Data Collection Fish relative abundance for the U.S. Atlantic, A Synthesis of Data from Multiple Providers, Created by the Northeast Regional Habitat Assessment and Prepared by the Marine-life Data and Analysis Team (MDAT)	
Data Collection Title	MDAT_WS_FISH_RELATIVE_ABUNDANCE_DATA_v1.0
Data Collection URL	Map services: https://mgelmaps.env.duke.edu/mdat/rest/services/MDAT

Data Set	
Data Set Title	MDAT_WS_FISH_RELATIVE_ABUNDANCE_DATA_v1.0
Principal Investigators	NRHA Project: Tori Kentner – Mid-Atlantic Fishery Management Council MDAT Project: Patrick N. Halpin (PI) – Marine Geospatial Ecology Lab at Duke University
Primary Points of Contact	NRHA Data: Tori Kentner tkentner@mafmc.org - Mid-Atlantic Fishery Management Council MDAT Collection: marinelife_data@duke.edu - Marine Geospatial Ecology Lab at Duke University
Collaborators	Data providers: Chesapeake Bay Multispecies Monitoring and Assessment Program (ChesMMAP) Connecticut Long Island Sound Trawl Survey Delaware 30ft Bottom Trawl Survey Delaware Bay Juvenile Finfish Trawl Survey Maine-New Hampshire Inshore Trawl Survey Maryland Bottom Trawl Survey Massachusetts Bottom Trawl Survey New Jersey Delaware Bay Juvenile Trawl Survey New Jersey Ocean Stock Assessment Program NorthEast Area Monitoring and Assessment Program (NEAMAP) Rhode Island Narragansett Bay Trawl Survey North Carolina Nursery Area Juvenile Survey (NC120) North Carolina Pamlico Sound Survey (N195) Peconic Bay Small Mesh Trawl Survey Rhode Island Narragansett Bay Trawl Survey SEAMAP-SA Coastal Trawl Survey VIMS Juvenile Trawl Survey
Author List	NRHA data: Tori Kentner[1], Jessica Coakley[1], Michelle Bachman[2], Chris Haak[3], Laurel Smith[4] [1]Mid-Atlantic Fishery Management Council [2]New England Fishery Management Council [3]Monmouth University [4]Northeast Fisheries Science Center MDAT: Corrie Curtice[1], Jesse Cleary[2], Deborah Brill[2], Emily Shumchenia[3], Patrick Halpin[2]

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Abstract	In 2014, the Marine Geospatial Ecology Lab (MGEL) of Duke University began work with the Northeast Regional Ocean Council (NROC), the NOAA National Centers for Coastal Ocean Science (NCCOS) and the NOAA Northeast Fisheries Science Center (NEFSC), as part of the Marine-life Data and Analysis Team (MDAT), to characterize and map marine life in the Northeast region in support of the Regional Ocean Plan. In 2015, the Mid-Atlantic Regional Council on the Ocean (MARCO) contracted with MDAT to build upon and expand this effort into the Mid-Atlantic planning area, and in support of the Mid-Atlantic Regional Ocean Plan. These research groups collaborated to produce "base layer" predictive model products with associated uncertainty products for cetacean species or species guilds and avian species, and three geospatial products for fish species. Periodic updates to these base layer models and data are produced by the individual institutions in the MDAT team based on schedules set by the funders of each modeling effort. The Northeast Regional Habitat Assessment (NRHA) was developed to describe and characterize estuarine, coastal, and offshore fish habitat distribution, abundance, and quality in the region. This project aligns habitat science goals and priorities with available resources to produce habitat science products that support assessment and management efforts. The NRHA leverages data from various federal and state fisheries surveys, including bottom trawls and seine surveys, to provide insights into species composition, abundance, and distribution. Data spanning from 1963 to 2019 were aggregated from NOAA databases and directly from state and regional sources. The Northeast Regional Habitat Assessment (NRHA) collaborated with MDAT to summarize the seasonal fish relative abundance from state fishery surveys in the US Atlantic for fifteen species from 2010-2019. Survey samples for spring were collected from March through May and samples for fall were collected from September through November.
Purpose	The objective of this project is to provide a broad overview of individual fish species relative abundance across the Northeast U.S. Continental Shelf ecosystem by leveraging existing survey data and analyses by coastal states. More detailed information is available on the NRHA data portal and through the individual data providers.
Methods	See https://seamap.env.duke.edu/models/mdat/Fish/NRHA_Methods_March2025.pdf for methods and a list of field descriptions.

Citations	NRHA: Kentner, T., Coakley J., Bachman M., Haak C., and Smith L. (2022). Summary of the Northeast Regional Marine Fish Habitat Assessment (NRHA). Available at: https://nrha.shinyapps.io/dataexplorer/#!/reports. See Use Limitations. MDAT: 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 Analysis Team (MDAT). Accessed at: http://seamap.env.duke.edu/models/MDAT/MDAT-Technical-Report.pdf.
Data Start Date	2010
Data End Date	2019
Data Northern Boundary	44.9 degrees N
Data Southern Boundary	28.7 degrees N
Data Western Boundary	81.5 degrees W
Data Eastern Boundary	66.7 degrees W
Place Keywords	North Atlantic Ocean
Spatial Reference Information	Type: Projected Geographic Coordinate Reference: GCS_North_American_1983 Projection: North_American_1983_Hotine_Oblique_Mercator_Azimuth_Center Well-Known Text: PROJCS ["North_American_1983_Hotine_Oblique_Mercator_Azimuth_Center", GEOGCS["GCS_North_American_1983", DATUM["D_North_American_1983", SPHEROID["GRS_1980",6378137.0,298.257222101]], PRIMEM["Greenwich",0.0], UNIT["Degree",0.0174532925199433]], PROJECTION["Hotine_Oblique_Mercator_Azimuth_Center"], PARAMETER["false_easting",0.0], PARAMETER["false_northing",0.0], PARAMETER["scale_factor",0.9996], PARAMETER["azimuth",40.0], PARAMETER["longitude_of_center",-75.0], PARAMETER["latitude_of_center",35.0], UNIT["Meter",1.0]]
Spatial Representation Type	Grid
Datasets	Connecticut Long Island Sound Trawl Survey NorthEast Area Monitoring and Assessment Program (NEAMAP) Maine-New Hampshire Inshore Trawl Survey Massachusetts Bottom Trawl Survey Rhode Island Narragansett Bay Trawl Survey New Jersey Delaware Bay Juvenile Trawl Survey New Jersey Ocean Stock Assessment Program Delaware 30ft Bottom Trawl Survey Delaware Bay Juvenile Finfish Trawl Survey Maryland Bottom Trawl Survey North Carolina Nursery Area Juvenile Survey (NC120)

	North Carolina Pamlico Sound Survey (N195) SEAMAP-SA Coastal Trawl Survey Peconic Bay Small Mesh Trawl Survey Chesapeake Bay Multispecies Monitoring and Assessment Program (ChesMMAP) VIMS Juvenile Trawl Survey See https://nrha.shinyapps.io/dataexplorer/#!/reports for metadata sheets for each data provider which include survey data contact info.
Update Frequency	Irregular
Resource Provider	*Marine Geospatial Ecology Lab (MGEL) at Duke University (marinelife_data@duke.edu), on behalf of MDAT and NRHA.*
Comment	*This data documentation describes numerous geospatial datasets archived together as a data collection, and is intended to provide dataset-level metadata for the purposes of discovery, use, and understanding.*
Use Limitation	***Use Limitation:*** *If you use this dataset or portions of it in a scientific or formal publication, please cite Curtice et al. (2019), NRHA (2022), and the relevant dataset and/or data provider. Additionally, since we are not the original data providers, we recommend contacting the respective data providers for any publication-related permissions or additional citation requirements.*