



Credit: Duane Raver, Jr.

## **Blueline Tilefish - Advisory Panel Information Document<sup>1</sup>**

### **February 2017**

#### **Management System**

A proposed rule is under development for blueline tilefish from Virginia and to the north. Until that rule is finalized, state regulations govern the catch of blueline tilefish. Virginia, Maryland, and Delaware have implemented 300 pound incidental commercial trip limits and a 7-fish recreational possession limit for all tilefish species combined. These measures were designed to prevent a large directed commercial fishery and constrain fishing mortality in the recreational fishery. New Jersey has also implemented regulations, limiting commercial vessels to 300 pounds (whole weight) of blueline tilefish per trip and recreational fishermen to 7 blueline tilefish per person per trip. From June 2015 through 2016, emergency measures limited commercial landings from Virginia north to 300 pounds commercially and 7 fish per person recreationally.

#### **Basic Biology**

Blueline tilefish are primarily distributed from Campeche, Mexico northward through the Mid-Atlantic (Dooley 1978, NMFS survey and observer data). Several very recently-completed studies suggest that blueline tilefish from the eastern Gulf of Mexico through the Mid-Atlantic are comprised of one genetic stock (<http://sedarweb.org/sedar-50-data-workshop>). Blueline tilefish inhabit the shelf edge and upper slope reefs at depths of 46-256m (Sedberry et al. 2006) and temperatures between 15-23°C. Blueline tilefish are considered opportunistic predators that feed on prey associated with substrate (crabs, shrimp, fish, echinoderms, polychaetes, etc.) (Ross 1982). They are considered relatively sedentary, and thought not to undertake north-south migrations along the coast. The species constructs burrows in sandy areas in close association with rocky outcroppings in the South Atlantic Bight (SEDAR 50 Stock ID workshop).

Blueline tilefish, like other tilefish species, are a large, long-lived fish, ranging up to about 900 mm. This species also exhibits dimorphic growth with males attaining larger size-at-age than females. Males are predominant in the size categories greater than 650 mm FL. An aging workshop conducted to support the new blueline tilefish assessment (SEDAR 50) has called into question the ability to accurately age blueline tilefish, so previous age determinations may have substantial error. They are classified as indeterminate spawners, with up to 110 spawnings per individual based on the estimates of a spawning event every 2 days during a protracted spawning season from approximately February through November.

The SAFMC's SSC has provided an updated blueline tilefish ABC (224,100 pounds whole weight for 2016-2017) and the SAFMC has approved/implemented a framework action to use that ABC. Their SSC

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<sup>1</sup> This document was prepared by the MAFMC staff. Data employed in the preparation of this document are from unpublished National Marine Fisheries Service (NMFS) Dealer, Vessel Trip Reports (VTRs), Permit, and Marine Recreational Statistics (MRFSS/MRIP) databases.

did not accept updated projections but concluded that “the assessment estimates of reference points ( $B_{MSY}$ ,  $F_{MSY}$ ) based on historic stock production remain to be the best scientific information available and can be used for management advice.” This is the source for the 224,100 pound ABC. Genetic work done for the new blueline tilefish assessment suggests a genetically homogenous population off the entire Atlantic coast, but does not suggest what catch may be appropriate off of different parts of the coast – the new assessment will be investigating whether consideration of available habitat may inform such determinations.

The Council is funding a pilot survey for blueline and golden tilefish in the Mid-Atlantic to develop better information about the state of the blueline and golden tilefish stocks off the Mid-Atlantic.

The MAFMC and SAFMC are jointly participating in SEDAR 50 to assess the blueline tilefish stock throughout its range, with explicit consideration of the spatial management approach being undertaken by the MAFMC and SAFMC. The assessment results are expected in late 2017 or early 2018.

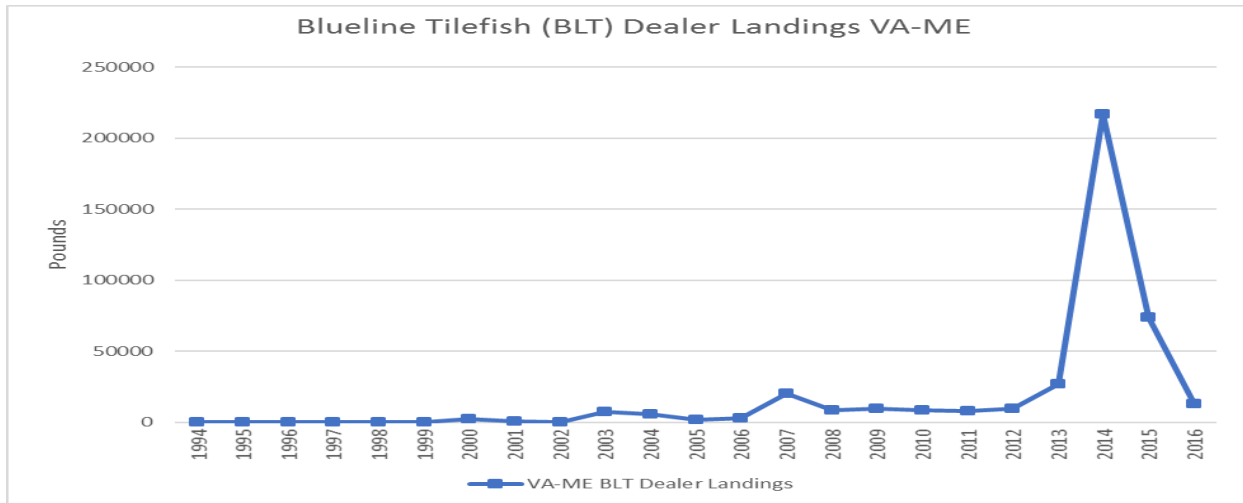
Given the differences between the blueline fisheries off the Mid- and South Atlantic, and the gaps in information on blueline tilefish off the Mid-Atlantic incorporated in the last blueline tilefish stock assessment (SEDAR 32), the MAFMC’s SSC found that SEDAR 32’s results are not sufficient for management off the Mid-Atlantic. The MAFMC’s SSC used a data limited approach to develop an initial ABC for blueline tilefish north of North Carolina of 87,031 pounds, which the Council adopted for its blueline tilefish amendment. The SSC will revisit the blueline tilefish ABC for 2018 at its March meeting.

### **Status of the Stock**

NMFS lists blueline tilefish as not overfished with overfishing occurring ([http://www.nmfs.noaa.gov/sfa/fisheries\\_eco/status\\_of\\_fisheries/status\\_updates.html](http://www.nmfs.noaa.gov/sfa/fisheries_eco/status_of_fisheries/status_updates.html)), but the new assessment may change these findings in the near future.

### **Fishery Performance**

Landings into VA-ME (see figure below) were generally very low except for 2013-2015, when regulations south of Virginia, the lack of regulations in Federal waters from Virginia north, and the lack of regulations in New Jersey drove effort somewhat northward and landings into New Jersey.

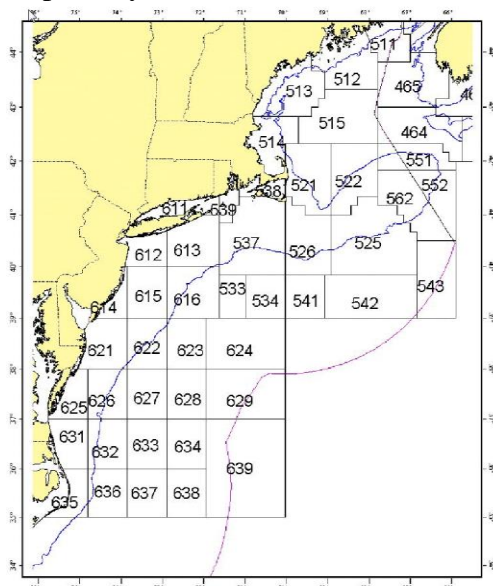


**Figure 1. Commercial U.S. BlueLine Tilefish Landings (live weight) from Maine-Virginia, 1994-2016.** Source: 1994-2016 NMFS unpublished dealer data.

Landings were low and variable from VA-MA except for the higher NJ landings in 2013-2015. Further breakdown by year/state may violate data confidentiality rules (especially for 2016).

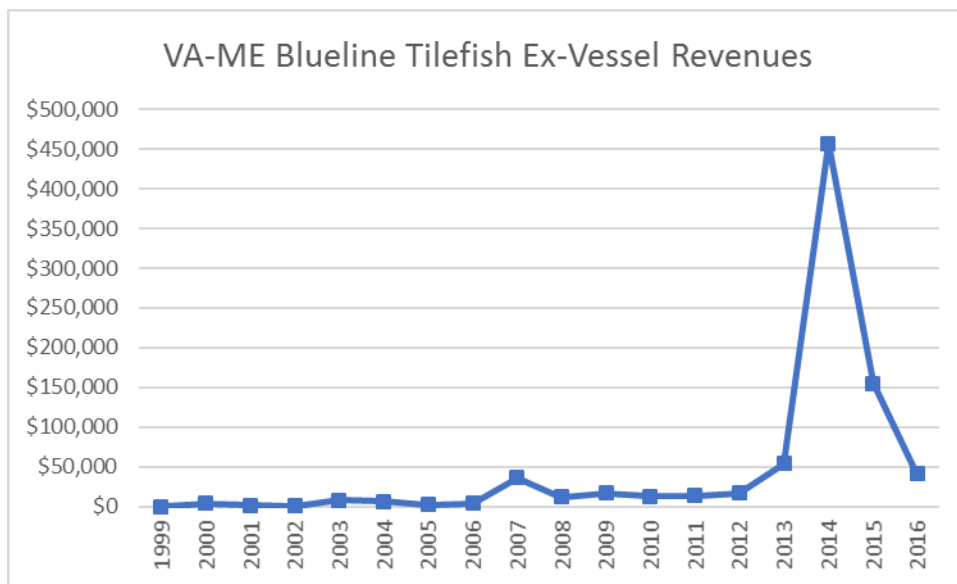
Landings from the entire time-series are approximately 2/3 from bottom longline, with most of the remaining landings coming from bottom trawl and handline. Over half of all landings in the time series were bottom longline into New Jersey in 2013-2015. Landings from all other gear types are low and variable from year to year.

For location of catch, Statistical Areas 616, 621, 622, 626, and 632 account for most catch in most years without substantial trend other than the overall ramp up in the recent years in areas 621, 626, and 632. Further breakdown by year/area may violate data confidentiality rules (especially for 2016).

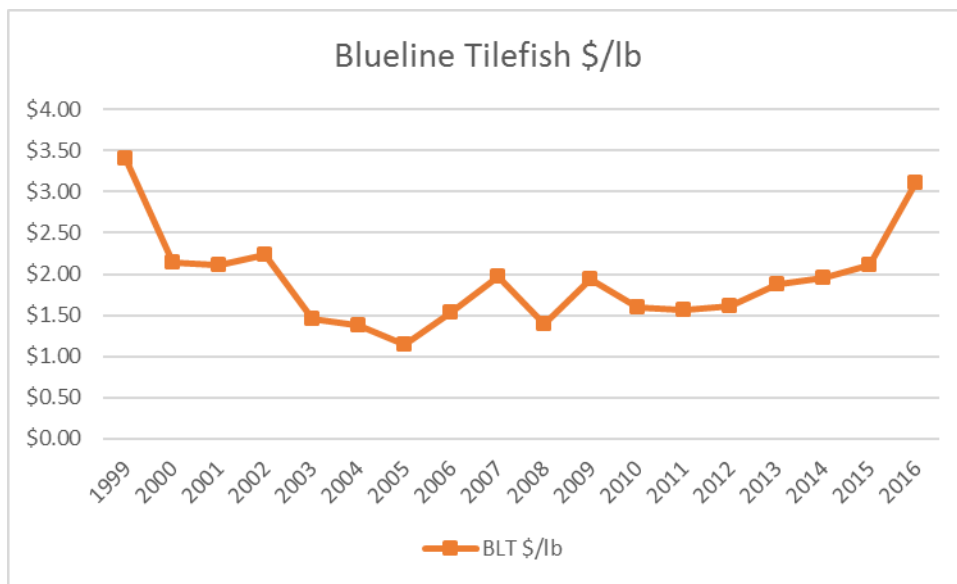


**Figure 2. NMFS Statistical Areas.**

Commercial blueline tilefish ex-vessel revenues (nominal) and price (inflation adjusted to 2015 dollars) are described in the two figures immediately below.



**Figure 3. Ex-Vessel Revenues for blueline tilefish, Maine through Virginia combined, 1999-2016.**



**Figure 4. Price for blueline tilefish, Maine through Virginia combined, 1999-2016.** Note: Price data have been adjusted by the GDP deflator indexed for 2015.

## Recreational Fishery

The recreational fishery is small. Blueline tilefish intercepts in the MRIP program are an exceedingly rare event, but in 2016 MRIP estimates were 10,646 for Maryland and 15,338 for Virginia. It is believed that VTR reporting compliance for blueline tilefish has been low, but the table below provides the available VTR reports for blueline tilefish since 2012, when previous work with the advisors and other blueline tilefish recreational fishermen has suggested VTR reporting compliance began to encompass at least the primary head boats.

YEAR	_FREQ_	fish
2012	103	10,051
2013	120	11,838
2014	136	15,794
2015	170	14,391
2016	152	14,373