







Marine-life Data and Analysis Team (MDAT) Fish Product Updates Summary of Changes for v3.2_2022_02 Update (April 2022)

<u>Overview</u>

This document contains a brief summary of the changes to the MDAT fish products. NEFSC group summary products were updated to include a new set of summary products for species potentially vulnerable to EMF. Additionally, given the completion of the most recent decade of data for NEFSC (2010-2019) in the last MDAT update (v3.1_2021_09), a new time series was created to show increments in the total biomass from 1980-2019 for both Fall and Spring trawl surveys.

Additional details on other base layers and summary products can be found in the MDAT Technical Report (Curtice et al., 2019). Base layer products for the NEFSC, MDMF, MENH, and NEAMAP trawl surveys have not been updated.

1. Species group summary product updates

A new summary layer was created with input from the Fish Working Group showing species potentially vulnerable to EMF from undersea cables. The EMF sensitivity group species composition was determined based on a report by BOEM (Snyder et al., 2019).

2. Historical biomass averages time series

A new MDAT summary product was created showing the historical 5-year and 10-year averages of total biomass from 1980-2019 for Spring and Fall trawl surveys for certain groups of species. Summary layers were created for 1980-1989, 1990-1999, 2000-2009, 2010-2014 and 2015-2019. The changeover to 5 year increments was implemented to add additional temporal resolution to recent time periods supporting current management decision making. Symbology for each species group was determined by the distribution of values from the most recent decade and applied to all time steps in the series, allowing comparisons between seasons and decades within a given species group. These new layers were created for the species groupings: All Fish species, Demersal species, Forage species, and Diadromous species.

References

Curtice, C., Cleary J., Shumchenia E., Halpin P.N. 2019. Marine-life Data and Analysis Team (MDAT) technical report on the methods and development of marine-life data to support regional ocean planning and management. Prepared on behalf of the Marine-life Data and Analysis Team (MDAT). Accessed at: http://seamap.env.duke.edu/models/MDAT/MDAT-Technical-Report.pdf.









Snyder, D., Bailey, W., Palmquist, K., Cotts, B. and Olsen, K., 2019. Evaluation of Potential EMF Effects on Fish Species of Commercial or Recreational Fishing Importance in Southern New England (OCS Study BOEM 2019-049). Bureau of Ocean Energy Management, US Department of the Interior: Sterling, VA, USA. Accessed at: https://espis.boem.gov/final%20reports/BOEM_2019-049.pdf