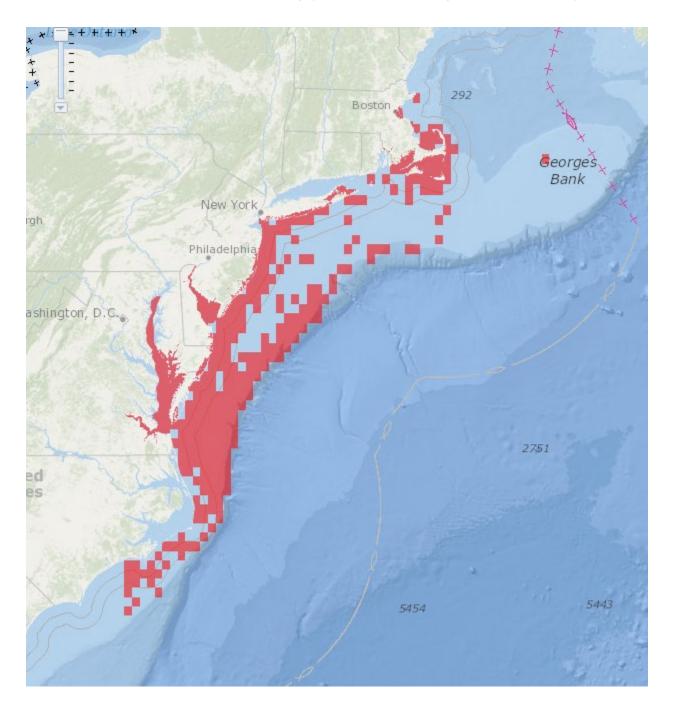
Larvae: The area which encompasses the top 90% of the area where black sea bass larvae are found in the MARMAP and NEFSC trawl surveys, as well as the estuaries where black sea bass eggs were identified in the ELMR database as common, abundant, or highly abundant for the "mixing" and "seawater" salinity zones.



Juveniles: Offshore, EFH is the area which encompasses the top 90% of the area where black sea bass juveniles are found in the MARMAP and NEFSC trawl surveys. Inshore, EFH is the estuaries where black sea bass eggs were identified in the ELMR database as common, abundant, or highly abundant for the "mixing" and "seawater" salinity zones.



Adults: Offshore, EFH is the area which encompasses the top 90% of the area where black sea bass adults are found in the MARMAP and NEFSC trawl surveys. Inshore, EFH is the estuaries where black sea bass eggs were identified in the ELMR database as common, abundant, or highly abundant for the "mixing" and "seawater" salinity zones.



5. Designation and Mapping Methods

The Council has generally identified EFH using level 1 and/or level 2 data (see EFH regulations; section 7) primarily from distribution and relative abundance data from the Northeast Fisheries Science Center (NEFSC) bottom trawl surveys (spring and fall, 1963+), ichthyoplankton surveys (monthly, 1977+), information from species EFH source documents (technical memos) developed by NEFSC staff, and - for some inshore areas - a resource inventory conducted by NOAA's Estuarine Living Marine Resources Program (ELMR; 1994). The designations were comprised of a detailed text description and a series of maps by ten-minute square areas (TMSQ). The Mid-Atlantic EFH Technical Team, NEFSC scientists, and other experts developed alternatives for the Council to consider. Four alternatives were proposed and, for mapping purposes, the Council selected the alternative that used a distributional percentage (50%, 75%, 90%, or 100% of observations) of the catches by area based on which level of information was available and stock status. EFH maps were developed for each life stage and displayed the distribution and abundance data by TMSQ.

The Council identified EFH for summer flounder, scup, and black sea bass through Amendment 12 (1999) using NEFSC trawl surveys (spring and fall) and the ELMR program. The Council considered using 100% of the TMSQ as EFH since black sea bass has specific associations with benthic habitats types, and were also significantly overfished at the time. However, they chose the 90% of the TMSQ for all life stages and species since it was risk-averse and level 2 information was available.

6. EFH Source Documents

Information on black sea bass habitat requirements can be found in:

Drohan AF, Manderson JP, Packer DB. 2007. Essential Fish Habitat Source Document: Black sea bass, *Centropristis striata*, Life History and Habitat Characteristics, 2nd edition. NOAA Technical Memorandum, NMFS-NE-200. Available at: http://www.nefsc.noaa.gov/nefsc/habitat/efh/.

Steimle FW, Zetlin CA, Berrien PL, Chang S. 1999. Essential Fish Habitat Source Document: Black sea bass, *Centropristis striata*, Life History and Habitat Characteristics. NOAA Technical Memorandum, NMFS-NE-143. Available at: http://www.nefsc.noaa.gov/nefsc/habitat/efh/.

7. Other Information

EFH Legal Authorities

EFH from Magnuson Stevens Act:

http://www.fisheriesforum.org/HigherLogic/System/DownloadDocumentFile.ashx?DocumentFileKey=014976d6-5bc1-f0c4-be6b-ade7c99fc932&forceDialog=0

EFH Contents of Fishery Management Plans under CFR §600.815:

https://www.gpo.gov/fdsys/pkg/CFR-2013-title50-vol12/pdf/CFR-2013-title50-vol12-sec600-815.pdf

Federal agency consultation with the Secretary under CFR §600.920:

https://www.gpo.gov/fdsys/pkg/CFR-2014-title50-vol12/pdf/CFR-2014-title50-vol12-sec600-920.pdf

NMFS 2006 EFH Guidance:

http://www.nmfs.noaa.gov/op/pds/documents/03/201/03-201-15.pdf

Management and Stock Assessments

MAFMC: http://www.mafmc.org, Atlantic States Marine Fisheries Commission: http://www.asmfc.org, NEFSC Stock Assessments: http://www.nefsc.noaa.gov/saw/