

# Golden Tilefish



**SSC Meeting**

*May 10, 2023*

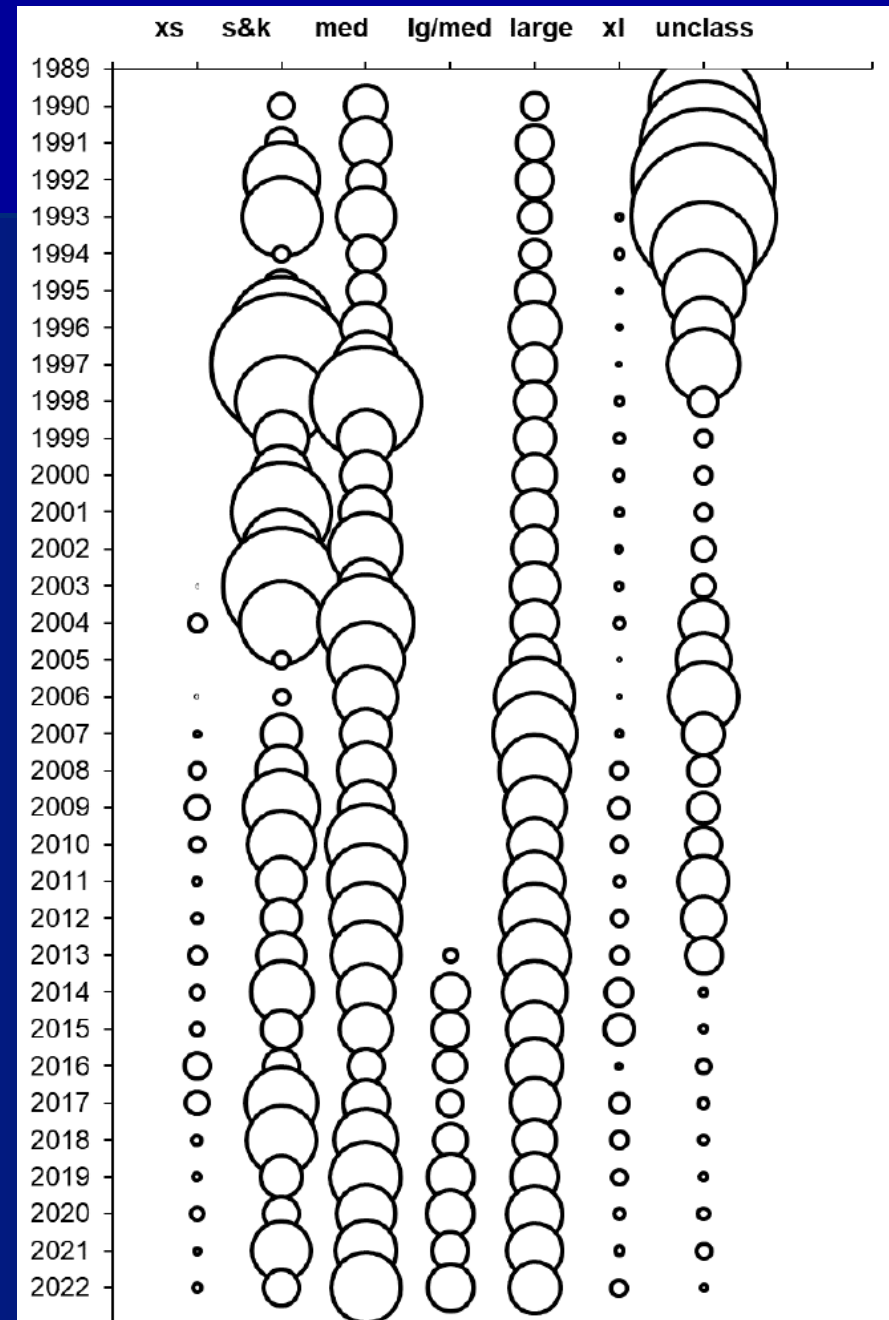
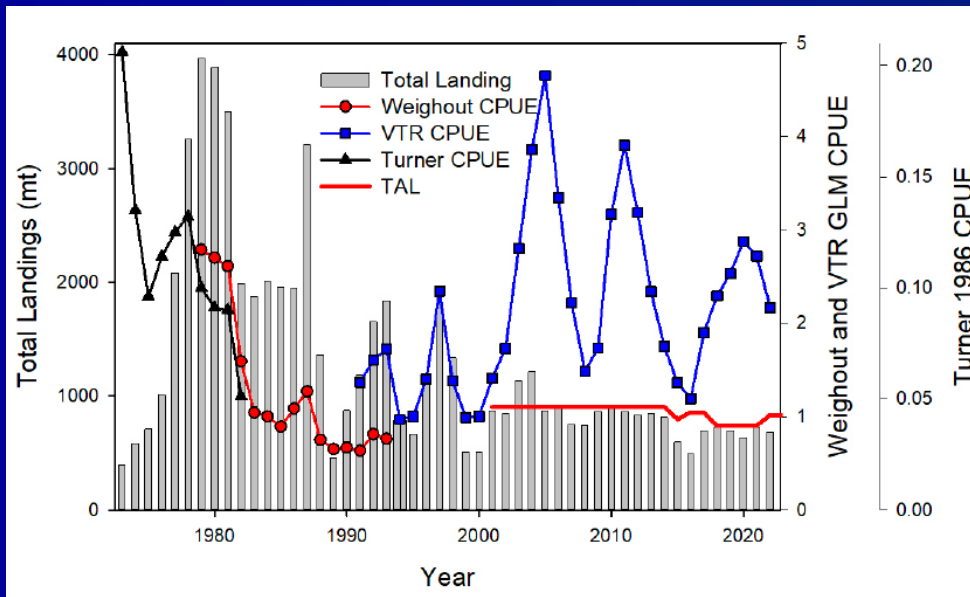
# Today

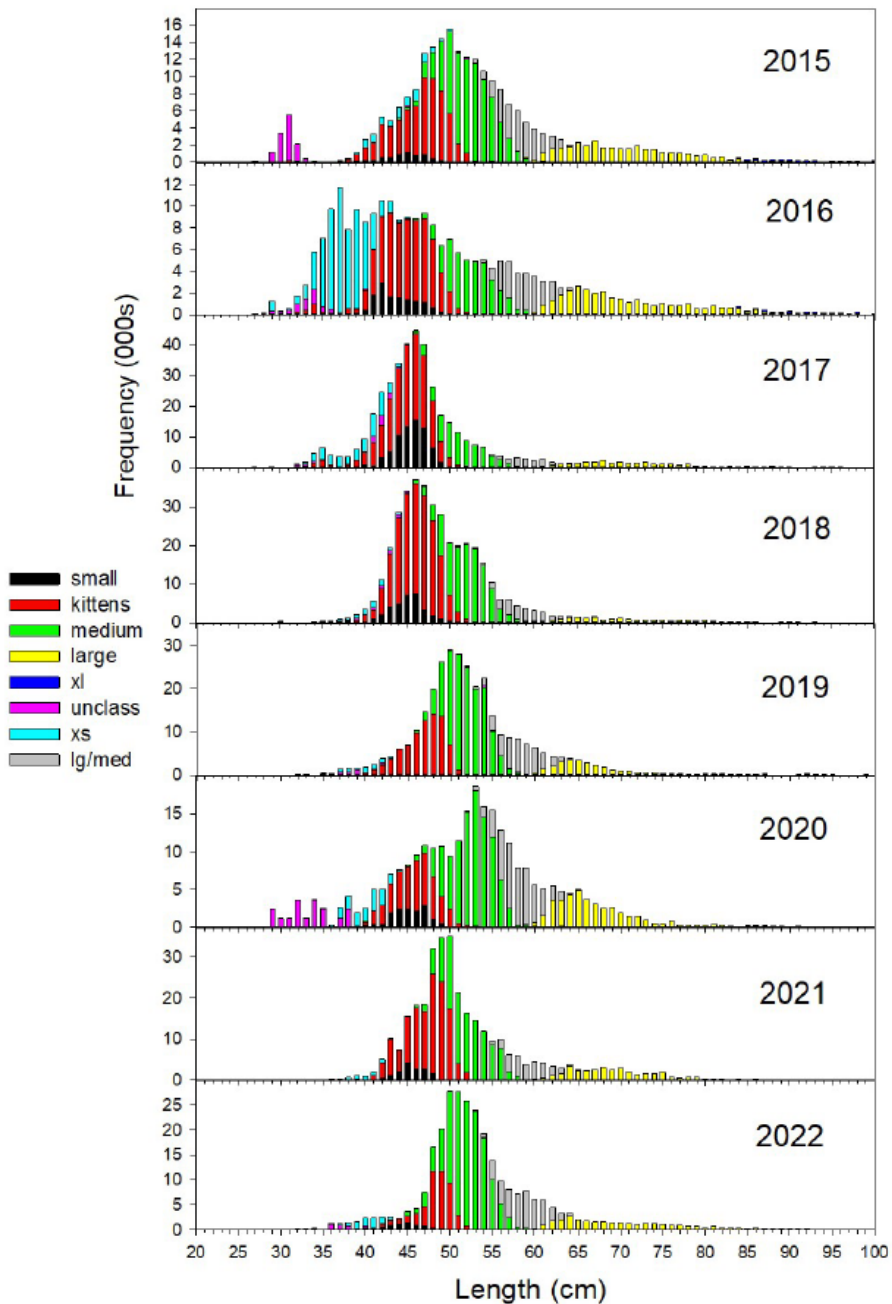
- Objective: To provide the SSC with updated fishery information on GTF; Review 2024 ABC
- We will discuss:
  - Stock status, 2021 MTA, Data Update
  - Regulatory Review
  - Recent Fishery Performance
    - Fishery Information Document
    - Fishery Performance Report
  - Staff Memo to Chris Moore

# Stock Status; 2021 MTA

- Stock not overfish and overfishing not occurring in 2020 (Nitschke 2021)
- Fishing mortality in 2020 estimated at  $F=0.160$ ; 39% below the fishing mortality threshold of  $F=0.261$  ( $F_{MSY}$  proxy =  $F_{40\%}$ )
- SSB in 2020 estimated at 23.28 million pounds (10,562 mt); 96% of the 24.24 million pounds biomass target ( $SSB_{MSY}$  proxy =  $SSB_{40\%}$ )
- There was some evidence of a stronger than average year class in 2017

# Data Update, through 2022 (Nitschke 2023)





**Data Update,  
through 2022  
(Nitschke 2023)**

# Regulatory Review

- July 2021, the SSC recommended 3-year ABCs (2022, 2023, 2024)
- ABCs for two scenarios were provided
  - Traditional ABC calculation
  - Constant ABC calculation

# Regulatory Review

- The SSC accepted the CV of 100% in the OFL as the foundation for the ABC. Using the Council's published risk policy, the recommended ABCs are as follows:

<b>YEAR</b>	<b><u>Traditional</u></b> <b><u>(Scenario 1)</u></b>		<b><u>Constant</u></b> <b><u>(Scenario 2)</u></b>	
	<b>ABC (mt)</b>	<b>OFL (mt)</b>	<b>ABC (mt)</b>	<b>OFL (mt)</b>
2022	867	1,011	891	1,011
2023	917	1,013	891	1,010
2024	890	975	891	976

# SSC Noted . . .

- Interim metrics
  - Landings and length/age distribution from fishery
  - SSC emphasized the need to maintain/increase port sampling
- Sources of uncertainty included:
  - Fishery dependent data used in assessment
  - Dome-shape selectivity curve
  - Lack of reliable recreational catch information
  - Lack of recruitment index



# SSC Noted . . .

- Provided research and monitoring recommendations that would reduce uncertainty in the ABC recommendation and/or could be used/considered for the 2024 RTA
  - Work in progress
  - Completed
  - Hope to address under 2024 RTA

# Specifications Process Timeline

- 2022-2024 GTF fishery specifications
  - 3<sup>rd</sup> year of current specifications cycle
- This year the SSC (May 9-10), MC (May 15), Council (June 6-8)
  - Review 2024 fishery specifications

# Specifications Process Timeline

- 2021 MTA was used to develop specifications for the current cycle (2022-2024)
- 2024 RTA will be used to develop specifications for the next cycle
  - Spring 2024

# Table 1 (Abbreviated). Summary of management measures and landings for FY 2011 through 2024.

Management Measures	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
ABC (m lb)	-	-	2.013	2.013	1.766	1.898	1.898	1.636	1.636	1.636	1.636	1.964	1.964	1.964
TAL (m lb)	1.995	1.995	1.995	1.995	1.755	1.887	1.887	1.626	1.626	1.626	1.625	1.839	1.839	1.839
Com. quota- (m lb)	1.995	1.995	1.995	1.995	1.755	1.887	1.887	1.626	1.626	1.626	1.625/ 1.672*	1.839	1.839	1.839
Com. landings	1.924	1.873	1.840	1.826	1.351	1.051	1.501	1.624	1.563	1.403	1.548	1.668	-	-
Com. Overage / underage (m lb)	-0.071	-0.122	-0.155	-0.169	-0.404	-0.836	-0.387	-0.003	-0.064	-0.223	-0.123	-0.171	-	-
Incidental trip limit (lb)	300	500	500	500	500	500	500	500	500	500	500	500	500	500
Rec. possession limit	8 <sup>b</sup>	8 <sup>b</sup>	8 <sup>b</sup>	8 <sup>b</sup>	8 <sup>b</sup>	8 <sup>b</sup>	8 <sup>b</sup>	8 <sup>b</sup>	8 <sup>b</sup>	8 <sup>b</sup>	8 <sup>b</sup>	8 <sup>b</sup>	8 <sup>b</sup>	8 <sup>b</sup>

2017-2022  
 Average landings = 1.551 M pounds  
 Average quota = 1.712 M pounds  
 91% quota harvested

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2021 – 93% quota harvested  
 2022 – 91% quota harvested

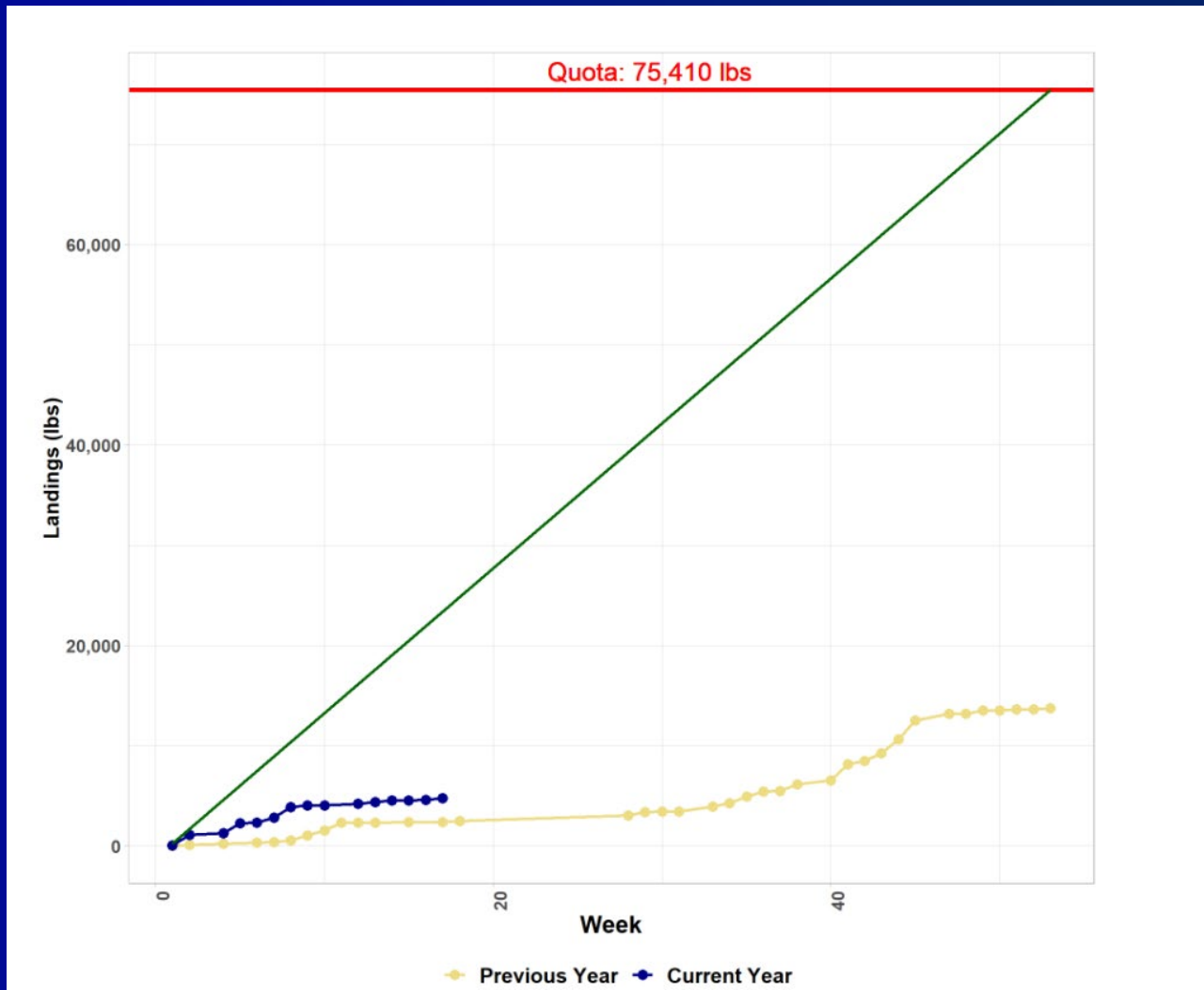
# Commercial Landings

- Tilefish are primarily caught by longline (99%) and bottom otter trawl (<1%) - Table 2
- Statistical areas 616 (55%), 537 (38%), 613 (4%) - Table 3
  - Accounting for 97% of the landings

# Landings, ex-vessel value, and price/lb

- 2022 landings (landed weight) – 1.37 million pounds (6% decrease from 2021)
  - 1.46 million pounds in 2021
- 2022 ex-vessel revenue – \$6.47 million (5% increase from 2021)
  - \$6.19 million in 2021
- 2022 mean price per pound – \$4.72 (12% increase from 2021)
  - \$4.23/lb in 2021

# Incidental Landings





# Incidental Landings

<b>Fishing year</b>	<b>Landings (pounds)</b>	<b>Incidental quota (pounds)</b>	<b>Percent of quota landed (%)</b>
2013	36,442	99,750	37
2014	44,594	99,750	45
2015	18,839	87,744	21
2016	20,929	94,357	22
2017	60,409	94,357	64
2018	61,254	72,752	84
2019	22,246	72,752	31
2020	25,864	72,752	36
2021	25,321	70,548	36
2022*	26,827	75,410	36

Table 10. Incidental commercial landings for 2013-2022 fishing years.

# Dealers

- In 2022 - 55 dealers - \$6.47 million – 118 vessels
- In 2021 - 47 dealers - \$6.18 million – 108 vessels
- Dealers are mostly located in NY, RI, NJ, CT, and MA (Table 8)

# Recreational Fishery

- NMFS recreational statistics (Table 11)
- Recreational landings for the 1982 - 2022 period, ranged from zero for most years to approximately 200k fish in 2010
- In 2022, ~ 100k tilefish landed (preliminary - NMFS recreational statistics database)

# Recreational Fishery

Year	Landed no. A and B1				Released no. B2			
	Party/charter		Private/rental		Party/charter		Private/rental	
1982			2,225	(102.0)				
1983-93								
1994	555	(101.6)						
1995								
1996	1,765	(80.5)						
1997-00								
2001	98	(101.4)						
2002			122,443	(85.7)			8,163	(85.7)
2003	967	(75.2)						
2004	55	(102.2)						
2005								
2006	471	(103.7)						
2007	1,837	(71.4)						
2008								
2009	168	(89.8)						
2010	4,754	(81.9)	213,382	(98.4)				
2011-12								
2013	1,145	(0)						
2014-15								
2016			26,691	(70.4)				
2017			59,413	(59.4)				
2018	7,925	(80.3)	893	(102.9)	4	(106.8)		
2019			10,364	(64.2)				
2020	1,933	(60.3)	9,336	(94.7)	41	(100.3)		
2021	270	(102.1)	9,921	(55.6)				
2022	1,306	(39.0)	96,718	(68.2)				

**Table 11.**  
**Recreational**  
**tilefish data from**  
**the NMFS**  
**recreational**  
**statistics**  
**databases, 1982-**  
**2022.**

# Recreational Fishery

Year	Party/Charter		Private	
	Number of golden tilefish kept	Mean effort	Number of golden tilefish kept	Mean effort
1996	81	1.4		
1997	400	7.5		
1998	141	4.7		
1999	91	0.4		
2000	147	0.5		
2001	222	0.6		
2002	774	0.9		
2003	991	1.6		
2004	737	1.2		
2005	498	0.9		
2006	477	1.2		
2007	1,077	1.2		
2008	1,100	1.3		
2009	1,451	1.3		
2010	1,866	2.0		
2011	2,938	3.4		
2012	6,424	2.8		
2013	6,560	3.2		
2014	6,958	3.1		
2015	8,297	4.2		
2016	5,919	4.1		
2017	7,014	4.7		
2018	7,110	3.9		
2019	5,424	3.1		
2020 <sup>a</sup>	3,466	3.2	61	4.4
2021	6,833	<sup>b</sup>	197	<sup>b</sup>
2022	5,689	<sup>b</sup>	303	<sup>b</sup>
All	82,685	--	561	--

**Table 12. Number of tilefish kept by recreational anglers and mean effort from Maine through Virginia, 1996 through 2022.**

# Recreational Fishery

**Table 14. Tilefish kept estimates (number of fish) for charter mode, LPS data, 2005-2022.**

Year	Golden Tilefish		Blueline Tilefish		Sand Tilefish		Unclassified		Total	
	Sum Kept	PSE	Sum Kept	PSE	Sum Kept	PSE	Sum Kept	PSE	Sum Kept	PSE
2005	0	.	0	.	0	.	0	.	0	.
2006	0	.	0	.	0	.	27	76.44	27	76.44
2007	298	67.63	0	.	0	.	211	54.12	509	45.50
2008	7	99.48	0	.	0	.	449	85.08	455	83.81
2009	504	51.66	0	.	0	.	241	86.67	745	44.81
2010	4	100.00	0	.	0	.	398	82.81	402	81.94
2011	1,743	42.97	77	87.56	0	.	983	64.09	2,803	35.00
2012	168	48.28	156	68.34	21	98.16	179	74.66	523	36.34
2013	32	58.93	543	60.47	0	.	20	73.47	595	55.33
2014	1,554	49.94	785	34.43	0	.	135	71.21	2,474	33.44
2015	417	67.95	2,045	31.55	65	87.98	107	57.22	2,635	26.93
2016	722	58.03	3,108	29.07	0	.	641	66.02	4,471	24.20
2017	557	33.23	1,540	39.09	0	.	1,640	43.09	3,737	25.33
2018	372	51.09	1,856	30.07	0	.	782	48.13	3,010	23.24
2019	800	35.86	2,839	26.35	0	.	2,207	31.98	5,845	18.26
2020	1,656	36.83	4,431	19.51	0	.	2,639	47.83	8,726	18.87
2021	4,351	31.00	10,147	16.29	0	.	148	68.75	14,646	14.59
2022	2,097	30.77	8,352	18.81	0	.	518	40.86	10,968	15.60
<b>Total</b>	<b>15,282</b>	<b>13.56</b>	<b>35,879</b>	<b>8.18</b>	<b>86</b>	<b>70.95</b>	<b>11,325</b>	<b>17.00</b>	<b>62,573</b>	<b>6.51</b>

# Recreational Fishery

**Table 15. Tilefish kept estimates (number of fish) for private mode, LPS data, 2005-2022.**

Year	Golden Tilefish		Blueline Tilefish		Sand Tilefish		Unclassified		Total	
	Sum Kept	PSE	Sum Kept	PSE	Sum Kept	PSE	Sum Kept	PSE	Sum Kept	PSE
2005	0	.	0	.	0	.	209	71.23	209	71.23
2006	0	.	0	.	0	.	47	94.06	47	94.06
2007	288	70.19	0	.	0	.	552	52.21	840	41.90
2008	0	.	0	.	0	.	568	54.84	568	54.84
2009	0	.	0	.	0	.	971	51.52	971	51.52
2010	70	59.43	0	.	0	.	650	51.14	721	46.51
2011	1,346	42.77	78	79.50	0	.	697	37.72	2,121	29.98
2012	1,821	54.77	122	93.26	0	.	111	102.88	2,054	49.19
2013	315	47.19	349	52.29	0	.	390	47.30	1,054	28.37
2014	571	46.98	283	58.37	0	.	320	80.58	1,174	34.68
2015	294	51.22	1,312	36.70	0	.	1,622	50.84	3,228	29.95
2016	242	71.23	435	61.87	0	.	827	69.79	1,505	43.86
2017	2,121	42.22	2,322	38.67	0	.	893	40.45	5,336	24.71
2018	1,440	29.68	2,580	60.06	0	.	1,079	41.69	5,099	32.73
2019	2,357	32.46	2,335	27.59	0	.	247	52.00	4,939	20.42
2020	2,808	28.82	3,342	28.08	0	.	1,108	61.88	7,258	19.51
2021	3,095	34.86	3,568	27.04	0	.	0	.	6,663	21.72
2022	3,409	29.99	2,309	25.26	0	.	552	83.18	6,270	20.15
<b>Total</b>	<b>20,177</b>	<b>12.09</b>	<b>19,036</b>	<b>13.03</b>	<b>0</b>	<b>.</b>	<b>10,842</b>	<b>15.41</b>	<b>50,055</b>	<b>7.71</b>

# Survey Updates

## ■ Golden Tilefish Survey

- The 2023 golden tilefish fishery independent bottom longline survey will take place in Mid-June to early July
- The goal of the 2023 fishery independent bottom longline survey
  - Extend the timeseries to derive an index of abundance for the stock
  - Collect other biological information to support the golden tilefish stock assessment



# Survey Updates

- South Atlantic Deepwater Longline Survey (SADL)
  - Cooperative survey that targets several deepwater snapper/grouper species, including tilefish, in waters from the NC/VA border – FL Keys
  - Survey objective: generate indices of abundance and collect biological information to support stock assessments
  - 2023 SADL will be expanded north to about Wilmington Canyon
    - Support collection of information on blueline tilefish throughout its range as well as monitor potential distribution shifts of other deepwater species

# FPR – Market Factors

- Industry still experiencing market issues in NY, Fulton Market moved to a new location (Hunts Point) which resulted in some business losses
- COVID-19 has also impacted the way of how business is conducted
  - Sales down, collecting money difficult
- Industry is still not working at full capacity
- The market cannot handle too much volume of tilefish or prices drop dramatically

# FPR – Environmental Conditions / Management Issues

- Windy conditions impact fishing
  - Timing of trips
  - Duration of trips
- Recent changes in weather patterns make trip fishability difficult to predict
- MRIP data not be used as a tool for management or stock assessment purposes
- Concerns about LPS estimates

# FRP – General Fishing Trends

## ■ General Fishing Trends

- Effort has been consistent as far as days at sea, and more fish are being landed with the same effort
- A larger amount of extra small (< 2 pounds) were present in 2022 compared to previous years

# FRP – Other Issues

- Continue outreach/work for the rec. permit and reporting requirements
  - HMS
  - Enforcement at the state level
- For-hire effort was reduced in 2020/2021/2022
- Worse trip bookings in 2022 compared to 2021
- Expecting worse trip bookings in 2023 than in 2022 and 2021
  - Slightly better than during the COVID-19 pandemic but not to the level that we would like to see

# FRP – Other Issues

- Captain and Crew should also be allotted a bag limit
- Would like the Council to consider a differential trip limit (for-hire vs private) and longer recreational trips

# FRP – Research Priorities

- Concern over the lack of biological sampling at the dock
- Maintain current biological sampling or increase
  - Could observer efforts be incorporated into a biological sampling program?
  - Start a new database for biological sampling?

# Staff Recommendations

- Memo to Chris Moore
- Base on the review of recent fishery trends and other available information
- No change to the 2024 fishing year specifications



	2022	2023	2024	Basis
<b>OFL</b>	2,228,873 (1,011 mt)	2,226,669 (1,010 mt)	2,151,712 (976 mt)	Projections
<b>ABC</b>	1,964,319 (891 mt)	1,964,319 (891 mt)	1,964,319 (891 mt)	Staff recommendation based on overfishing probability averaging
<b>ACL</b>	1,964,319 (891 mt)	1,964,319 (891 mt)	1,964,319 (891 mt)	ABC = ACL
<b>IFQ fishery ACT</b>	1,763,478 (800 mt)	1,763,478 (800 mt)	1,763,478 (800 mt)	Deduction from management uncertainty = 0. IFQ ACT = 95% of the ACL and incidental ACT = 5% of the ACL. However, the MC is recommending an ACT that is below the ABC/ACL derived from the SSC recommendation and it is based on the more stable long-term productivity of the stock to acknowledge the positive development in the stock status but also to mitigate the potential risk to the stability and success in managing this relative data poor fishery
<b>Incidental fishery ACT</b>	92,815 (42 mt)	92,815 (42 mt)	92,815 (42 mt)	
<b>Projected IFQ fishery discards</b>	0	0	0	Data indicates no discards in the IFQ fishery (directed fishery). IFQ fishery discards are prohibited in the FMP
<b>Projected incidental fishery discards</b>	17,405 (8 mt)	17,405 (8 mt)	17,405 (8 mt)	Average discards (2016-2020) mostly sm/lg mesh OT and Gillnet gear
<b>IFQ fishery TAL = IFQ fishery quota</b>	1,763,478 (799.900 mt)	1,763,478 (799.900 mt)	1,763,478 (799.900 mt)	IFQ fishery TAL = IFQ fishery ACT – IFQ fishery discards. No additional reductions applied between IFQ TAL amounts and final IFQ fishery quota amounts
<b>Incidental fishery TAL = incidental fishery quota</b>	75,410 (34.205 mt)	75,410 (34.205 mt)	75,410 (34.205 mt)	IFQ fishery TAL = IFQ fishery ACT – IFQ fishery discards. No additional reductions applied between IFQ TAL amounts and final IFQ fishery quota amounts

# Questions?



# Extra Slides

# Catch Disposition / Discard Trends

- According to the “Discard Estimation, Precision, and Sample Size Analysis” conducted by the NEFSC, discard estimations for commercial fisheries are low (mostly large/small mesh trawls and gillnets)
  - 2012-2016 – avg. 9,393 pounds (~4 mt)
  - 2014-2018 – avg. 11,627 pounds (~5 mt)
  - 2015-2019 – avg. 11,524 pounds (~5 mt)
  - 2016-2020 – avg. 17,405 pounds (~8 mt)

# Permits

- In 2022, 1,641 open access commercial/incidental tilefish permits (valid for both golden and blueline tilefish) were issued
- In 2022, 703 open access charter/party tilefish permits were issued
- As of October 5, 2022, 790 tilefish permits have been issued for private recreational anglers

# SSC R & M Recommendations . . .

- Continue to explore development of a fishery independent survey to estimate abundance and distribution. **Work in progress**
- Continue to perform exploratory analyses of fish distributions to assess whether the dome-shaped selectivity curve used in the assessment reflects fishery selectivity or availability, or both.
- Expand observer coverage to improve index standardization of fishery-dependent data.

# SSC R & M Recommendations . . .

- Leverage existing fishing activity to provide samples to improve life history and distribution information.
- Assess the accuracy and reliability of aging techniques. **Work in progress**
- Evaluate the role of sanctuaries on the Golden Tilefish stock and its fisheries.
- Given the results of the assessment update, it seems reasonable to change the overfishing definition to  $F_{40\%}$ . **This was done and completed**

# SSC R & M Recommendations . . .

- Continuation of adequate age sampling is critical to the switch from the use of pooled age-length-key to year specific age-length-keys for more appropriate characterization of age structure and better tracking of year classes. **This was done and completed**
- There is a significant concern with reductions in the biological port sampling that may negatively affect future assessments, including the next RT assessment model in 2024.



# SSC R & M Recommendations . . .

- Due to the lack of information on incoming recruitment at the end of the time series (no fishery independent surveys that capture young fish), alternatives to the TAL calculations based on projections that rely on uncertain indications of year class strength should be considered. A conservative approach to changes in the TAL over time appear to have resulted in overall benefits for both the Golden Tilefish stock and for the fishery.  
**Hope to look at this under the projections TOR**