



Mid-Atlantic Fishery Management Council

800 North State Street, Suite 201, Dover, DE 19901
Phone: 302-674-2331 | FAX: 302-674-5399 | www.mafmc.org
Michael P. Luisi, Chairman | G. Warren Elliott, Vice Chairman
Christopher M. Moore, Ph.D., Executive Director

M E M O R A N D U M

Date: March 27, 2017
To: Council
From: Jason Didden and Matthew Seeley, Staff
Subject: Blueline Tilefish Management Measures for 2018

The following materials are enclosed for Council consideration for the 2018 blueline tilefish management measures.

- 1) 2017 Blueline Tilefish Monitoring Committee Summary (including summary table of the SSC and Monitoring Committee recommended catch and landings limits)
- 2) March 2017 Scientific and Statistical Committee Report (see Tab #10)
- 3) Staff ABC Memo to Dr. Chris Moore (March 8, 2017)
- 4) 2017 Blueline Tilefish Fishery Performance Report
- 5) 2017 Blueline Tilefish Advisory Panel Information Document



**Blueline Tilefish Monitoring Committee
Meeting Summary
March 21, 2017**

Attendees: Dan Farnham (Commercial Fisherman-NY), Douglas Potts (GARFO), Paul Nitschke (NEFSC), Stephen Heins (NYSDEC), José Montañez (Council Staff). Others in Attendance: Laurie Nolan (Tilefish Fishing Industry and Council Member), Matthew Seeley (Council Staff), Kiley Dancy (Council Staff) and Julia Beaty (Council Staff).

Discussion: The Tilefish Monitoring Committee was presented with a summary of the Scientific and Statistical Committee (SSC) deliberations of the March 2017 SSC meeting, where the SSC reviewed the 2017 Blueline Tilefish Advisory Panel Fishery Performance Report and the 2017 Blueline Tilefish Advisory Panel Information Document. The blueline tilefish acceptable biological catch (ABC) was presented to the committee and recommended for one year (2018) at 87,031 lbs. The committee discussed the current state of amendment implementation, interest in changing recreational measures and staff recommendations.

Tilefish Monitoring Committee comments and recommendations:

Annual Catch Targets

Blueline tilefish ABC recommendations were made for the next year (2018) following the March 2017 SSC meeting. The SSC and Monitoring Committee recommended status quo management measures for 2018.¹ Recommendations were set for one year as a revised assessment will be produced at the end of the year.

There were no reductions for the annual catch limits (ACL) in management uncertainty resulting in ACL equal to the ACT. The committee recommended a status quo annual catch target (ACT = ACL) of 87,031 lbs. This ACL is partitioned into 73% recreational and 27% commercial. The committee recommended the total allowable landings (TAL) be reduced by 2% recreational and 1% commercial from the ACT for discards. These management measures remain status quo (Table 1).

Trip Limits

The committee recommended a commercial trip limit of 300 lbs. gutted weight (head and fins must be attached), which remains status quo management measures.

¹ Amendment 6 is under review by GARFO (working on implementation, proposed rule coming).

Recreational Requirements

The pending recreational season for blueline tilefish would run from May 1 to October 31. During the season, the recreational per-person bag limit is 7 fish for U.S. Coast Guard inspected for-hire vessels, 5 fish for uninspected for-hire vessels and 3 fish for private vessels

The Council has indicated interest in possibly changing these recreational measures. The participating Advisory Panel (AP) members were supportive of maintaining status quo (see AP Fishery Performance Report). There also continues to be interest by AP members in higher multi-day trip limits. If changes are made to the regulations there will be a zero-sum exercise as expanding somewhere will require an approximate reduction elsewhere. The Monitoring Committee also indicated that they would need Council advice regarding any potential change in recreational measures.

No comments or objections were raised by the Monitoring Committee resulting in status quo management measures from 2017 to 2018.

Table 1. 2018 Blueline Tilefish ACLs/ACTs/TALs

Specification	Recreational	Commercial
ABC	87,031 lbs (39.48 mt)	
ACLs	63,533 lbs (28.82 mt)	23,498 lbs (10.66 mt)
ACTs	63,533 lbs (28.82 mt)	23,498 lbs (10.66 mt)
TALs	62,262 lbs (28.24 mt)	23,263 lbs (10.55 mt)

Report of the March 2017
Meeting of the MAFMC SSC

See Committee Reports

Tab # 10



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Michael P. Luisi, Chairman | G. Warren Elliott, Vice Chairman
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MEMORANDUM

Date: 3/8/2017

To: Dr. Chris Moore, Executive Director

From: Jason Didden *JD*

Subject: Blueline Tilefish ABC

In 2016 the SSC recommended a blueline tilefish ABC of 87,031 pounds for 2017. The SSC used the output of a data-limited toolkit for conducting Management Strategy Evaluations (MSE) to develop catch limits developed by Carruthers et. al. (2014) and implemented by a working group of the SSC. This toolkit has been used previously by the SSC to develop ABC recommendations for black sea bass and Atlantic mackerel. Based on the output of the toolkit, which simulates stock responses to different harvest strategies, the SSC recommended a 2017 blueline tilefish ABC of 87,031 pounds as meeting the Council's risk policy to best avoid overfishing when guidance from a standard stock assessment is not available. Details on the analysis and rationale of the SSC can be found in the working group's report, available at <http://www.mafmc.org/briefing/april-2016> (see subcommittee report and SSC presentation). This document also notes that due to the limited information on recreational blueline tilefish catch, the recreational catch histories used in the toolkit resulted from a Delphi Approach workshop with fishermen to develop an approximation of 2015 recreational catch, and then a time series was created based on the Delphi Approach estimate and other available data.

There is an ongoing SEDAR assessment for blueline tilefish, and results are expected in late 2017 (terminal year of data is 2015). Staff anticipates that the assessment will necessitate a revisiting of the blueline tilefish ABC, but at this point staff recommends maintaining the current ABC and specifying it for 2 years in case no changes are appropriate after the assessment. While some life history parameters used in the MSE are likely to change in the new assessment, they have not yet been reviewed. The SEDAR data workshop also recommended using a slightly modified private recreational time series from what was used for the 2017 ABC, but that would not be expected to result in substantial changes for the MSE. Updated 2016 catch and landings information is provided on the following page; the lower 2015/2016 commercial landings were the expected outcome of the emergency regulations in place for part of 2015 and most of 2016 (Table 1). The Delphi process judged VTR records as unreliable before 2012, so the included VTR time series begins in 2012 to facilitate comparison with the most recent years (Table 2). For the first time ever, MRIP (preliminary) estimated substantial blueline tilefish catch in 2016 for the Mid-Atlantic, totaling 38,005 fish with a 95% confidence interval of $\pm 67\%$ (10.6K MD, 3K NJ, 24.3K VA). Assuming these estimates persist after review, it remains to be seen if this event is an anomaly or will be repeated - no major methodological changes to MRIP occurred in 2016, but the states did take over intercept sampling duties from contractors in 2016.

Table 1. Dealer Landings

YEAR	Dealer Pounds Landed*
1999	33
2000	2,446
2001	935
2002	304
2003	6,212
2004	7,332
2005	4,164
2006	28,153
2007	25,835
2008	7,803
2009	38,813
2010	7,365
2011	17,494
2012	40,856
2013	33,275
2014	201,977
2015	77,315
2016	13,087

Table 2. For-Hire VTR Kept Fish VA-ME (numbers of fish)

YEAR	Party Kept Fish	Charter Kept Fish
2012	9,670	381
2013	11,127	711
2014	14,811	983
2015	12,138	2,253
2016	12,356	2,017

* For years with blueline tilefish data (1999-2014), staff examined the NMFS dealer weighout "AA" tables. The "AA" tables have area information integrated via a matching process with VTR information. Staff removed landings from statistical areas south of the North Carolina-Virginia border and landings without area information landed in North Carolina. Virginia landings without area information were multiplied by .89 because commercial VTR information suggested that 89% of Virginia VTR catch with area information came from areas north of the North Carolina-Virginia border. Landings into states north of Virginia without area information were included fully as being from north of the North Carolina-Virginia border. Landings coming from statistical areas 631 and 632 (which straddle the North Carolina-Virginia border) were apportioned half to north of the North Carolina-Virginia border and half south. While VTR data suggest that 67% percent of catch in these areas comes from north of the North Carolina-Virginia border, the VTR information does not capture all of the landings from these areas, 81% of which went into North Carolina, so staff judged that lowering the percent from 67% to 50% seemed reasonable. Also, in terms of latitude, the 631 and 632 statistical areas are 55% off of North Carolina. All 2016 preliminary landings (they have not been added to the AA tables yet) from Virginia north were included as being north of the North Carolina-Virginia border

2017 Tilefish Advisory Panel (AP)
BlueLine Tilefish Fishery Performance Report (FPR)

The Mid-Atlantic Fishery Management Council's (Council's) Tilefish Advisory Panel (AP) met via Webinar on February 9, 2017 to review the fishery information document and develop the **BlueLine** Tilefish Fishery Performance Report (FPR) based on advisor perspectives on catch and landings patterns and other trends in this fishery. The following is the report from the Tilefish AP.

The Advisers in attendance were: David Arbeitman, Ron Callis, Denny Dobbins, Dan Farnham, Frank Green, Jeffrey Gutman, Michael Johnson, Jan McDowell, and John Nolan III. They represent tilefish commercial fisherman (from New York and New Jersey); recreational fishermen (private/head boats, bait and tackle business, from New Jersey and Virginia); and research/academia (VIMS). Also in attendance were: Laurie Nolan and Tom Baum - Council Members; Doug Potts - GARFO; Paul Nitschke and Barbara Rountree - NEFSC; Fred Akers; Greg DiDomenico – GSSA; Jason Didden and José Montañez - Council Staff.

The fishery performance report's primary purpose is to contextualize catch histories for the Scientific and Statistical Committee (SSC) because of the potential importance of this and related information for determining Acceptable Biological Catches (ABCs) in cases of fisheries with high levels of assessment uncertainty. The goal is to allow comparing and contrasting of the most recent year's conditions (2015/2016) and fishery characteristics with previous years. The following trigger questions were used to guide discussion, and the summary of the AP's input follows.

*What factors have influenced recent catch?

- Markets/economy? – Environment?
- Fishery regulations? – Other factors?

*Are the current fishery regulations appropriate? How could they be improved?

- Gear regulations and exemptions? -Trip Limits? -Others?

*Where should the Council and Commission focus their research priorities?

*What else is important for the Council to know?

General Observations

- No major changes have been observed for bluelines in terms of catch rates/composition. Once blueline limits are met then recreational trips search for other targets (goldens). There is a sense from some AP members that the fishery restrictions are/will be benefiting recreational catch per unit effort (CPUE).

Factors Influencing Catch

- Commercial landings since June 2015 have been heavily influenced (restricted) by regulations limiting the fishery to an incidental trip limit.
- Recreational For-Hire Vessel Trip Report (VTR) landings would also have been higher without trip limits since June 2015. Recreational limits depress catch and effort.
- Weather impacts effort – Weather in 2016 similar or slightly windier vs 2015.
- Recreational landings are also constrained by state bag limits.
- Recreational effort changes – Some areas seem to have higher numbers of deep-droppers (Northern), others lower in 2016 (Mid Delmarva area – less offshore activity generally in 2016). The fishery is becoming more and more understood and more people have the required gear. Moderate tuna availability in deeper water translates into highest effort (enough tuna to create effort, but not so much as to occupy interest for a whole trip). Applies for bluelines even more than goldens due to shallower depth of bluelines. Ocean City advisor reported more effort, both charter and private.

Input on Regulations

- Has the 300-pound incidental trip limit caused any regulatory discarding? Not too often in golden tilefish fishery – incidental landings in 2016 were typical and generally accommodated by the 300-pound trip limit. Some southern area effort has had to shift within particular trips to avoid bluelines once 300 pounds were retained.
- Has the 7-fish recreational trip limit caused any regulatory discarding? No, but it is causing shifts in effort away from bluelines once limit reached.
- Some AP members would like the Council to consider a higher trip limit for longer recreational trips, structured after Gulf of Mexico regulations. Other AP members were concerned about the impact of higher recreational limits on the overall fishery especially given low ABC and recreational catch uncertainty.
- Some AP members would like the Council to consider a higher blueline trip limit for longer directed commercial IFQ golden tilefish trips to prevent regulatory discarding. This could include a bycatch percentage of total landings limitation.
- Regarding the recreational measures in the Amendment¹: One advisor recommended multi-day considerations for all types of recreational trips if the Amendment's system is used. Two advisors recommended standing pat with the current system until we can see how it performs.

¹ May 1 – October 31 and per-person recreational bag limits of 7 blueline tilefish on for-hire inspected vessels, 5 blueline tilefish on for-hire uninspected vessels, and 3 blueline tilefish on private vessels

Research Priority Ideas

- Need an actual assessment.
- Need survey to inform assessments.

Other Issues Raised

- General concern about appropriateness of current ABC given recent catches. Blueline ABC is 1/20th of golden tilefish despite likely similar productivity in mid-Atlantic – does not make sense.



Credit: Duane Raver, Jr.

Blueline Tilefish - Advisory Panel Information Document¹

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

¹ 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.

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 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), 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 state regulations in New Jersey drove effort somewhat northward and landings into New Jersey.

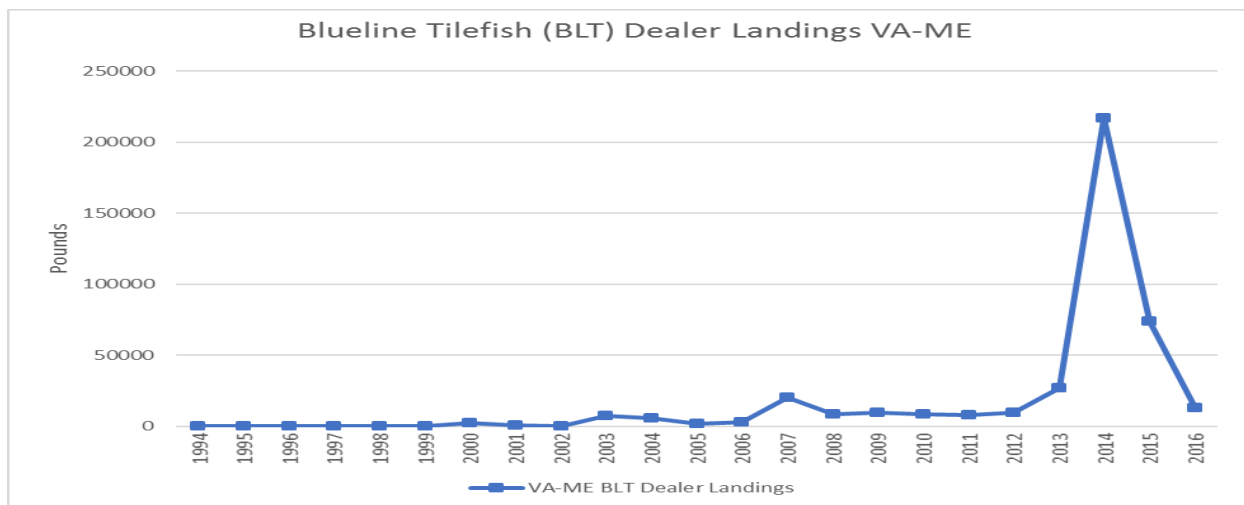


Figure 1. Commercial U.S. Blueline Tilefish Landings (live weight) from Maine-Virginia, 1994-2016. Source: 1994-2016 NMFS unpublished dealer data.

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).

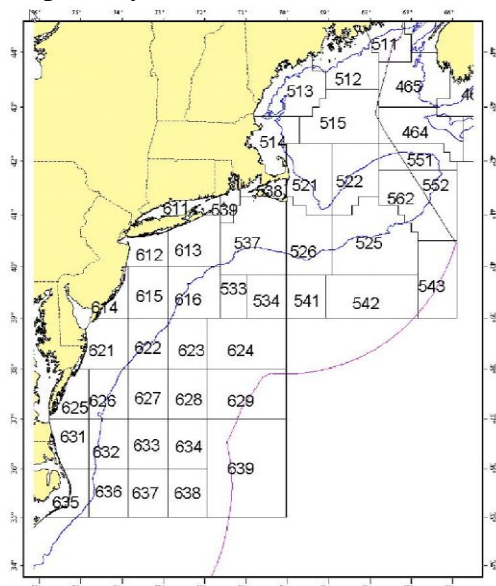


Figure 2. NMFS Statistical Areas.

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

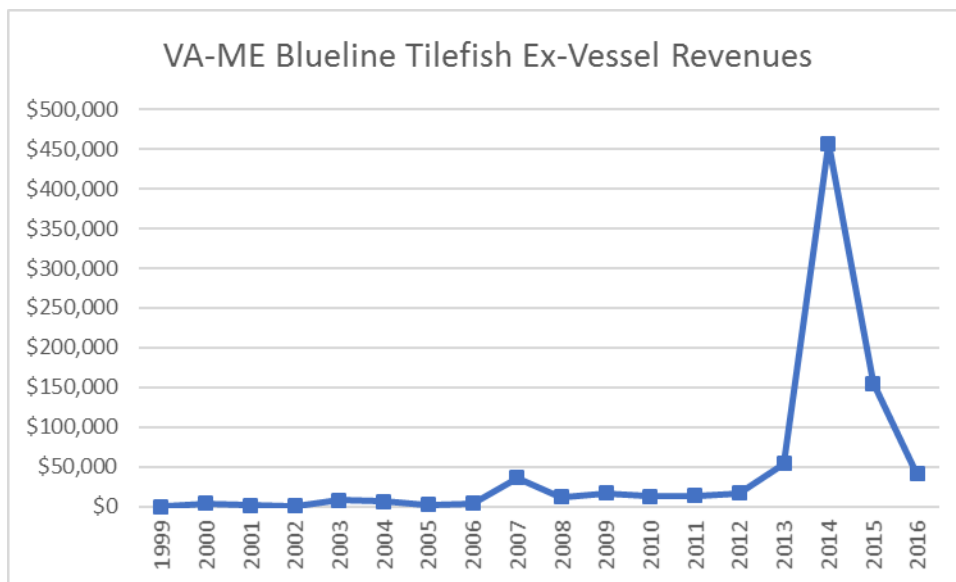


Figure 3. Ex-Vessel Revenues for blueline tilefish, Maine through Virginia combined, 1999-2016.

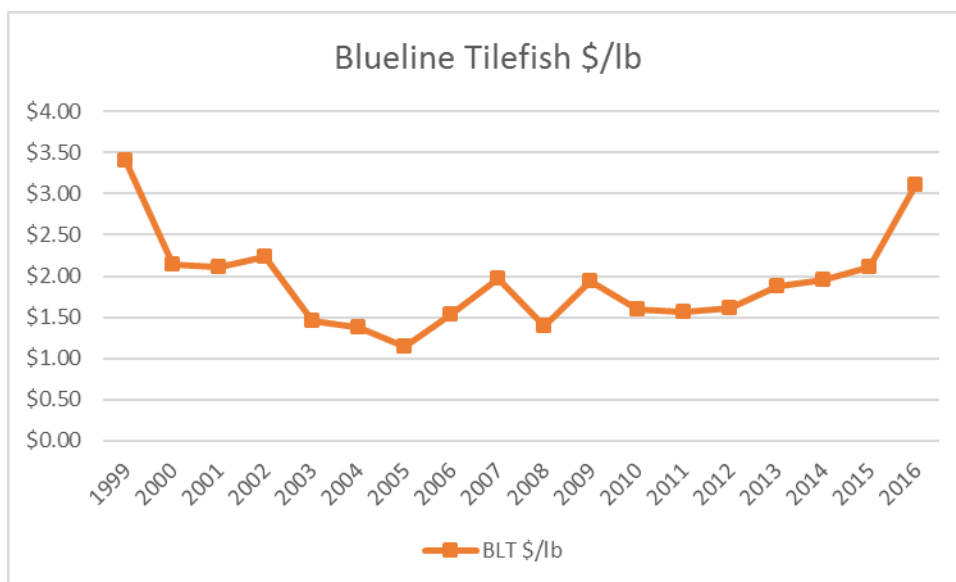


Figure 4. Price for blueline tilefish, Maine through Virginia combined, 1999-2016. Note: Price data have been adjusted by the GDP deflator indexed for 2015.

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 fish for Maryland and 15,338 fish 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