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# **Virginia Seafood Sustainability**

## A report requested by the Virginia Marine Products Board

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#### Virginia Seafood Sustainability<sup>1</sup>

Virginia's commercial fisheries operate sustainably under a suite of management tools based upon information received from marine scientists and fishery managers who regularly conduct biological sampling of fish while tracking commercial landings and other gathering of required information. Analyses of fishing effort and overall stock conditions, as well as formulas designed to calculate threshold limits for maintaining sustainable stocks are regularly performed. Restrictions on seasons, size, days at sea, and gear are imposed as needed to achieve management supporting long-term biological sustainability.

Virginia's marine fisheries are managed by the Virginia Marine Resources Commission (VMRC). Virginia wild fisheries have plans to sustain harvests and to rebuild stock sizes fallen below scientifically derived target sustainability levels. Producers provide mandatory information on their harvest levels and practices and are subject to operational monitoring to ensure compliance. The VMRC and National Marine Fisheries Service (NMFS) maintain cooperative law enforcement at the harvest and wholesale distribution levels, enforcing regulations that ensure the chain of custody of seafood products is documented with harvesters and seafood dealers. Virginia shellfish aquaculture products are grown and harvested under strict regulation by the VMRC and the Virginia Department of Health (VDH), Division of Shellfish Sanitation, which includes mandatory educational training on safe harvest and handling for harvesters and dealers. In addition there are educational resources such as Best Management Practices (BMP's) developed for Virginia's shellfish culture industry that encourage and support sustainable practices.

All migratory fish moving through Virginia coastal waters are co-managed with the Atlantic States Marine Fisheries Commission (ASMFC). Through interstate fishery management plans, the ASMFC oversees 22 species of marine fish (including 7 species of shark) and promulgates regulations for those species that all Atlantic Coast states must follow. Fish that primarily inhabit offshore waters (more than 3 miles off the Virginia coast) are managed by the Mid-Atlantic Fishery Management Council (MAFMC), part of the National Marine Fisheries Service. Other states represented in the Mid-Atlantic region include North Carolina, Maryland, Delaware, Pennsylvania, New Jersey, and New York. The MAFMC currently manages 13 offshore marine fish species, including Atlantic mackerel, butterfish, spiny dogfish, surf clam, tilefish, bluefish, summer flounder, and black sea bass. Highly migratory species, such as swordfish, are managed in federal waters directly by the National Marine Fisheries Service (NMFS). Additionally other import products such as the Atlantic Sea Scallop are co-managed by the MAFMC and the New England Fishery Management Council (NEFMC).

<sup>&</sup>lt;sup>1</sup> Source: Marine Advisory Service, Virginia Institute of Marine Science, College of William & Mary. February 2018. Previous versions of this report include: VIMS Marine Resource Report No. 2015-5 (May 2015) and VIMS Marine Resource Report No. 2011-1 (January 2011)

# Summary of Sustainability Measures for Primary Virginia Marine Fishery Products<sup>2</sup>

| Common Name                         | Scientific Name              | Managing<br>Agencies                             | Size<br>Limit        | Quota | Overfished | Gear<br>Limits | Seasonal<br>closures |
|-------------------------------------|------------------------------|--|----------------------|-------|------------|----------------|----------------------|
| Black Sea Bass                      | Centropristis striata        | ASMFC<br>MAFMC                                   | Υ                    | Υ     | N          | Υ              | Υ                    |
| Bluefish                            | Pomatomus saltatrix          | ASMFC<br>MAFMC                                   | N                    | Υ     | N          | N              | N                    |
| Butterfish                          | Peprilus triacanthus         | MAFMC  | N                    | Υ     | N          | Υ              | Υ                    |
| Catfish, Blue                       | Ictalurus furcatus           | N/A  | N                    | N     | N          | N              | N                    |
| Crab, Blue                          | Callinectes sapidus          | Ches. Bay<br>Watershed<br>Agreement <sup>3</sup> | Υ                    | Y     | N          | Y              | Υ                    |
| Crab, Blue (softshell)              | Callinectes sapidus          | VMRC   | Υ                    | N     | N          | Y              | Υ                    |
| Crab, Red                           | Chaceon quinquedens          | NEFMC  | Male only<br>fishery | Υ     | N          | Υ              |                      |
| Croaker                             | Micropogonias<br>undulates   | ASMFC  | N                    | N     | N          | N              | N                    |
| Dogfish (spiny)                     | Squalus acanthias            | ASMFC<br>MAFMC                                   | N                    | Υ     | N          | Υ              | Υ                    |
| Eastern Oyster<br>(aquaculture)     | Crassostrea virginica        | VMRC<br>VDH                                      | N                    | N     | N          | Υ              | N                    |
| Eastern Oyster<br>(wild)            | Crassostrea virginica        | VMRC<br>VDH                                      | Υ                    | N     | N          | Υ              | Υ                    |
| Flounder (summer)                   | Paralichthys dentatus        | ASMFC<br>MAFMC                                   | Υ                    | Υ     | N          | Υ              | Υ                    |
| Grey Trout/<br>Weakfish             | Cynoscion regalis            | ASMFC  | Υ                    | N     | N          | Υ              | Υ                    |
| Hard Clam<br>(aquaculture)          | Mercenaria mercenaria        | VMRC<br>VDH                                      | N                    | N     | N          | N              | N                    |
| Hard Clam (wild)                    | Mercenaria mercenaria        | VMRC   | Υ                    | N     | N          |                | N                    |
| Monkfish/Goosefish                  | Lophius americanus           | MAFMC<br>NEFMC                                   | Υ                    | Υ     | N          | Υ              | Υ                    |
| Scallop (sea)                       | Placopecten<br>magellanicus  | NOAA<br>NEFMC                                    | Υ                    | Υ     | N          | Υ              | Y (Areas)            |
| Northern Puffer /<br>Sugar Toad     | Sphoeroides maculatus        | N/A  | N                    | N     | Unknown    | N              | N                    |
| Scup/Porgy                          | Stenotomus chrysops          | ASMFC<br>MAFMC                                   | Υ                    | Y     | N          | Υ              | Υ                    |
| Spot                                | Leiostomus xanthurus         | ASMFC  | N                    | N     | Unknown    | N              | N                    |
| Spotted Seatrout/<br>Speckled Trout | Cynoscion nebulosus          | ASMFC  | Υ                    | Υ     | N          | N              | N                    |
| Striped Bass                        | Morone saxatilis             | ASMFC  | Υ                    | Υ     | N          | N              | Υ                    |
| Whelk, Channeled                    | Busycotypus<br>canaliculatus | VMRC   | Υ                    | Y     | N          | Υ              | N                    |

<sup>&</sup>lt;sup>2</sup>Sources: N.O.A.A. National Marine Fisheries Service (NMFS), New England Fishery Management Council (NEFMC), Mid-Atlantic Fishery Management Council (MAFMC), Atlantic States Marine Fisheries Commission (ASMFC). Virginia Marine Resources Commission (VMRC).

<sup>&</sup>lt;sup>3</sup>The Chesapeake Bay blue crab fishery is managed by three jurisdictions: the State of Maryland, the Commonwealth of Virginia, and the Potomac River Fisheries Commission, all participating in the Chesapeake Bay Watershed Agreement. https://www.chesapeakebay.net/documents/22029/1a\_blue\_crab\_6-24-15\_ff\_formatted.pdf

#### Resources

Atlantic States Marine Fisheries Commission (ASMFC) http://www.asmfc.org/

Mid-Atlantic Fishery Management Council http://www.mafmc.org/

• Summer Flounder, Scup, Black Sea Bass

http://www.mafmc.org/sf-s-bsb/

• Atlantic Mackerel, Squid, Butterfish

http://www.mafmc.org/msb/

New England Fishery Management Council (NEFMC) https://www.nefmc.org/

N.O.A.A. National Marine Fisheries Service (NMFS) https://www.fisheries.noaa.gov/welcome

• Greater Atlantic Region: Atlantic Mackerel, Squid, Butterfish https://www.greateratlantic.fisheries.noaa.gov/sustainable/species/msb/index.html#el111022

#### Virginia Marine Resources Commission (VMRC)

http://www.mrc.state.va.us/

- http://www.mrc.state.va.us/fmac/fmoverview.shtm
- Black Sea Bass, Bluefish, Dogfish (spiny), Flounder (summer), Grey Trout (weakfish), Monkfish/Goosefish, Spotted Seatrout/Speckled Trout: http://www.mrc.virginia.gov/Regulations/regindex.shtm (finfish)

#### N.O.A.A. Fishwatch (U.S. Seafood Facts)

https://www.fishwatch.gov/

#### Black Sea Bass

- http://www.asmfc.org/species/black-sea-bass
- http://www.mafmc.org/sf-s-bsb/
- https://www.fisheries.noaa.gov/species/black-sea-bass
- https://www.greateratlantic.fisheries.noaa.gov/sustainable/species/bsbass/index.html
- https://www.fishwatch.gov/profiles/black-sea-bass
- http://www.mrc.state.va.us/Regulations/fr950.shtm

#### Bluefish

- http://www.asmfc.org/species/bluefish
- http://www.mafmc.org/bluefish/
- https://www.fisheries.noaa.gov/species/bluefish
- https://www.greateratlantic.fisheries.noaa.gov/sustainable/species/bluefish/index.html
- https://www.fishwatch.gov/profiles/bluefish
- http://www.mrc.state.va.us/Regulations/fr450.shtm

#### **Butterfish**

- http://www.mafmc.org/msb/
- https://www.fisheries.noaa.gov/species/butterfish
- https://www.greateratlantic.fisheries.noaa.gov/sustainable/species/msb/index.html
- https://www.fishwatch.gov/profiles/butterfish

#### Catfish (blue)

- http://safinacenter.org/documents/2015/02/blue-catfish-chesapeake-bay-full-species-report-2.pdf
- http://www.seafoodwatch.org/seafood-recommendations/groups/catfish?type=blue&q=Catfish,%20 Blue&t=blue%20catfish%20

#### Crab (blue)

- http://www.mrc.state.va.us/Regulations/regindex.shtm (scroll down to "crab" section)
- http://www.mrc.state.va.us/regulations/fr270.shtm

#### Crab (red)

- https://www.nefmc.org/management-plans/red-crab
- https://www.nefmc.org/management-plans/red-crab
- https://www.greateratlantic.fisheries.noaa.gov/sustainable/species/redcrab/index.html
- http://s3.amazonaws.com/nefmc.org/1\_Red-Crab-press-release.pdf

#### Croaker

• http://www.asmfc.org/species/atlantic-croaker

#### Dogfish (spiny)

- http://www.asmfc.org/species/spiny-dogfish
- http://www.mafmc.org/dogfish/
- https://www.nefmc.org/management-plans/dogfish
- https://www.fisheries.noaa.gov/species/atlantic-spiny-dogfish
- https://www.greateratlantic.fisheries.noaa.gov/sustainable/species/sdogfish/index.html
- https://www.fishwatch.gov/profiles/atlantic-spiny-dogfish
- http://www.mrc.state.va.us/regulations/fr490.shtm

#### Eastern Oyster (wild)

- http://www.mrc.state.va.us/Regulations/regindex.shtm (scroll down to "oyster" section)
- http://www.mrc.state.va.us/regulations/er720.shtm

#### Eastern Oyster (hatchery-based aquaculture) and Hard Clam (hatchery-based aquaculture)

- https://www.fishwatch.gov/profiles/eastern-oyster-farmed
- http://www.mrc.virginia.gov/Shellfish\_Aquaculture.shtm
- Best Management Practices: http://www.vims.edu/research/units/centerspartners/map/aquaculture/docs\_aqua/MRR\_2008\_10.pdf http://www.vdh.virginia.gov/environmental-health/environmental-health-services/shellfish-sanitation/

#### Flounder (summer)

- http://www.asmfc.org/species/summer-flounder
- http://www.mafmc.org/sf-s-bsb/
- https://www.fisheries.noaa.gov/species/summer-flounder
- https://www.greateratlantic.fisheries.noaa.gov/sustainable/species/fluke/index.html
- https://www.fishwatch.gov/profiles/summer-flounder
- http://www.mrc.state.va.us/regulations/fr620.shtm

#### Grey Trout (weakfish)

• http://www.mrc.state.va.us/regulations/fr380.shtm

#### Monkfish/Goosefish

- http://www.mafmc.org/monkfish/
- https://www.nefmc.org/management-plans/monkfish
- https://www.fisheries.noaa.gov/species/monkfish
- https://www.greateratlantic.fisheries.noaa.gov/sustainable/species/monkfish/index.html
- https://www.fishwatch.gov/profiles/monkfish
- http://www.mrc.state.va.us/regulations/fr1080.shtm

#### Scallop (sea)

- https://www.nefmc.org/management-plans/scallops
- https://www.greateratlantic.fisheries.noaa.gov/sustainable/species/scallop/index.html
- https://www.fishwatch.gov/profiles/atlantic-sea-scallop

#### Spot

http://www.asmfc.org/species/spot

#### Spotted Seatrout/Speckled Trout

- http://www.asmfc.org/species/spotted-seatrout
- http://www.mrc.state.va.us/regulations/fr280.shtm

#### Striped Bass

- http://www.asmfc.org/species/atlantic-striped-bass
- https://www.fisheries.noaa.gov/species/atlantic-striped-bass
- https://www.fishwatch.gov/profiles/atlantic-striped-bass
- http://www.mrc.state.va.us/regulations/fr252.shtm

#### Whelk (channeled)

• http://www.mrc.state.va.us/regulations/fr890.shtm





