



Mid-Atlantic Fishery Management Council
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Michael P. Luisi, Chairman | P. Weston Townsend, Vice Chairman
Christopher M. Moore, Ph.D., Executive Director

MEMORANDUM

Date: March 22, 2021
To: Council
From: Matthew Seeley, Staff
Subject: 2022-2024 Blueline Tilefish Specifications

As part of the 2022-2024 multi-year specification process for blueline tilefish, the Scientific and Statistical Committee (SSC) and Tilefish Monitoring Committee (MC) reviewed the most recent information to develop and recommend specifications.

The following materials are enclosed:

1. Blueline Tilefish Monitoring Committee Summary (March 22, 2021)
2. March SSC Report – Behind the Committee Reports Tab (March 2021)
3. Blueline Tilefish Staff Memo to Chris Moore (February 23, 2021)
4. Blueline Tilefish Fishery Performance Report (February 2021)
5. Blueline Tilefish Fishery Information Document (February 2021)



Tilefish Monitoring Committee Meeting Summary

March 2021

Dated: March 22, 2021

The Mid-Atlantic Fishery Management Council's (Council) Tilefish Monitoring Committee (MC) met via webinar on March 16, 2021 to review the most recent information and make recommendations for the 2022-2024 blueline tilefish specifications. The primary purpose of this report is to summarize the Tilefish MC recommendations for the 2022-2024 blueline tilefish specifications package. Please note: MC comments described below are not necessarily consensus or majority statements.

Committee Members present: John Maniscalco (NYSDEC), Laurie Nolan (Commercial), Paul Nitschke (NEFSC), Doug Potts (GARFO), Mike Auriemma (NJ DFW), José Montañez and Matt Seeley (Council Staff).

Others present: James Fletcher (UNFA), Dan Farnham (Council Member), and Paul Risi (Council Member).

Discussion

The MC was presented with a summary of the SSC deliberations of the March 2021 SSC meeting, where the SSC reviewed the 2021 Blueline Tilefish Advisory Panel Fishery Performance Report and the 2021 Blueline Tilefish Fishery Information Document. The SSC recommended no changes to the previously set blueline tilefish ABC of 100,520 pounds (45.60 mt) for 2022-2024. Following this recommendation, the MC discussed different components of blueline tilefish catch and recent fishery trends to recommend 2022-2024 management measures.

Monitoring Committee Comments and Recommendations

Annual Catch Targets and Landings Limits and Basis for Derivation

The comments and recommendations in this section are proposed as the 2022-2024 management measures. The recommended measures would remain status quo from the 2019-2021 specifications package. The MC recommended the annual catch limit (ACL) equal the annual catch target (ACT; no adjustment for management uncertainty) of 73,380 pounds (33.28 mt) for the recreational sector and 27,140 pounds (12.31 mt) for the commercial sector for the 2022-2024 fishing years. The MC recommended no changes to the 2% and 1% reduction for recreational and commercial discards, respectively, which defines the total allowable landings (TAL). The recommended recreational TAL is 71,912 pounds (32.62 mt) and the commercial TAL is 26,869 pounds (12.19 mt) for 2022-2024. All catch and landings limits are shown in Table 1.

Recreational Management Measures

The MC recommended no changes to the current recreational management measures. The recreational season is May 1 – October 31 with bag limits set at 7 fish for U.S. Coast Guard inspected vessels, 5 fish for uninspected vessels, and 3 fish for private vessels. The MC recommended to not use MRIP numbers to estimate recreational harvest of blueline tilefish as the intercepts are continuously low for rare event species and unavailable in 2020 due to COVID-19.

There is still no comprehensive system set in place to monitor the recreational ACL. The MC discussed the status of private recreational permitting and reporting, which went live in August 2021. Since the recreational season closes on October 31st, three months of data associated with this brand-new initiative was not sufficient to fully assess the private recreational sector. During those three months, ~340 permits were issued and reported 8 trips landing a total of 84 fish. To supplement the limited data, Council staff also presented the blueline tilefish MRIP estimates through 2019, and estimates generated using a multiplier identified in the 2016 Delphi method¹. To estimate recreational landings, an average weight of 3.65 pounds was used and is consistent with the approach taken in Amendment 6 to the Tilefish Fishery Management Plan (FMP).

The MC continued to question whether MRIP detectability issues for estimating blueline tilefish private recreational catch and harvest have improved enough to warrant the use of the MRIP survey in monitoring the recreational component. Therefore, the MC again recommended using the Delphi percentage of 105.16% of charter vessel landings to estimate landings for the private angler until private angler permitting/reporting becomes common practice. This is an interim fix to not having private recreational landings and will be used until more data is available or an improved method is developed. Party/charter landings will continue to be monitored using the most updated VTRs to assess the catch and landings in numbers of fish since MRIP estimates are consistently associated with very high percent standard errors. Overall recreational fishery performance is presented in Table 2 detailing the MC recommendations.

The MC shares the SSC's concern over the poorly described level of recreational catch for blueline tilefish. The MC notes that recreational effort and landings by party/charter vessels have increased in recent years and that private vessel activity has the potential to greatly alter total landings. Therefore, there is need for collection of recreational data that would help the monitoring component of the fishery. The MC continues to support the permitting and reporting requirements for tilefish that have been approved under Amendment 6 to the Tilefish FMP, however the MC anticipates it will take multiple years of data before the information can influence management.

¹ The Delphi method was run in 2016 and offered recreational landings for charter, party, and private anglers. The Delphi method was used to develop a recreational time series for blueline tilefish through extrapolation of survey results. A ratio was used to back calculate private recreational landings in relation to charter landings from vessel trip reports. This method had been peer reviewed and accepted as best available science by SEDAR 50 (<https://sedarweb.org/sedar-50>) and further recommended by the MC.

Commercial Management Measures

The MC recommended no changes to the commercial season or trip limit which extends from January 1st – December 31st and limits vessels to 500 pounds (and is further reduced to 300 pounds once 70% of the commercial TAL has been landed). In 2020, the MC noted that the Greater Atlantic Regional Fisheries Office (GARFO) opted not to implement the reduction in trip limit to 300 pounds once the 70% threshold was surpassed considering the reduction was to occur shortly prior to the December 31st season end. This decision may have played a role in the commercial sector landing 31,270 pounds, which exceeded the ACL of 27,140 pounds by ~16%. Now, GARFO staff are reviewing commercial catch accounting results to define when accountability measures may be triggered and exactly what poundage.

MC members discussed the overage associated with the commercial sector and recommended to the Council that accountability measures not be triggered for the 2021 fishing year. The MC developed this recommendation because the implications associated with the COVID-19 pandemic disrupted the fishery, GARFO made the decision to not implement the reduction in trip limit once the trigger was surpassed, the recreational sector substantially under-harvested their ACL (assuming a 3.65-pound average weight and private recreational landings estimated with the Delphi multiplier), and there is likely minimal biological justification to reduce the commercial quota in 2021 since the quota overage was small. An adjustment for this small overage will likely not result in meaningful conservation for the stock.

Discards

The MC recommended no changes to the 2% recreational and 1% commercial reduction from ACT to TAL for blueline tilefish discards. The current measures were developed using the average percentage of discards from 2011-2015. According to VTR data, discards in the recreational and commercial fisheries were both ~1%. Due to the uncertainty in landings within the recreational fishery and the continued increased trip limit for the commercial fishery, the MC recommended a status quo reduction from the ACT to TAL.

Other

The MC expressed support for basic research on blueline tilefish life history and growth studies in the Mid-Atlantic to improve the understanding of stock structure and population dynamics. This research may then bolster the stock assessment methodology and reduce the many uncertainties associated with the current assessment (which utilizes a data limited approach).

The MC also recommended that GARFO and commercial port side biological samplers work with golden tilefish vessels in the Mid-Atlantic to improve overall intercepts and sampling of blueline tilefish. Obtaining landings at length information is difficult since sampling opportunities are rare because of the low quota. Given many golden tilefish vessels incidentally land blueline tilefish, the MC suggested the golden tilefish fleet call ahead to port side biological samplers when blueline tilefish have been encountered to improve data needs. The MC did express concern over whether this recommendation may induce bias into the sampling efforts, however, shoreside sampling of blueline tilefish is rare and any increase in sampling should support/improve the currently limited

data. Effort should also be made in states south of New York to increase the likelihood of biological sampling of blue-line tilefish to capture potential spatial size structure differences.

Table 1. Summary of SSC and MC recommendation for catch and landings limits for blue-line tilefish for 2022-2024.

Specification	Recreational	Commercial
ABC	100,520 lbs (45.60 mt)	
ACLs	73,380 lbs (33.28 mt)	27,140 lbs (12.31 mt)
ACTs	73,380 lbs (33.28 mt)	27,140 lbs (12.31 mt)
TALs	71,912 lbs (32.62 mt)	26,869 lbs (12.19 mt)

Table 2. Blue-line tilefish landings (ME-VA) using commercial dealer data, VTRs (party/charter: 2015-2020, private rental: 2020) and MRIP (private/rental: 2015-2019), as well as estimates of private/rental catch using the Delphi method (Delphi – 105.16% of charter). **Pound estimates are generated using a 3.65-pound average weight as identified in Amendment 6 to the Tilefish FMP and include the sum of Party, Charter, and Private Rental (Delphi – Numbers).*

Year	Commercial (Pounds)	Party (Numbers)	Charter (Numbers)	Private Rental (MRIP 2015-2019, VTR 2020 Numbers)	Private Rental (Delphi - Numbers)	*Total Recreational Landings (pounds)
2015	73,644	12,381	2,298	4,663	2,417	62,400
2016	14,235	13,746	2,057	116,833	2,163	65,576
2017	10,734	8,735	1,632	12,122	1,716	44,103
2018	13,068	4,796	7,885	2,989	8,291	76,548
2019	22,759	3,247	7,679	4,839	8,075	69,354
2020	31,270	6,166	3,626	84	3,813	49,658

SSC Report is behind
the Committee Reports
tab.



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MEMORANDUM

Date: February 23, 2020
To: Dr. Chris Moore, Executive Director
From: Matthew Seeley, Staff
Subject: 2022-2024 Blueline Tilefish Specifications

Summary

This memo supports the March 2021 Scientific and Statistical Committee (SSC) meeting for setting blueline tilefish specifications for up to three years (2022-2024). Given stock status is still unknown in the Mid-Atlantic, the next assessment is not scheduled until 2024/2025, and a lack of Northeast Fisheries Science Center data update through 2020, staff recommends a status quo Acceptable Biological Catch (ABC) of 100,520 pounds (45.60 mt) for the 2022-2024 fishing years.

Introduction

The Magnuson-Stevens Act requires each Council's SSC to provide, among other things, ongoing scientific advice for fishery management decisions, including recommendations for ABCs. The SSC recommends ABCs to the Mid-Atlantic Fishery Management Council (Council) that address scientific uncertainty such that overfishing is unlikely to occur per the Council's risk policy. The Council's ABC recommendations to the National Marine Fisheries Service (NMFS) for the upcoming fishing year(s) cannot exceed the ABC recommendation of the SSC. As such, the SSC's ABC recommendations form the upper limit for catches of Council-managed species.

Once the SSC meets and decides on an ABC, the Tilefish Monitoring Committee will convene to discuss if changes to other management measures should be recommended. These measures include annual catch limits (ACL), annual catch targets, discard calculations, management measures and accountability measures. The Council will then make recommendations to the NMFS Northeast Regional Administrator based on the SSC and Monitoring Committee recommendations.

Regulatory Review

In June of 2015 emergency regulations were put into place in the Mid-Atlantic to temporarily constrain fishing effort on the blueline tilefish stock. These regulations consisted of a 300-pound commercial trip limit and a recreational seven fish bag limit and were extended through the 2016 fishing year.

In 2016, based on the output of the DLM 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. This toolkit has been used previously by the SSC to develop ABC recommendations for black sea bass and Atlantic mackerel. Details on the analysis and rationale of the SSC can be found in the working group's report, available [here](#)¹ (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. Then, a time series was created based on the Delphi Approach estimate and other available data.

In Spring 2017 the SSC recommended a status quo ABC of 87,031 pounds for 2018. Specifications were only recommended for one year as the 50th Southeast Data, Assessment, and Review (SEDAR) benchmark assessment was anticipated to be completed late in 2017, which could change the biological reference points.

The 2017 SEDAR 50 benchmark assessment for blueline tilefish was split into two separate stocks, north and south of Cape Hatteras, North Carolina. ABC recommendations were set for the region south of Cape Hatteras (not overfished, overfishing not occurring), but data limitations restricted an ABC recommendation for the region north of Cape Hatteras, which encompasses part of the South Atlantic and the Mid-Atlantic management areas. To assist in developing an ABC recommendation, the Mid- and South Atlantic Councils/SSCs, as well as staff from the Northeast and Southeast Fisheries Science Centers developed a joint subcommittee to rerun the DLM Toolkit for the region north of Cape Hatteras. The results were partitioned at the Council boundaries using coastwide catch data from the pilot tilefish survey funded by the MAFMC out of SUNY Stony Brook.

As a result of rerunning the DLM Toolkit and partitioning the overlapping region (Cape Hatteras, NC to the VA/NC line), the SSC recommended an ABC of 100,520 pounds (45.60 mt). The current ABC has remained status quo since the recommendation in 2018.

Biological Reference Points, Stock Status, and Projections

At the March 2018 SSC meeting, the SSC reviewed the output from the most recent blueline tilefish DLMTool runs (as recommended by the Joint Mid- and South Atlantic Blueline Tilefish Subcommittee) as well as the output from the SEDAR 50 benchmark stock assessment and provided recommendations for annual overfishing limit (OFL) and ABC levels for 2019-2021². The SSC also concluded that the maximum sustainable yield (MSY) estimate based on the DLMTool analysis for the region north of Cape Hatteras is an estimate of the OFL, not the ABC (as recommended by the joint subcommittee), which enabled the SSC to use the P* approach and the Council's risk policy in setting ABC specifications. This was considered a reasonable recommendation for 2019-2021 (with annual reviews) due to limited data and broad uncertainties

¹ <http://www.mafmc.org/briefing/april-2016>

² The March 2018 SSC meeting report is available at: <http://www.mafmc.org/ssc>.

(e.g. max age, short time series, no estimate of recruitment, etc.) within the fishery. Since the SSC lacked information on the estimate of stock biomass relative to B_{MSY} , a ratio of $B/B_{MSY} = 1$ was applied as a default value for the P^* (i.e., $P^* = 0.4$ under the MAFMC's risk policy *in 2018*). The SSC also assumed a typical life history (similar to golden tilefish). Based on this application of the Council's risk policy, the resulting SSC-recommended ABC was 179,500 pounds for 2019-2021 for the region north of Cape Hatteras. The SSC then followed the recommendation of the joint Mid- and South Atlantic Blueline Tilefish Subcommittee to allocate 56% of that ABC to the MAFMC (VA/NC border – north) and 44% to the South Atlantic Fishery Management Council. The basis for this percentage breakdown came from the catch results and random stratified design of the Pilot Blueline Tilefish Longline Survey (SUNY Stony Brook-Frisk et al. 2018). Using the 56% allocation, the MAFMC ABC for 2019-2021 was 100,520 pounds.

Landings

Commercial dealer landings through 2020 are presented in Table 1. Commercial landings (Maine-Virginia) were generally very low (less than 20,000 pounds) throughout the time series 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 northward and into New Jersey. In 2018, the Council approved an increase in trip limit from 300 to 500 pounds. Additionally, a trigger to reduce the commercial trip limit back to 300 pounds was implemented to assist in ensuring the ACL was not exceeded within this new data limited fishery. As indicated by the advisors, this approach worked well in 2019 because there was an opportunity for fishermen to target more fish without creating a large directed fishery. However, given the COVID-19 pandemic and the inherent quota monitoring challenges associated with this fishery, the commercial ACL was exceeded by ~16% (2020 Catch: 31,583, 2020 ACL: 27,140). NMFS quota monitoring is in the process of validating this overage and identifying if/when accountability measures will be triggered.

Recreational catch described by combined party/charter vessel trip reports (VTRs) is reported in Table 2. Reported catch and discards have remained between approximately 10,000 – 15,000 fish since 2012. Previous work with the advisors and other blueline tilefish recreational fishermen has suggested VTR reporting compliance began to encompass at least the primary headboats in 2012. Private recreational angler landings are available from the Marine Recreational Information Program (except for 2020 due to COVID-19), but blueline tilefish intercepts are rare occurrences and the estimates are often associated with very high percent standard errors. As an alternative approach to estimating private angler performance, the Monitoring Committee previously recommended using the Delphi³ percentage of 105.16% of charter vessel landings to estimate private angler landings (Table 3). This approach will be revisited again at the upcoming March Monitoring Committee meeting.

³ The Delphi method was run in 2016 and offered recreational landings for charter, headboat, and private anglers. The Delphi method was used to develop a recreational time series for blueline tilefish through extrapolation of survey results. A ratio was used to back calculate private recreational landings in relation to charter landings from vessel trip reports. This method had been peer reviewed and accepted as best available science by SEDAR 50 and further recommended by the MC in 2019.

Private Recreational Permitting and Reporting

To improve tilefish management, the Greater Atlantic Regional Fisheries Office initiated private recreational permitting and reporting for tilefish anglers in August 2020. Given the recreational fishing season runs from May 1st to October 31st, limited data was gathered over the first 3 months. Ultimately, this initiative should allow for improved monitoring of the recreational fishery and provide ample data necessary to improve the future stock assessment process.

OFL/ABC Recommendations

Following the 2018 approach detailed in *the Biological Reference Points, Stock Status, and Projections* section, the SSC previously recommended an ABC of 100,520 pounds (45.60 mt) to the Mid-Atlantic management area for 2019-2021. Considering this recommendation, recent fishery performance, lack of an updated assessment, the need to streamline the Mid-Atlantic specifications cycle with a SEDAR assessment scheduled for 2024/2025, and the high degree of uncertainty within the recreational sector, **Council staff recommends a status quo ABC of 100,520 pounds (45.60 mt) for the 2022-2024 specifications package.**

Table 1. Commercial blueline tilefish landings (live weight) from Maine-Virginia, 2000-2020. Source: NMFS unpublished dealer data.

Year	Landings (Pounds)
2000	2,446
2001	955
2002	269
2003	7,601
2004	5,827
2005	2,031
2006	3,039
2007	21,068
2008	8,495
2009	9,626
2010	8,388
2011	8,179
2012	9,624
2013	26,781
2014	215,928
2015	73,644
2016	14,235
2017	10,734
2018	13,068
2019	22,759
2020	31,270

Table 2. Blueline tilefish party/charter VTR landings and reported discards from Maine-Virginia, 2012-2020. Source: NMFS unpublished VTR data.

Year	Number of Trips	Landings (Numbers of Fish)	Reported Discards (Numbers of Fish)
2012	103	10,051	338
2013	120	11,838	128
2014	138	15,849	254
2015	170	14,391	292
2016	158	15,493	246
2017	129	10,164	115
2018	221	12,432	99
2019	166	10,711	176
2020	143	9,600	174

Table 3. Recreational blueline tilefish catch (Maine-Virginia) using VTRs (party/charter: 2015-2020, private rental: 2020) and MRIP (private/rental: 2015-2019), as well as estimates of private/rental catch using the Delphi method (Delphi – 105.16% of charter).

Year	Party (Numbers)	Charter (Numbers)	Private Rental (MRIP 2015-2019, VTR 2020 Numbers)	Private Rental (Delphi - Numbers)
2015	12,381	2,298	4,663	2,417
2016	13,746	2,057	116,833	2,163
2017	8,735	1,632	12,122	1,716
2018	4,796	7,885	2,989	8,291
2019	3,247	7,679	4,839	8,075
2020	6,166	3,626	84	3,813



Blueline Tilefish Fishery Performance Report

February 2021

The Mid-Atlantic Fishery Management Council's (Council) Tilefish Advisory Panel (AP) met via webinar on February 17, 2021 to review the Fishery Information Document and develop the following Fishery Performance Report. The primary purpose of this report is to contextualize catch histories by providing information about fishing effort, market trends, environmental changes, and other factors. A series of trigger questions listed below were posed to the AP to generate discussion of observations in the blueline tilefish fishery. Please note: Advisor comments described below are not necessarily consensus or majority statements.

Advisory Panel members present: Fred Akers (Private), Gregory Hueth (Private/For-hire), Robert Bogan (For-hire), Doug Zemeckis (Rutgers), Skip Feller (For-hire), and Michael Johnson (Commercial).

Others present: Paul Nitschke (NEFSC), Dan Farnham (Council Member), Scott Lenox (Council Member), Sonny Gwin (Council Member), Dewey Hemilright (Council Member), Joe Cimino (Council Member), Michelle Duval (Council Member), James Fletcher (UNFA), Laurie Nolan (Commercial), Doug Potts (GARFO), Paul Rago (SSC), Matthew Seeley (Council Staff), and José Montañez (Council Staff).

Trigger questions

1. What factors have influenced recent catch (markets/economy, environment, regulations, other factors)?
2. Are the current fishery regulations appropriate? How could they be improved?
3. What would you recommend as research priorities?
4. What else is important for the Council to know?

Factors Influencing Catch

In 2020, the COVID-19 pandemic resulted in less for-hire trips and decreased effort overall. However, one advisor indicated that private recreational effort increased, as they observed more recreational fishing boats everywhere in state and federal waters and confirmed that recreational boat sales increased in 2020. For the commercial sector, the quota was exceeded in 2020 and the advisors indicated that individuals from other fisheries may have transitioned to targeting bluelines and also noted that the small quota is difficult to monitor/manage when trips land up to 500 pounds.

AP members confirmed that no major changes have been observed for blueline tilefish in terms of catch rates/composition. Once blueline tilefish limits are met, recreational trips search for other targets (often golden tilefish). However, the commercial advisors from New York indicated they

rarely direct on blueline tilefish and only land incidentally. These incidental landings come from the east end of long island since there is little to no effort in the Baltimore and Wilmington Canyon area.

AP members indicated that the majority of time they target blueline tilefish they land the recreational trip limits. They also indicated that the 3 fish limit is quite limiting. Additionally, the seasonal closure on October 31 could potentially depress catch and effort, which may be beneficial to the stock. Often AP members try to target golden tilefish and find that blueline tilefish abundance is limiting.

Recreational effort decreased this year as it does not make economic sense to target blueline tilefish when tuna are not present. Typically, moderate tuna availability in deeper water translates into the highest effort (enough tuna to create effort, but not so much as to occupy interest for a whole trip). In 2020, advisors indicated there was less pressure on blueline tilefish because the tuna were plentiful and found in shallower waters. However, a Council member on the call indicated private landings in Maryland alone were over 84 fish (the coastwide estimate of private landings from August to October) because they are less dependent on tuna abundance, and more so on swordfish.

Regulations are keeping harvest where they should be since we currently do not have an accepted stock assessment in the Mid-Atlantic. Advisors agreed that they want to see how the current specifications and management measures play out since this is still a newly managed fishery in the Mid-Atlantic. Improved reporting from the rec sector will help.

Market/Economic Conditions

Advisors indicated that in New York (Hunts Point) they were receiving approximately \$2.88 per pound, and occasionally as high as \$4.00 per pound for larger fish. Advisors remain confident that there is continued demand for blueline tilefish, but this demand is driven by low and sporadic supply. Overall, blueline tilefish is becoming a more appreciated species.

Management Issues

To avoid regulatory discarding, anglers often shift effort away from blueline tilefish once the limit is reached. Small amounts of discards do occur as incidental interactions when targeting golden tilefish. But multiple advisors indicated they often know where blueline tilefish are and they know how to avoid them. Thus, the trip limit did not really affect the incidental fishery.

AP members advocate to maintain the 3 (private), 5 (U.S. Coast Guard *uninspected* vessel), 7 (U.S. Coast Guard *inspected* vessel) bag limits in place since there is currently limited reporting for private anglers and we are still learning how the fishery responds to management in the Mid-Atlantic. Additionally, advisors indicated they would like to see captain and crew included in the bag limits and noted that if bag limits drop lower than 7 fish the head boat community will have greater difficulty filling their trips. Furthermore, daytime swordfishing has taken pressure off blueline tilefish and advisors are looking for liberalization in the private sector.

Some AP members would like the Council to consider a higher trip limit for longer recreational trips, structured after Gulf of Mexico regulations (makes filling trips easier). Other AP members

were concerned about the impact of higher recreational limits on the overall fishery especially given low ABC and recreational catch uncertainty. Ultimately, advisors want to avoid creating a directed fishery especially with the uncertainty of the overall stock.

It was noted at the meeting that there is a general decrease in port sampling, which can greatly impact future assessments, particularly tilefish as it relies critically on cyclical recruitment. Port sampling is a key factor that will help identify the life history characteristics of blueline tilefish that will improve the overall stock assessment process.

Research Priorities

Discussion focused on the need to improve the understanding of biological and life history traits. Specifically, age validation, maturity, post-release mortality, and movement. One advisor stated that a defined sampling program has the potential to hit on multiple priorities. For example, developing a tagging program (using applied and natural tags) offers insight into movement, age, maturity, and habitat preference. There are more bluelines now than in previous years and they are being identified in places they have never been before (even in waters as shallow as 60-80 feet off Block Island).

The AP remained unanimous in their recommendation and continued support for private recreational permitting and reporting. The information gathered in 2020 was only from August through October, so the AP is looking forward to the continuation of this initiative to better understand recreational catch/landings and effort.

The AP also reviewed the Council's comprehensive research plan for blueline tilefish and noted that all research focusing on life history characteristics and monitoring (i.e., improvements to biological sampling, aging methods, habitat studies, assessment of discards, mean weight estimates, and collection of catch per unit effort data) are necessary to improve our understanding of the stock and to work towards a successful assessment.



Blueline Tilefish Fishery Information Document

February 2021

This Fishery Information Document provides a brief overview of the biology, stock condition, management system, and fishery performance for blueline tilefish with an emphasis on 2020. Data sources for Fishery Information Documents are generally from unpublished National Marine Fisheries Service (NMFS) survey, dealer, vessel trip report (VTR), permit, and Marine Recreational Information Program (MRIP) databases and should be considered preliminary. For more resources, including previous Fishery Information Documents, please visit <http://www.mafmc.org/tilefish/>.

Key Facts

- There has been no change to the unknown stock status since the 2017 assessment.
- Recreational permitting/reporting requirements are in place for private tilefish anglers.
- ABC = 100,520 pounds, Commercial ACL = 27,140 pounds, Recreational ACL = 73,380 pounds
- The commercial fishery is open year-round with a trip limit of 500 pounds gutted (heads and fins attached) weight that is reduced back to 300 pounds once 70% of the quota has been landed.
- The recreational fishery is open from May 1 – October 31. Bag limits are as follows: private vessels: 3-fish, for-hire vessel (no USCG inspection): 5-fish, for-hire vessel (with USCG inspection): 7-fish.
- Commercial landings increased by 37% from 2019 to 2020 (22,759 to 31,270 pounds) while the price per pound increased by ~9% from \$2.65 to \$2.88 from 2019 to 2020.
- Commercial catch exceeded the ACL by ~16% (Catch: 31,583, ACL: 27,140), which may result in a pound for pound payback in the 2021 fishing year.
- In 2020, party/charter anglers reported a ~10% decrease in catch compared to 2019 (10,925 to 9,792 pounds).

Basic Biology

Blueline tilefish are primarily distributed from Campeche, Mexico northward through the Mid-Atlantic (Dooley 1978). Several recently completed studies suggest that blueline tilefish from the eastern Gulf of Mexico through the Mid-Atlantic are comprised of one genetic stock (SEDAR 50 Data Workshop). This homogenous stock inhabits the shelf edge and upper slope reefs at depths of 150-840 feet (46-256 m) and temperatures between 59-73°F (15-23°C) where they are considered opportunistic predators that feed on prey associated with substrate (crabs, shrimp, fish, echinoderms, polychaetes, etc.) (Sedberry et al. 2006 and Ross and Huntsman 1982)). They are

sedentary in nature and burrow into sandy areas in close association with rocky outcroppings (SEDAR 2017).

Blueline tilefish are long-lived fish reaching sizes up to about 36 inches (91 cm) and exhibit dimorphic growth with males attaining larger size-at-age than females. Males are predominant in the size categories greater than 26 inches (66 cm) fork length. Blueline tilefish are classified as indeterminate spawners, with up to 110 spawns per individual based on the estimates of a spawning event every 2 days during a protracted spawning season from approximately February through November. Additionally, an aging workshop conducted to support the blueline tilefish assessment has called into question the ability to accurately age blueline tilefish, so previous age determinations may no longer be accurate (SEDAR 2017).

Status of the Stock

Prior to management of blueline tilefish in the Mid-Atlantic, NMFS listed blueline tilefish as overfished, but not overfishing from the Southeast Data, Assessment, and Review (SEDAR) 32 conducted in 2013 (SEDAR 2013). More recently, updated stock status information was identified through the 2017 benchmark assessment, SEDAR 50 (SEDAR 2017). Genetic work conducted for SEDAR 50 suggests a genetically homogenous population off the entire Atlantic coast yet does not suggest what catch may be appropriate off various parts of the coast. In SEDAR 50, the blueline tilefish stock was split in two, north and south of Cape Hatteras to allow each Council (Mid and South Atlantic) to set their own specifications. The stock south of Cape Hatteras was determined to be not overfished with overfishing not occurring. The assessment did not provide stock status information relevant to the Mid-Atlantic management area due to insufficient data.

Management System and Fishery Performance

Management

The Mid-Atlantic Fishery Management Council (Council or MAFMC) established management of blueline tilefish north of the Virginia/North Carolina border through Amendment 6 to the Tilefish Fishery Management Plan. In 2016, initial measures were set using a data limited approach and the Delphi Method (Southwick and Associates 2016).

Following the 2017 SEDAR 50 assessment where no recommendations were made for the region north of Cape Hatteras, which extends beyond the Council management areas of the Virginia/North Carolina border, the MAFMC and South Atlantic Fishery Management Council (SAFMC) formed a joint blueline tilefish subcommittee. The subcommittee used the Data Limited Toolkit to develop acceptable biological catch (ABC) recommendations for the respective Scientific and Statistical Committees (SSC). This offered an opportunity to partition blueline tilefish ABCs that crossed the two management areas (north of Cape Hatteras). *The MAFMC SSC developed the 2019-2021 blueline tilefish ABC recommendation of 100,520 pounds at its March 2018 meeting.* The SAFMC's SSC proposed blueline tilefish ABCs of 233,968 pounds for 2020-2022 (Abbreviated Framework Amendment 3 to the FMP for the Snapper Grouper Fishery of the South Atlantic Region).

In the Mid-Atlantic, commercial vessels can fish year-round and are limited to 500 pounds gutted (heads and fins attached) weight until 70% of the quota (Commercial Total Allowable Landings =

26,869 pounds) has been landed, then the trip limit is reduced to 300 pounds gutted (heads and fins attached) weight.

The recreational blueline tilefish season is open from May 1 to October 31 and the possession limit depends on the type of vessel being used (Recreational Total Allowable Landings = 71,912 pounds). Anglers fishing from private vessels are allowed to keep up to three blueline tilefish per person per trip. Anglers fishing from a for-hire vessel that has been issued a valid federal Tilefish Party/Charter Permit but does not have a current U.S. Coast Guard safety inspection sticker can retain up to five blueline tilefish per person per trip. Finally, anglers on for-hire vessels that have both a valid federal Tilefish Party/Charter Permit and a current U.S. Coast Guard safety inspection sticker can retain up to seven blueline tilefish per person per trip.

Commercial Fishery

Commercial landings (Maine-Virginia) were generally very low (less than 20,000 pounds) throughout the time series 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 northward and into New Jersey (Figure 1 and Table 1). Further breakdown by year/state may violate data confidentiality rules (especially for 2016 and 2017). In 2020, 1,937 individuals held federal commercial tilefish permits (valid for both golden and blueline tilefish) and landed 31,270 pounds (Tables 1 and 2). Discards are calculated as 1% of overall commercial landings resulting in 313 pounds for 2020. Thus, total commercial catch was 31,583, which exceeds the 27,140-pound ACL by ~16%. Given the ACL has been exceeded, the tilefish accountability measures indicate “landings in excess of the commercial ACL will be deducted from the commercial ACL for the following year”.

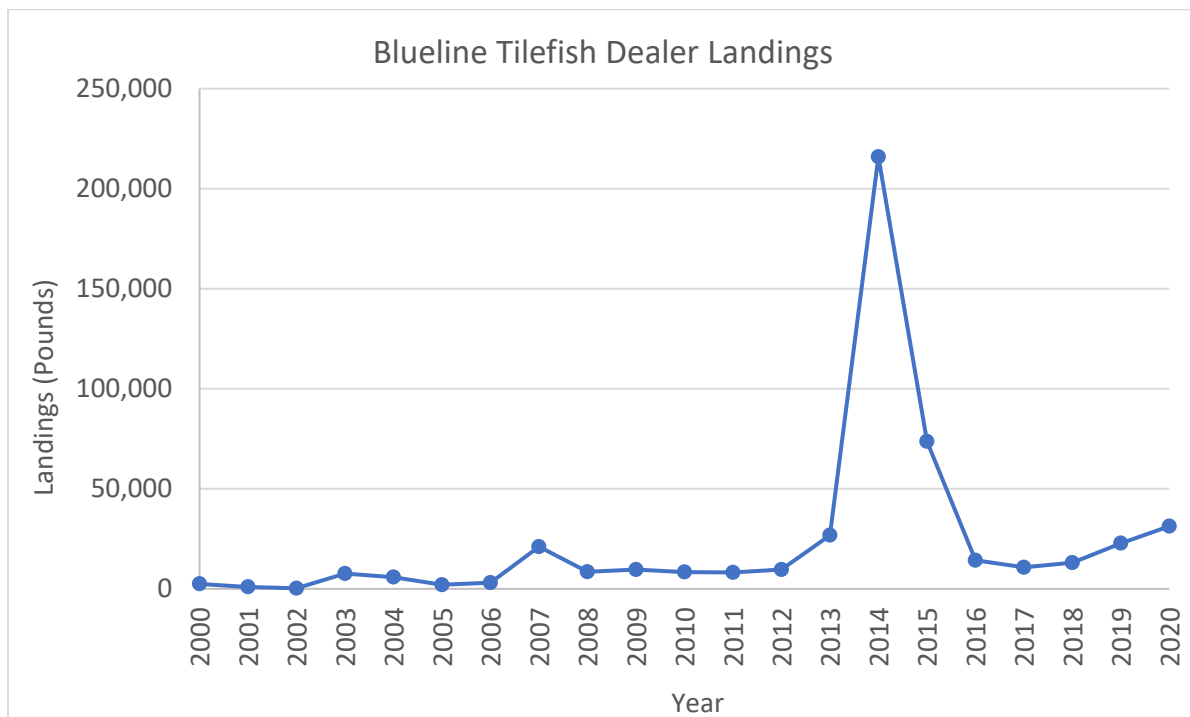


Figure 1. Commercial blueline tilefish landings (live weight) from Maine-Virginia, 2000-2020. Source: NMFS unpublished dealer data.

Table 1 and Table 2. Commercial blueline tilefish landings (live weight) from Maine-Virginia, 2000-2020 (Table 1) and 2020 by state (Table 2). Source: NMFS unpublished dealer data. Confidential means less than 3 vessels landed blueline tilefish.

1.)

Year	Pounds
2000	2,446
2001	955
2002	269
2003	7,601
2004	5,827
2005	2,031
2006	3,039
2007	21,068
2008	8,495
2009	9,626
2010	8,388
2011	8,179
2012	9,624
2013	26,781
2014	215,928
2015	73,644
2016	14,235
2017	10,734
2018	13,068
2019	22,759
2020	31,270

2.)

State	Pounds (2020)
MA	Confidential
RI	3,469
NY	1,849
NJ	4,049
MD	9,872
DE	Confidential
VA	11,713
Total	31,270

Aggregate landings from the 2000-2020 time-series are approximately 64% 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 prior to Mid-Atlantic management. Landings from all other gear types are low and variable from year to year. The breakdown of commercial landings by gear (based on VTRs) for 2020 are presented in Table 3. Furthermore, Table 4 presents landings by trip in pounds bins.

Table 3 and Table 4. Commercial blueline tilefish landings (live weight) in 2020 by gear (Table 3) and trip presented in pound bins (Table 4) from Maine-Virginia. Source: VTR database.

3.)

Gear	Pounds ¹	Percent
Longline	13,545	48.05%
Handline	10,130	35.94%
Trawl	3,632	12.89%
Pots/Traps	880	3.12%
Total	28,187	100%

4.)

Pound Range	Trips (N)
500+	13
400 - 499	10
300 - 399	11
200 - 299	33
100 - 199	27
1 - 199	50
Total	144

Statistical areas 626, 622, 632, 616 and 621 accounts for the majority of catch for the 2000-2020 period (Figure 2 and Table 5) as well as the 2020 fishing year. A further breakdown by year/area may violate data confidentiality rules.

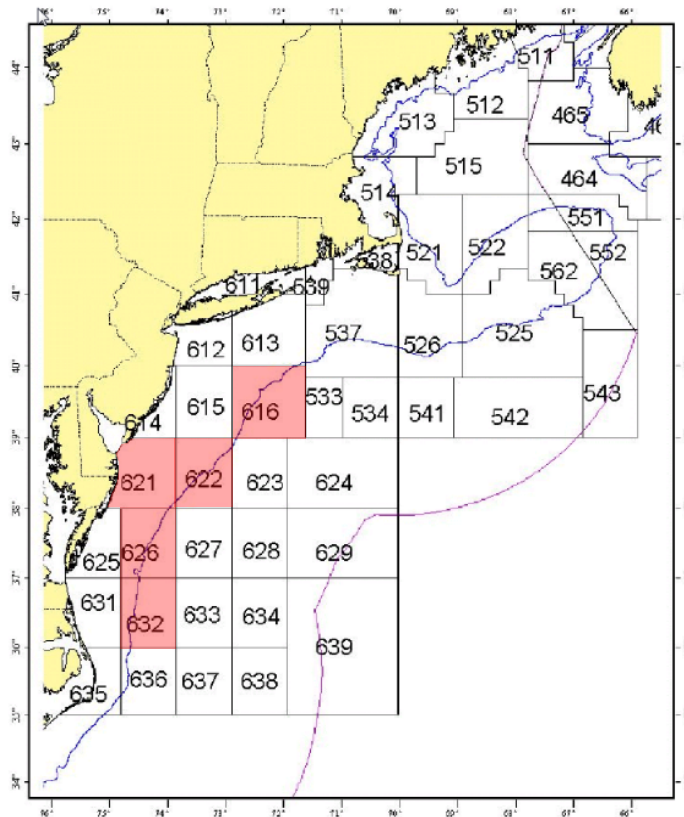


Figure 2. Top 5 NMFS statistical areas accounting for total 2020 blueline tilefish landings identified with commercial VTRs. Source: NMFS unpublished VTR data.

¹ One VTR record indicated landings of 20,000 pounds. This report is being reviewed by the NMFS, but is thought to be an inaccuracy. Therefore, this report was removed from the results presented in Table 3.

Table 5. Top 5 statistical areas summarizing blueline tilefish landings greater than 10,000 pounds from Maine-Virginia for 2000-2020. Source: NMFS unpublished VTR data.

Stat Area	2000-2020 Landings (Pounds)
626	239,658
622	40,576
632	52,674
616	51,895
621	29,816

Commercial blueline tilefish ex-vessel revenues (nominal) and price (inflation adjusted to 2019 dollars) are described in Figures 3 and 4. Since blueline tilefish have been managed by the Council (secretarial interim action in 2016), the ex-vessel value has averaged \$49,185 at approximately \$2.59 per pound. For 2020, the ex-vessel value was \$90,092 at \$2.88 per pound.

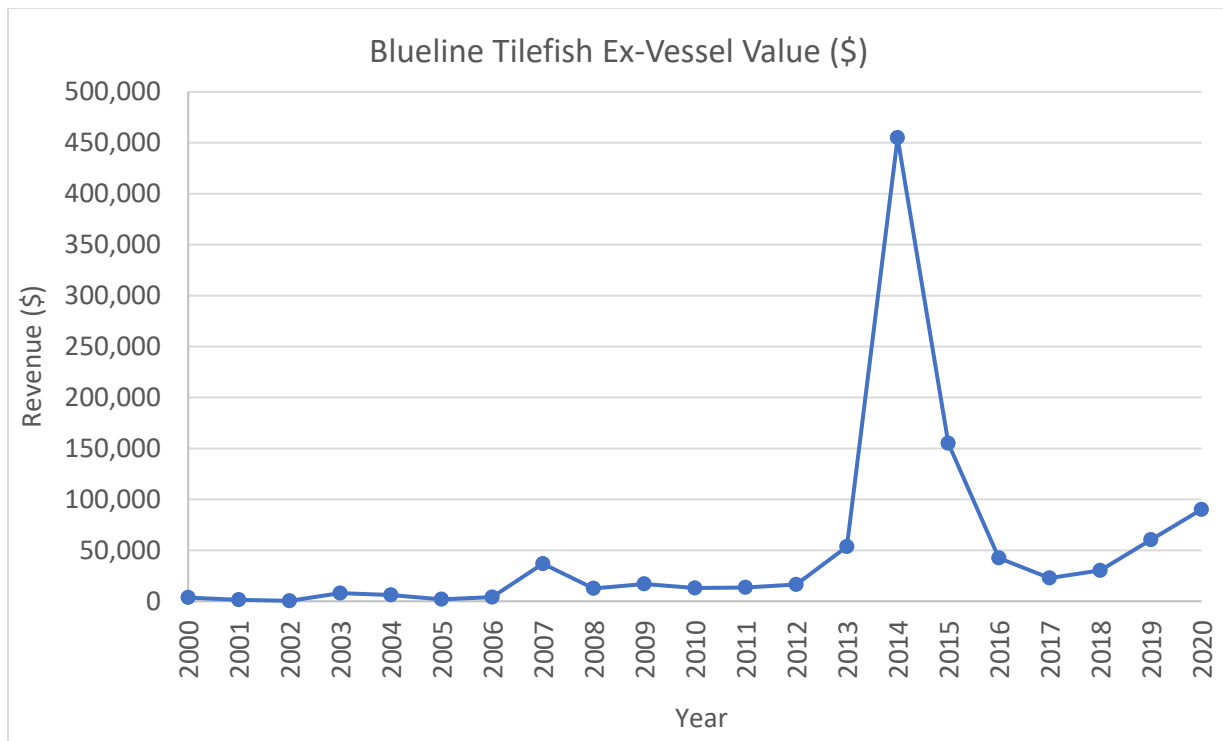


Figure 3. Ex-vessel revenues for blueline tilefish, Maine to Virginia combined, 2000-2020. Source: NMFS unpublished dealer data.

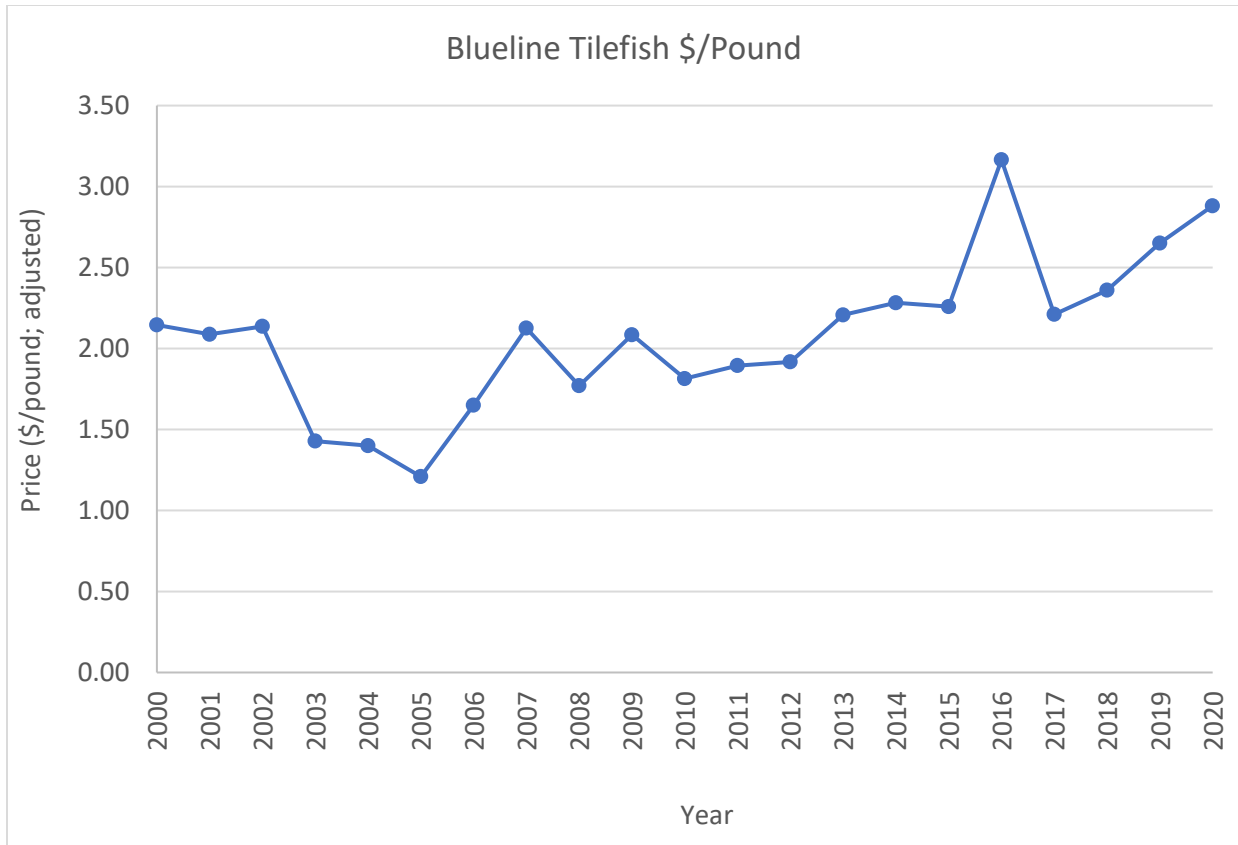


Figure 4. Price for blueline tilefish, Maine to Virginia combined, 2000-2020. Note: Price data have been adjusted by the GDP deflator indexed for 2019 (2020 – unadjusted). Source: NMFS unpublished dealer data.

Recreational Fishery

In 2020, 606 tilefish permits were issued to party/charter vessels within the relatively small recreational fishery. Stakeholders believe that VTR reporting compliance for blueline tilefish has been low, especially historically and for charter vessels. Table 6 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. For 2020, the for-hire sector landed 9,600 blueline tilefish. Recreational discards are calculated as 2% of overall landings resulting in 192 fish for 2020 (as compared to the number of reported discards – 174 fish). Thus, total recreational catch was 9,792 fish. Until recently, blueline tilefish landings by private anglers were only estimated via MRIP, however intercepts in the MRIP are an exceedingly rare event (Table 7).

Table 6. Blueline tilefish party/charter VTR landings and reported discards from Maine-Virginia, 2012-2020. Source: NMFS unpublished VTR data.

Year	Number of Trips	Landings (Numbers of Fish)	Estimated Discards ² (Numbers of Fish)	Reported Discards (Numbers of Fish)
2012	103	10,051	201	338
2013	120	11,838	237	128
2014	138	15,849	317	254
2015	170	14,391	288	292
2016	158	15,493	310	246
2017	129	10,164	203	115
2018	221	12,432	249	99
2019	166	10,711	214	176
2020	143	9,600	192	174

Table 7. Recreational blueline tilefish re-calibrated MRIP catch estimates (2020 – no MRIP intercepts) by state and mode. Source: NMFS unpublished MRIP data.

Year	State	MRIP Catch (Numbers of fish)	Mode
2015	DE	4,663	Private/Rental
2016	MD	46,106	Private/Rental
2016	NJ	9,924	Private/Rental
2016	VA	1,222	Charter
2016	VA	60,803	Private/Rental
2017	VA	12,122	Private/Rental
2018	DE	19	Charter
2018	MD	11	Party
2018	VA	2,373	Charter
2018	VA	2,989	Private/Rental
2019	MD	4,839	Private/Rental
2019	VA	7	Party
2019	VA	2,294	Charter

Private Recreational Angler Permitting and Reporting

To improve tilefish management and reporting, the Greater Atlantic Regional Fisheries Office (GARFO) implemented mandatory private recreational permitting and reporting for tilefish anglers in August 2020. This action was approved in late 2017, but with delayed implementation. Outreach materials and webinars were provided by GARFO and the Council leading up to the final rule and will continue to be circulated as these regulations become commonplace.

Under this rule, private recreational vessels (including for-hire operators using their vessels for non-charter, recreational trips) are required to obtain a federal vessel permit to target or retain

² Recreational discards are calculated as 2% of overall landings.

blueline or golden tilefish north of the Virginia/North Carolina border. These vessel operators would also be required to submit VTRs electronically within 24 hours of returning to port for trips where tilefish were targeted or retained. For more information about the proposed requirements, check out the [Recreational Tilefish Permitting and Reporting FAQs](#).

Permitting

Get your federal private recreational tilefish vessel permit through [Fish Online](#). This new permit is required even if a vessel already holds a for-hire tilefish permit. Call the GARFO Permit Office at 978-282-8438 for questions about the permitting process.

Reporting

NOAA Fisheries is encouraging anglers not already using another electronic VTR system to utilize NOAA Fish Online, which is available through a mobile app or a web-based portal. Other systems that may be suitable for recreational anglers include SAFIS eTrips/mobile and SAFIS eTrips Online. You can access information about approved applications and other aspects of electronic reporting on the [NOAA Fisheries website](#).

Additionally, a new app has been released to make the reporting process increasingly easy and convenient. Harbor Light Software's *eFin Logbook* has received certification from NOAA Fisheries as an approved application through which anglers can report their trips. Funded by the Council, *eFin Logbook* is a user-friendly application designed specifically for recreational tilefish anglers. The app is available for use on all Apple and Android mobile devices (iPhone, iPad, Android phone, and Android tablet).

At present, *eFin Logbook* can only be used by tilefish recreational anglers to satisfy reporting requirements. Future modifications may expand its capabilities to other reporting and personal fishing log applications. For-hire operators, many of whom have other reporting requirements, are encouraged to choose different software. To learn more about other electronic reporting options and decide which one is right for you, visit the [NOAA Fisheries Greater Atlantic Region Electronic Reporting Web Page](#).

Given these requirements have only been in place since August 2020 and the recreational fishery closes on October 31, the following data should be considered preliminary. As of February 1, 2021, 340 tilefish permits have been issued for private recreational anglers. This permit allows recreational anglers to land both blueline and golden tilefish. For the 2020 fishing year, 8 private recreational trips were reported by recreational anglers with landings equal to 84 fish. The low landings associated with private anglers may be attributed to the short fishing season (as a result of when implementation occurred), this being the first-time recreational anglers are required to report, and the COVID-19 pandemic decreasing effort further offshore.

Currently, there is no average weight that can be applied to blueline tilefish across the coast as average weights vary significantly. Thus, recreational catch is summarized in numbers of fish. For 2020, MRIP reported no blueline tilefish landings through the private/rental mode, however, 84 fish were reported through the new private angler permitting/reporting requirements. VTRs presented 9,792 fish caught (including estimated discards) via the for-hire fleet. Total recreational removals are then estimated to be 9,876 fish. Catch in pounds is then estimated using a range of accepted weights (3-6 pounds from NY to NC, as indicated by the tilefish advisors) across the coast (Table 8). For reference, an accepted average weight of 3.65 pounds was proposed in Amendment 1 to the Tilefish FMP.

Table 8. Coastwide recreational blueline tilefish catch using VTRs (party/charter: 2015-2020, private recreational: 2020) and MRIP (private/rental: 2015-2019) with assumed weights.

Year	3 Pounds	4 Pounds	5 Pounds	6 Pounds
2015	58,305	77,740	97,175	116,610
2016	404,918	539,890	674,863	809,835
2017	68,195	90,927	113,659	136,390
2018	47,188	62,918	78,647	94,377
2019	47,583	63,444	79,305	95,166
2020	29,633	39,511	49,388	59,266

In 2020, Tilefish Monitoring Committee members questioned whether MRIP detectability issues for estimating blueline tilefish private recreational harvest have improved enough to warrant the use of the MRIP survey in monitoring the recreational component. To monitor the recreational fishery, the MC recommended using the Delphi³ percentage of 105.16% of charter vessel landings to estimate landings for the private angler. This is an interim fix to not having robust estimates of private recreational landings and will be used until more data is available or an improved method is developed. Party/charter landings will continue to be monitored using the most updated VTRs to assess the catch and landings in numbers of fish (Table 9).

Table 9. Recreational blueline tilefish catch (ME-VA) using VTRs (party/charter: 2015-2020, private rental: 2020) and MRIP (private/rental: 2015-2019), as well as estimates of private/rental catch using the Delphi method (Delphi – 105.16% of charter).

Year	Party (Numbers)	Charter (Numbers)	Private Rental (MRIP 2015-2019, VTR 2020 Numbers)	Private Rental (Delphi - Numbers)
2015	12,381	2,298	4,663	2,417
2016	13,746	2,057	116,833	2,163
2017	8,735	1,632	12,122	1,716
2018	4,796	7,885	2,989	8,291
2019	3,247	7,679	4,839	8,075
2020	6,166	3,626	84	3,813

³ The Delphi method was utilized in 2016 and offered recreational landings for charter, headboat, and private anglers. The Delphi method was used to develop a recreational time series for blueline tilefish through extrapolation of survey results. A ratio was used to back calculate private recreational landings in relation to charter landings from vessel trip reports. This method had been peer reviewed and accepted as best available science by SEDAR 50 and further recommended by the MC through 2020.

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