
Data

Virginia Institute of Marine Science

2021

Maps depicting extent of suitable habitats for four forage fish species in Chesapeake Bay, 2000-2016

Mary C. Fabrizio

Virginia Institute of Marine Science, mfabrizio@vims.edu

Troy D. Tuckey

Virginia Institute of Marine Science, tuckey@vims.edu

Aaron J. Bever

Anchor QEA

Michael L. MacWilliams

Anchor QEA

Follow this and additional works at: <https://scholarworks.wm.edu/data>



Part of the [Aquaculture and Fisheries Commons](#)

Recommended Citation

Fabrizio, Mary C.; Tuckey, Troy D.; Bever, Aaron J.; and MacWilliams, Michael L., "Maps depicting extent of suitable habitats for four forage fish species in Chesapeake Bay, 2000-2016" (2021). Data. William & Mary.

<https://doi.org/10.25773/d37g-1h89>

This Data is brought to you for free and open access by the Virginia Institute of Marine Science at W&M ScholarWorks. It has been accepted for inclusion in Data by an authorized administrator of W&M ScholarWorks. For more information, please contact scholarworks@wm.edu.

Maps depicting extent of suitable habitats for four forage fish species in Chesapeake Bay, 2000-2016

Mary C. Fabrizio, Virginia Institute of Marine Science
Troy D. Tuckey, Virginia Institute of Marine Science
Aaron J. Bever, Anchor QEA
Michael L. MacWilliams, Anchor QEA

Document Type

Maps

Academic Department and/or Research Group:

Department of Fisheries Science, Virginia Institute of Marine Science, William & Mary (MCF, TDT) and Anchor QEA (AJB, MLM)

Publication Date:

2021

Abstract:

Habitat suitability maps are provided as tif files embedded in a Word document for each of the four forage fishes studied: juvenile spotted hake, juvenile spot, juvenile weakfish, and bay anchovy. Suitability maps are provided for each season and year, 2000 – 2016 for tidal waters of the Chesapeake Bay. Habitat suitability indices range between 0 (red) indicating poor habitat to 1 (blue) indicating most suitable habitat. These indices were estimated using procedures described in Fabrizio et al. (2021; see associated publication below).

Spatial information:

Chesapeake Bay including all major tributaries

Description:

File Name	Description
Juvenile Spotted Hake Habitat Maps	Heat maps of habitat suitability indices for juvenile spotted hake in Chesapeake Bay. Contains 67 maps, one for each season (winter, spring, summer, and fall) in each year (2000-2016). All maps are in tif format. 38,032 KB
Juvenile Spot Habitat Maps	Heat maps of habitat suitability indices for juvenile spot in Chesapeake Bay. contains 67 maps, one for each season (winter, spring, summer, and fall) in each year (2000-2016). All maps are in tif format. 38,030 KB
Juvenile Weakfish Habitat Maps	Heat maps of habitat suitability indices for juvenile weakfish in Chesapeake Bay. contains 67 maps, one for each season (winter, spring, summer, and fall) in each year (2000-2016). All maps are in tif format. 38,049 KB

Bay Anchovy Habitat Maps	Heat maps of habitat suitability indices for bay anchovy in Chesapeake Bay. contains 50 maps, one for winter, spring, and summer in each year (2000-2016). No habitat maps were constructed for fall. All maps are in tif format. 28,565 KB
--------------------------	---

Access Files at: <https://doi.org/10.25773/d37g-1h89>

Keywords:

Forage fishes; spotted hake; spot; weakfish; bay anchovy; Chesapeake Bay; James River; York River; Rappahannock River; habitat suitability

Funding:

Funding for the creation of the habitat suitability maps was provided by the NOAA Chesapeake Bay Office. Funding for the fish catch data was provided by the Virginia Marine Resources Commission, the US Fish & Wildlife Service, and VIMS through annual awards to the PIs (Fabrizio and Tuckey). In some years, funding was provided by the NOAA Chesapeake Bay Office.

Associated Publications:

Fabrizio, M. C., T. D. Tuckey, A. J. Bever, and M. L. MacWilliams. 2021. The extent of seasonally suitable habitats may limit forage fish production in a temperate estuary. *Frontiers in Marine Science*. 8: 706666. doi: 10.3389/fmars.2021.706666

ORCID Numbers for Authors:

Mary C. Fabrizio: 0000-0002-6115-5490
Troy D. Tuckey: 0000-0002-3333-1450
Aaron J. Bever: 0000-0002-2196-0831
Michael L. MacWilliams: 0000-0003-3312-3894

Recommended Citation:

Fabrizio, Mary C.; Tuckey, Troy D.; Bever, Aaron J.; and MacWilliams, Michael L., "Maps depicting extent of suitable habitats for four forage fish species in Chesapeake Bay, 2000-2016" (2021). Data. William & Mary. <https://doi.org/10.25773/d37g-1h89>