

# Golden Tilefish



SSC Meeting  
*19 March 2019*

# Today

- Objective: To provide the SSC with updated fishery information for Golden Tilefish (GTF)
- Presentation:
  - Stock Status
  - Regulatory Review
  - Data Update – NEFSC
  - Recent Fishery Performance
    - GFT Fishery Information Document
    - GTF Fishery Performance Report (FPR)
  - Staff Memo to Chris Moore

# I. Stock Status

# Stock Status

- Golden tilefish stock assessment update (Nitschke 2017)
- Stock not overfished and overfishing was not occurring in 2016 relative to newly developed updated BRPs

# Stock Status (cont'd)

- Fishing mortality in 2016 was estimated at  $F=0.249$ ; 20% below the fishing mortality threshold of  $F=0.310$  ( $F_{MSY}$  proxy= $F_{38\%}$ )
- SSB in 2016 was estimated at 18.69 million pounds (8,479 mt), and was at 89% of the biomass target ( $SSB_{MSY}$  proxy= $SSB_{38\%}$ ; 21 million pounds or 9,492 mt)

## **II. Regulatory Review**

# Regulatory Review

- March 2017, the SSC recommended a 3-year ABC (2018, 2019, 2020)
- Council's revised approach to the risk policy that seeks to maintain consistency in catch advise

# Regulatory Review (cont'd)

- The level of uncertainty in the assessment was assumed to require an SSC-specified coefficient of variation (CV)
- Maintained the 2014 determination based on consistency b/w input data and model dynamics, available model diagnostics, and lack of a pathological retrospective pattern



# Regulatory Review (cont'd)

- The ABC calculation was based
  - On the  $F_{MSY}$  proxy
  - Lognormal coefficient of variability around the OFL of 100%
  - That the ABC is taken every year
  - Risk policy for a typical life history

# Regulatory Review (cont'd)

	2018	2019	2020	Basis (2018-2020)
<b>OFL</b>	2.332 m lb (1,058 mt)	2.421 m lb (1,098 mt)	2.291 m lb (1,039 mt)	Projections
<b>ABC</b>	1.636 m lb (742 mt)	1.636 m lb (742 mt)	1.636 m lb (742 mt)	Projections/ Council Risk Policy (recommendation, based on overfishing probability averaging)
<b>ABC % of OFL</b>	70%	68%	71%	
<b>ACL</b>	1.636 m lb (742 mt)	1.636 m lb (742 mt)	1.636 m lb (742 mt)	ABC = ACL

# Regulatory Review (cont'd)

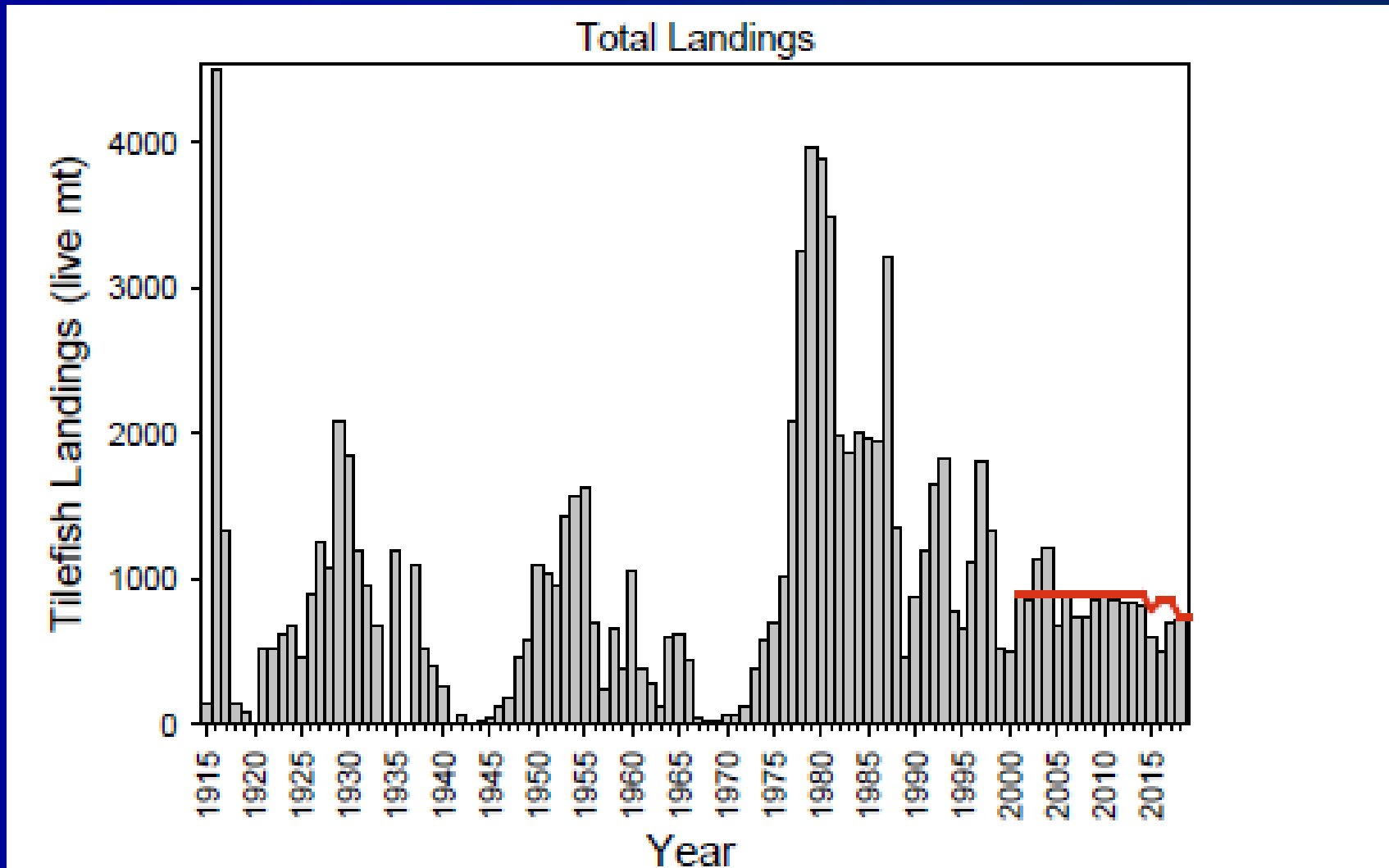
- Approach was used by the SSC because there is no strong trend in stock biomass in recent years
- Recommended the ABCs be re-examined annually in light of substantial changes in the size distribution in the catch or in the spatial distribution of the fishery
- Important as the 2013 year class fully recruits into the fishery over the next two years

# III. Data Update - NEFSC

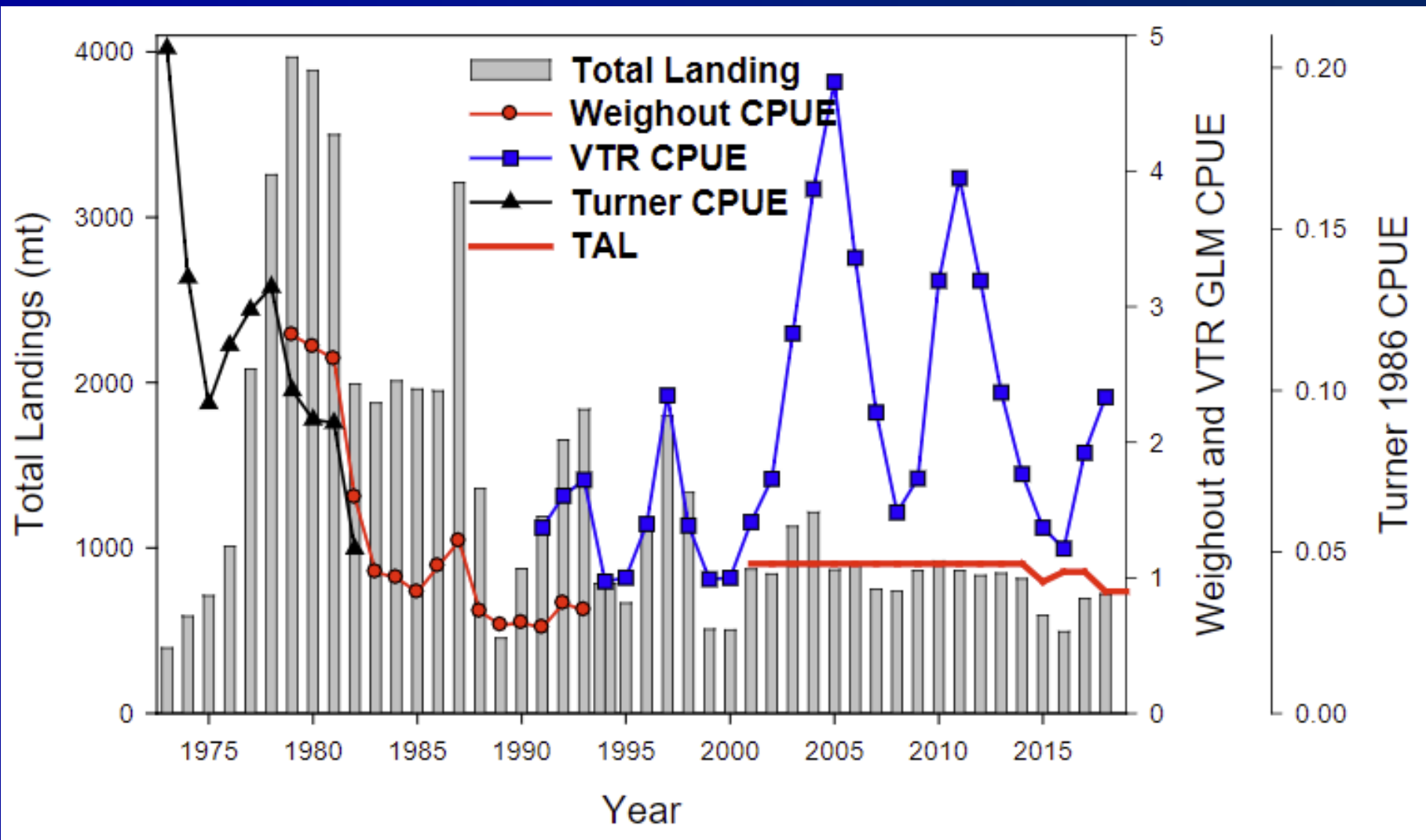
# 2019 Data Update

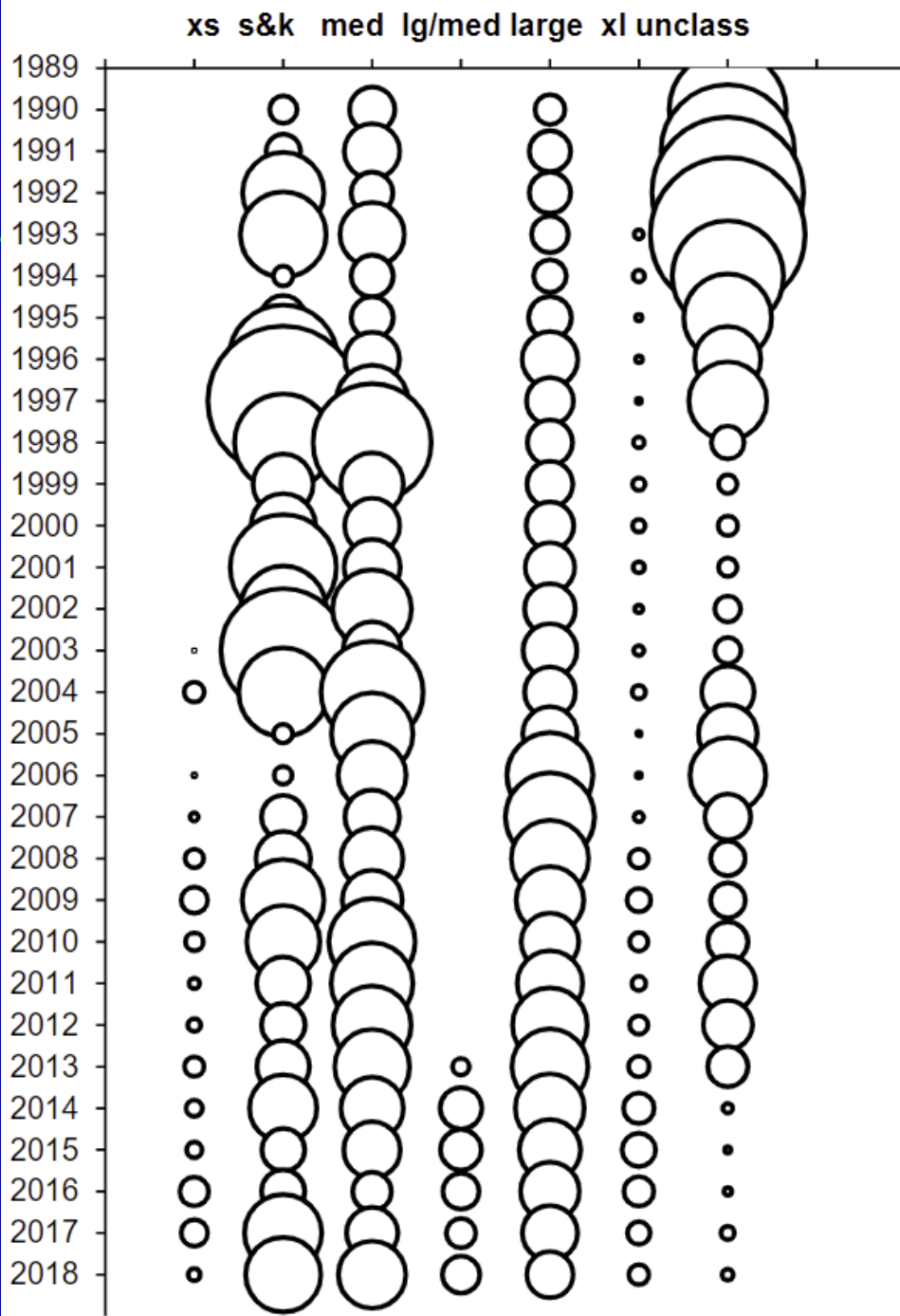
- As part of the reviewing process, the MAFMC requested a Golden Tilefish Data update
  - Trends commercial landings
  - Longline fishery CPUE
  - Size distribution of fish landed
  - Data through 2018

# Total Landings (Fig. 1 data update)



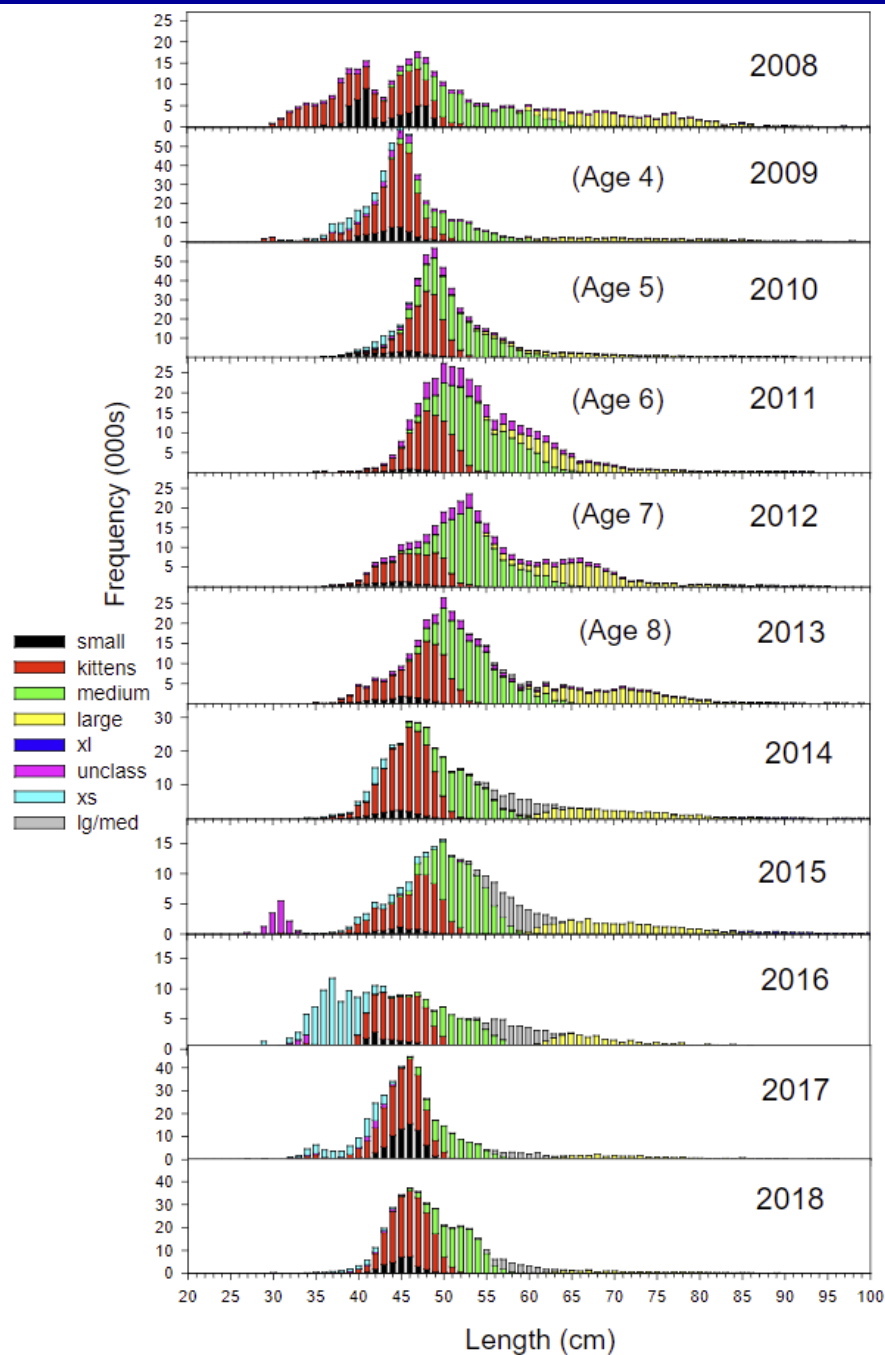
# CPUE (Fig. 5 data update)





**Bubble plot of Golden tilefish landings by market category (Fig. 7 of data update)**

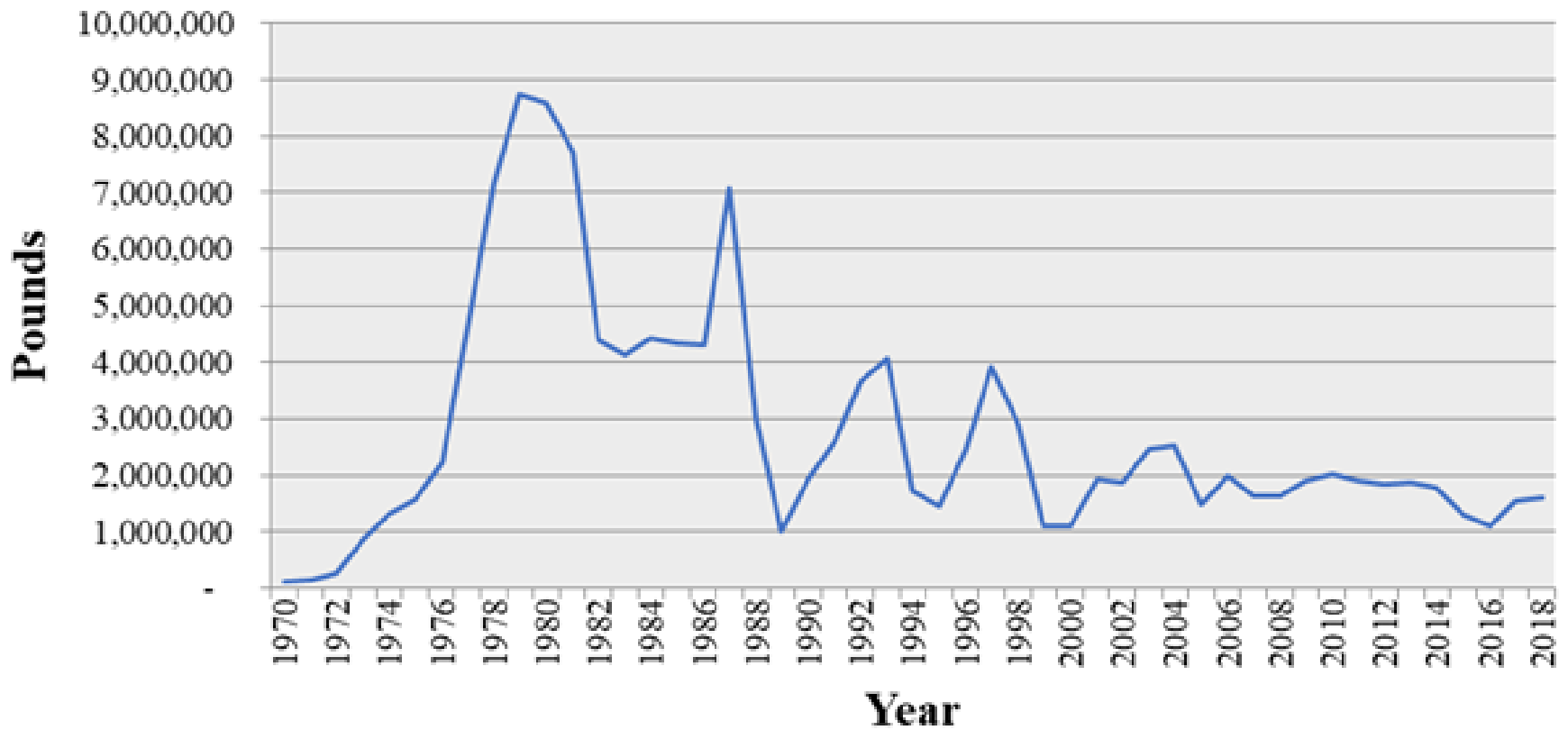




**Expanded length frequency distribution (Fig. 10 of the data update)**

# III. Fishery Trends / Performance

**Figure 1. Commercial U.S. Golden Tilefish Landings (Pounds) from Maine-Virginia, 1970-2018.**







# Commercial Landings (cont'd)

- Tilefish are primarily caught by longline (~98%) and bottom otter trawl (2%) for the 2014-2018 period (Table 2)
- Statistical areas 537 (47%), 616 (40%), 626 (6%), 539 (4%), and 526 (2%; Table 3)
  - Accounting for 99% of the tilefish landings in 2018

# Landings, ex-vessel value, and price for tilefish

- 2018 landings ~1.6 million pounds (9% increase from 2017)
- 2018 ex-vessel revenue ~ \$4.8 (4% increase)
- 2018 mean price per pound ~ \$3.30 (unadjusted; 1% increase)

# Discard Trends

- No commercial discards of GTF in directed GTF trips (according to VTR data)
- Commercial discards are low in non-directed trips
- Commercial discards not included in the assessment

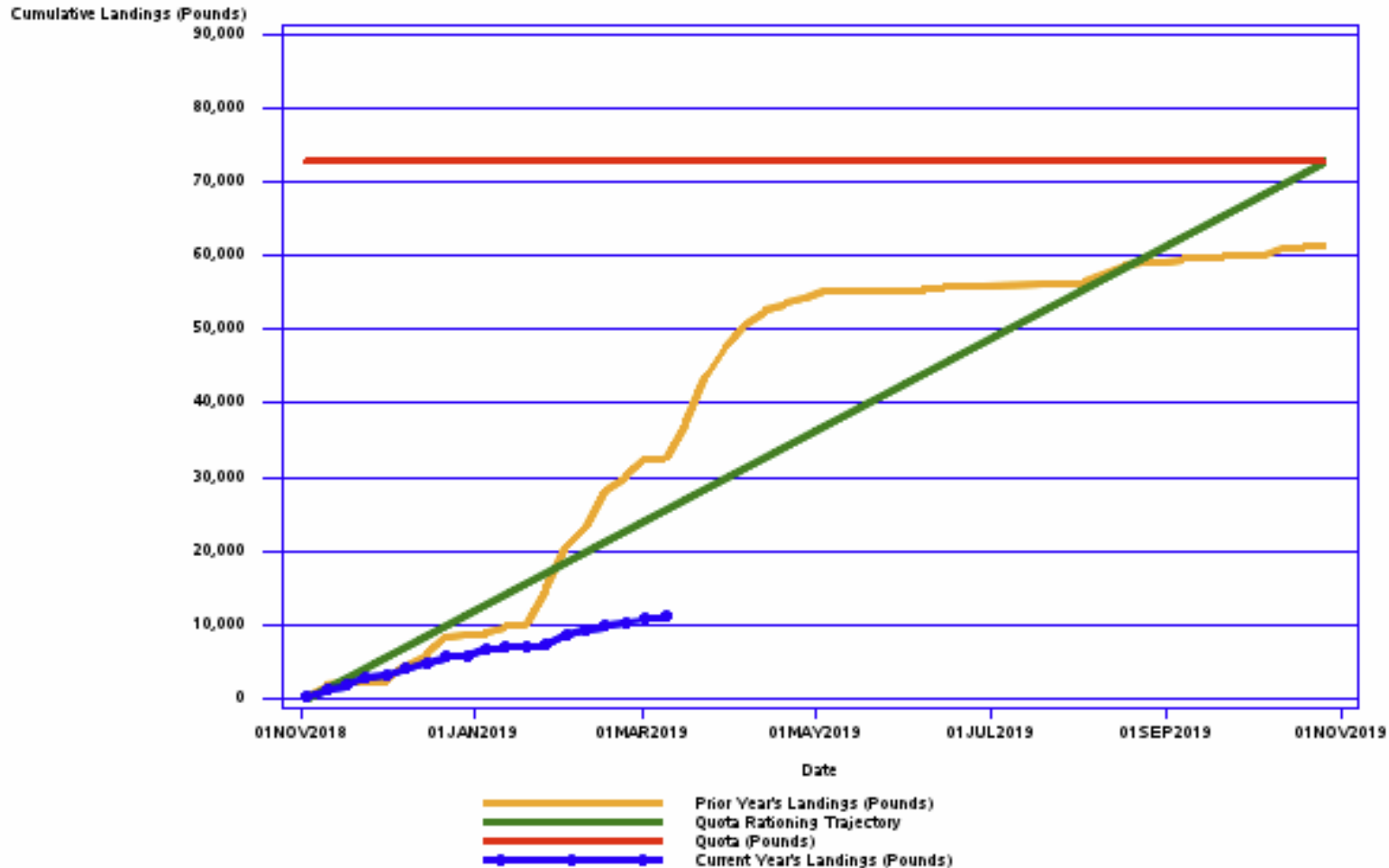


# Discard Trends (cont'd)

- 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)
  - NEFSC – avg. 9,393 pounds (~4 mt); 2012-2016
  - NEFSC – avg. 11,627 pounds (~5 mt); 2014-2018

# Incidental Landings

## Incidental Golden Tilefish Quota Monitoring Report



# Incidental Landings (cont'd)

<b>Fishing year</b>	<b>Landings (pounds)</b>	<b>Incidental quota (pounds)</b>	<b>Percent of quota landed (%)</b>
<b>2013</b>	36,442	99,750	37
<b>2014</b>	44,594	99,750	45
<b>2015</b>	18,839	87,744	21
<b>2016</b>	20,929	94,357	22
<b>2017</b>	60,409	94,357	64
<b>2018</b>	61,254	72,752	84

Table 12. Incidental commercial landings for 2013-2018 fishing years.

# Dealers

- In 2017 - 75 dealers - \$4.6 million – 131 vessels
- In 2018 - 72 dealers - \$4.8 million – 136 vessels
- Dealers are mostly located in NY, NJ, RI, and CT (Table 9)

# Recreational Fishery

- Recreational landings and catches are low (MRIP and VTR data)
- In the assessment, recreational catches are estimated to be low and not included as a component of removals
- GTF flowchart - recreational catches can be accommodated under scientific uncertainty or management uncertainty

<b>Year</b>	<b>Number of golden tilefish kept</b>	<b>Mean effort</b>
1996	81	1.4
1997	400	7.5
1998	243	8.1
1999	91	0.4
2000	147	0.5
2001	172	0.7
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	4.6
2018	7,118	3.9
All	61,333	2.8

**Table 14.**  
**Number of tilefish kept by party/charter anglers and mean effort from Maine through Virginia, 1996 through 2018.**

# IV. AP FPR

# Market/Economic Conditions

- Prices continue to be stable in all market categories
- Stable prices
  - Time of landings coordination
  - Avoid market gluts
  - Spreading landing throughout the year
  - Marketing efforts



# Market/Economic Conditions (cont'd)

- Having a steady year-round supply of tilefish has influenced the positive market development for this product
- Fishing expenses continue to increase
  - e.g., *Illex*
- Fishing as close to home port as possible

# Environmental Conditions

- Industry has observed no tilefish aggregation changes due to changes in water temperature
- Dogfish and skate interactions

# Management Issues

- IFQ system benefits - can plan fishing through the year. Working closely with each other and dealers to avoid market gluts

# General Fishing Trends

- Fishing practices impacted by severe weather
- Fishermen are not moving around much as they are finding a healthy mix of animals in traditional fishing grounds

# General Fishing Trends (cont'd)

- CPUE increasing
  - 2018 dogfish interactions continued to be high, but at the same level as 2017
  - 2018 skate interactions increased compared to 2017
  - 2018 weather poor, yet stable compared to 2017
  - Finding more fish and fishing improving
- Industry wants to see ACL stable from year to year

# Recreational Fishery

- 2018 fishing conditions remained stable compared to 2017
- Industry questions rec. catch estimates
- Concerns private/rental landings not reported
- Permitting/reporting requirements for private anglers need to be implemented

# Recreational Fishery (cont'd)

- Differential trip limit (for-hire vs private)
- Recreational allocation
- Headboats loosing trips due to bad weather
- Captains/crew should be included in the comingled bag limit (rec. possession limit)

# Recreational Fishery (cont'd)

---

- Concerns about relaxing recreational regulations = higher recreational



# Research Priorities

## ■ Fishery Dependent Surveys

- Expand observer coverage to improve index standardization of fishery-dependent data.
- Leverage large pelagic recreational fishing activity/surveys to collect improved life history information.

## ■ Fishery Independent Surveys

- Develop a fishery-independent survey. **Note:** Identified as a top priority

## ■ Modeling/Quantitative

- 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. **Note:** Identified as second priority

## ■ Biology/Life History/Habitat

- Assess the accuracy and reliability of aging techniques. **Note:** Identified as the third priority
- Consider genetic approaches to assess possible stock structure
- Evaluate the reliability of the report of protogynous hermaphroditism in the S. Atlantic stock

## ■ Biology/Life History/Habitat

- Consider genetic approaches to assess possible stock structure), to broader this research recommendation to include some other stock ID techniques that may be useful, such as: life history (e.g., maturation, growth) and natural tags (such as otoliths microchemistry, otoliths shape)

# Staff Recommendations

- Memo to Chris Moore
- Based on the review of the NEFSC data update, FPR, and other available information
- No change to the 2020 fishing year specifications

# Discussion

