



# Summer Flounder 2019 Specifications



SSC

*July 18, 2018*

# Overview

- No 2019 specifications in place for summer flounder; required by January 1, 2019
- Benchmark assessment in development for November 2018 SARC
- Objective: develop interim 2019 specifications for likely revision in Spring 2019

# Stock Status



- Last benchmark assessment:  
SAW/SARC 57 (2013)
  - Age-structured assessment program (ASAP)
- 2015 and 2016: assessment updates
- 2014, 2017 and 2018: data updates

# Stock Status: 2016 Update



## SSB

- 2015 SSB = 36,240 mt
- **58%** of  $SSB_{35\%} = SSB_{MSY} = 62,394$  mt
- **16%** above MSST =  $\frac{1}{2} SSB_{35\%} = 31,197$  mt
- **Not overfished in 2015**

## F

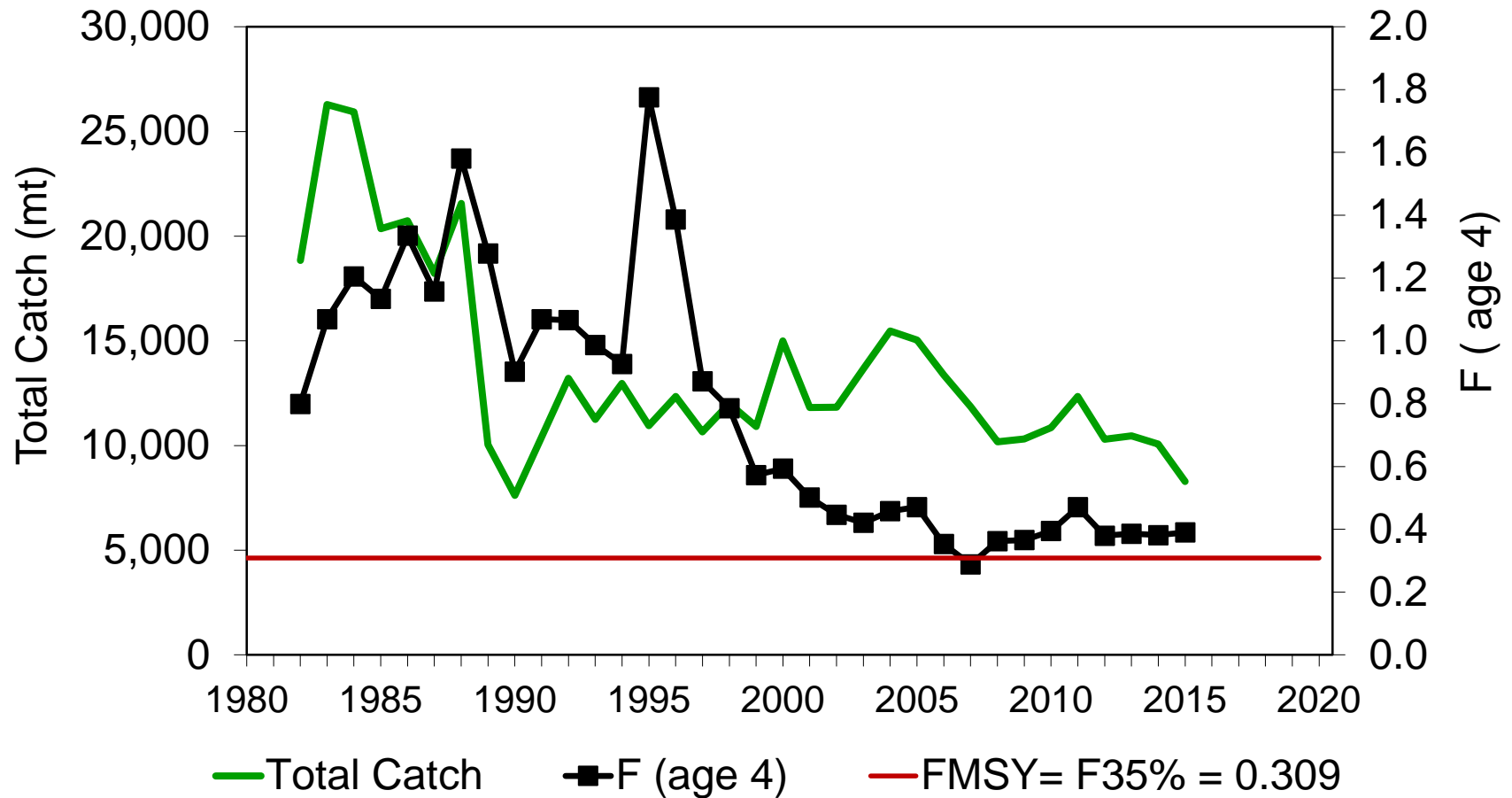
- 2015  $F = 0.390$
- **26%** above  $F_{35\%} = F_{MSY}$  proxy = 0.309
- **Overfishing occurring in 2015**

# Fishing Mortality



## Total Catch and Fishing Mortality (F)

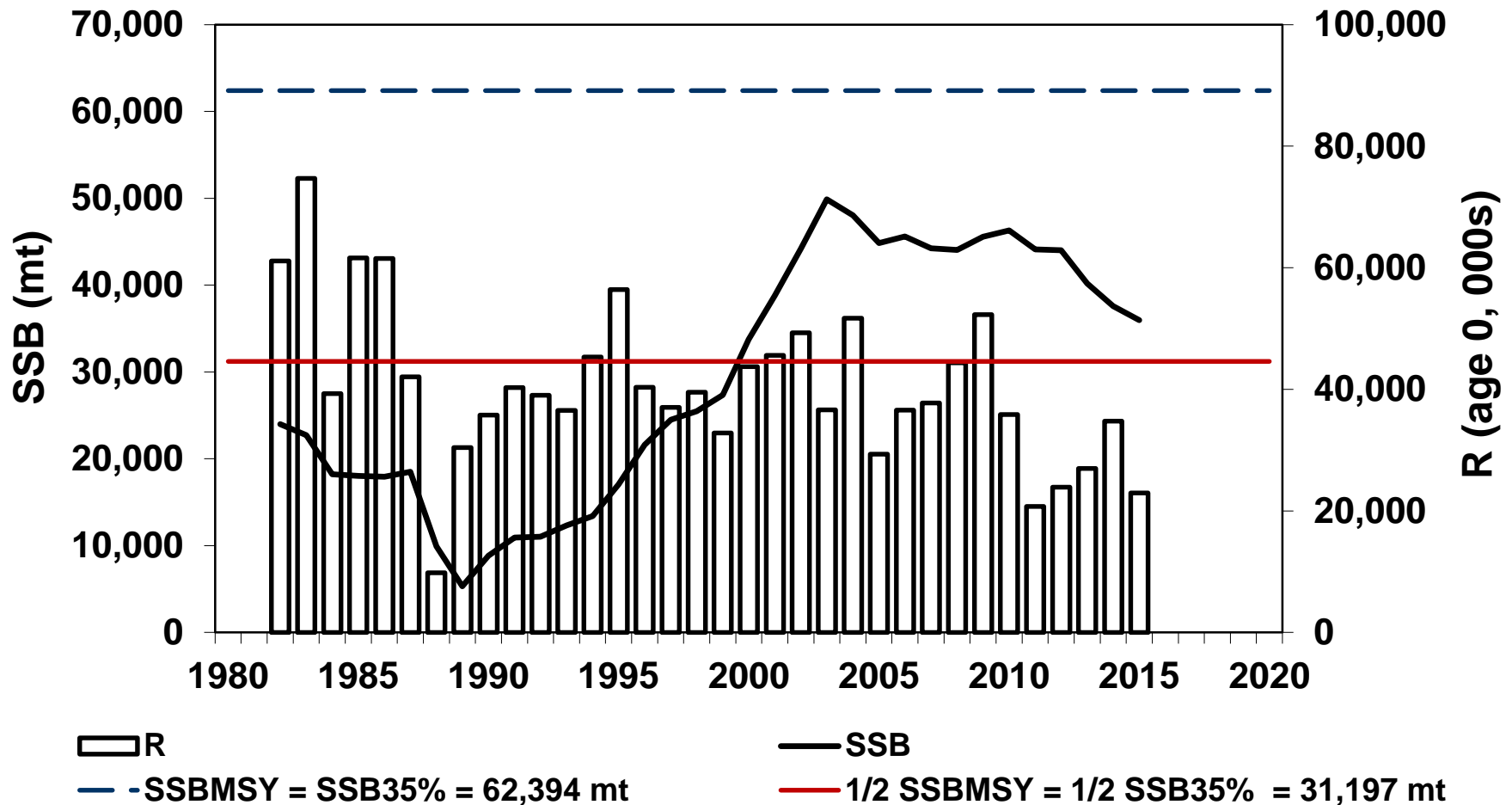
2016 Update



# SSB and Recruitment

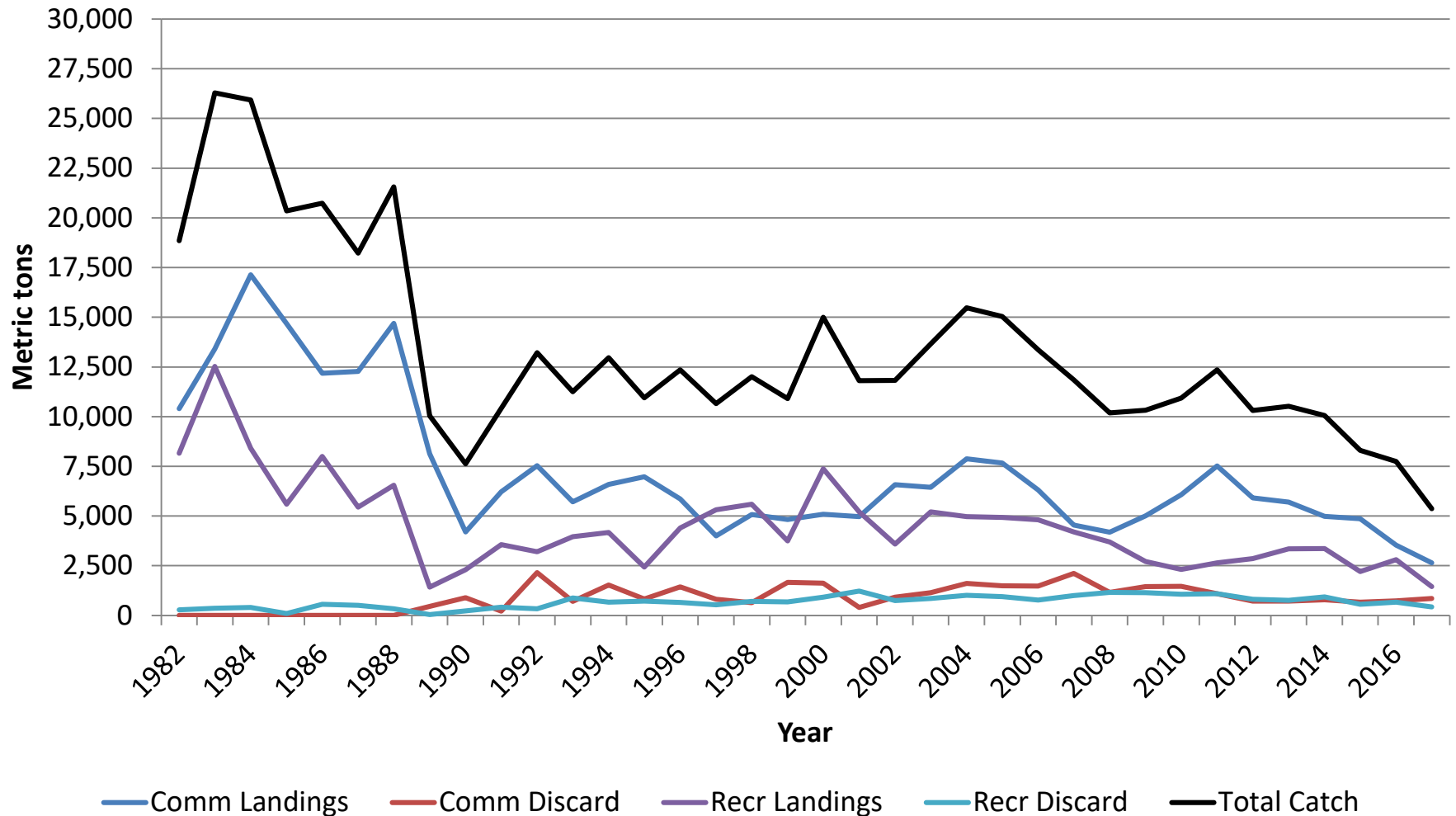


Spawning Stock Biomass (SSB) and Recruitment (R)  
2016 Update

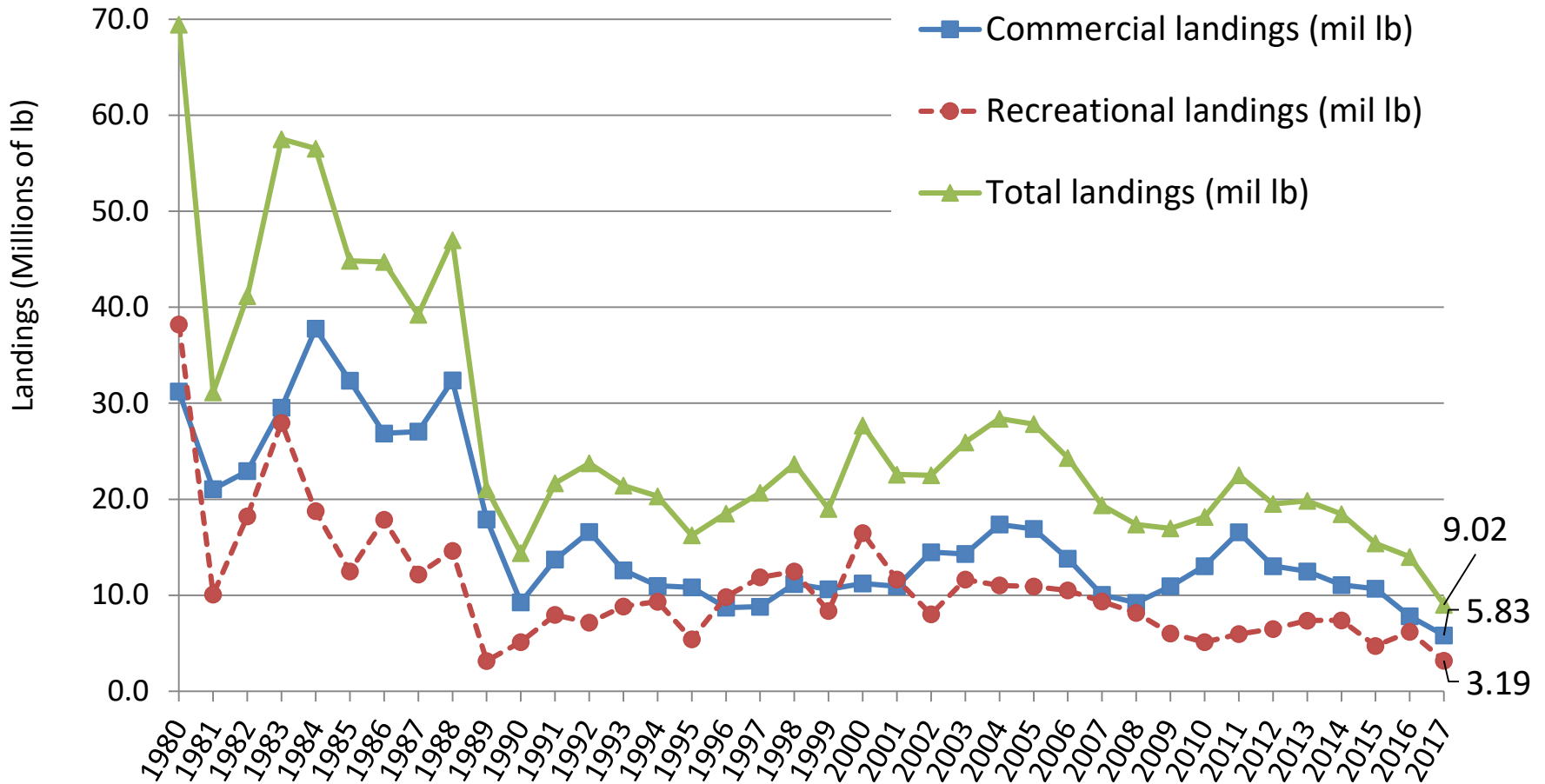


# Total Catch

## Summer Flounder Fishery Total Catch: 1982-2017



# Landings



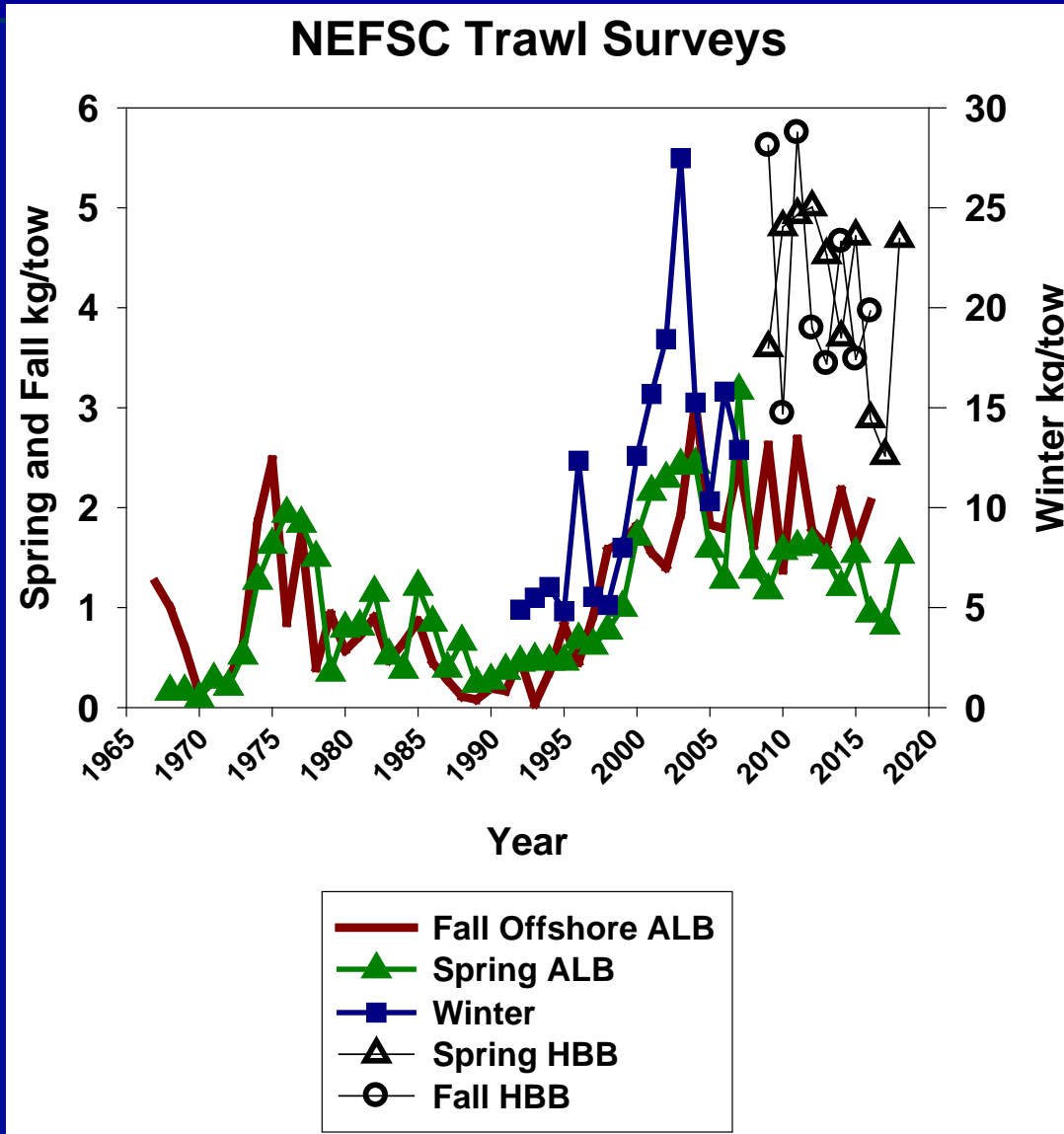


# Fishery Performance



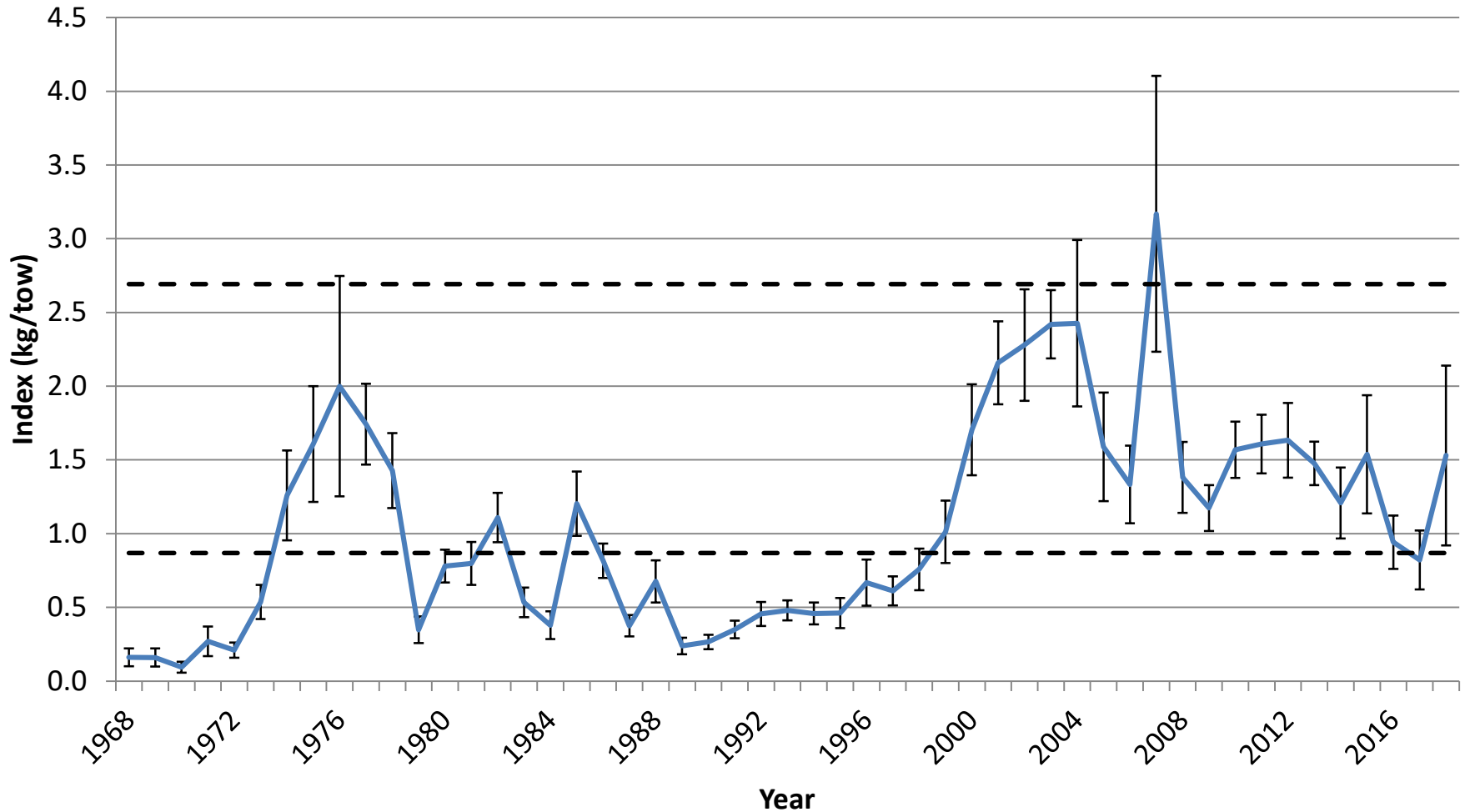
Year	Comm. Landings (mil lb)	Comm. Quota (mil lb)	Comm. % Overage (+)/ Underage(-)	Rec. Landings (mil lb)	Rec. Harvest Limit (mil lb)	Rec. % Overage (+)/ Underage(-)
<b>2013</b>	12.44	11.44	<b>+9%</b>	7.36	7.63	-4%
<b>2014</b>	11.00	10.51	<b>+5%</b>	7.39	7.01	<b>+5%</b>
<b>2015</b>	10.68	11.07	-4%	4.72	7.38	-36%
<b>2016</b>	7.81	8.12	-4%	6.18	5.42	<b>+14%</b>
<b>2017</b>	5.83	5.66	<b>+3%</b>	3.19	3.77	-15%
5-yr Avg.			<b>+2%</b>			<b>-7%</b>

# 2018 Data Update



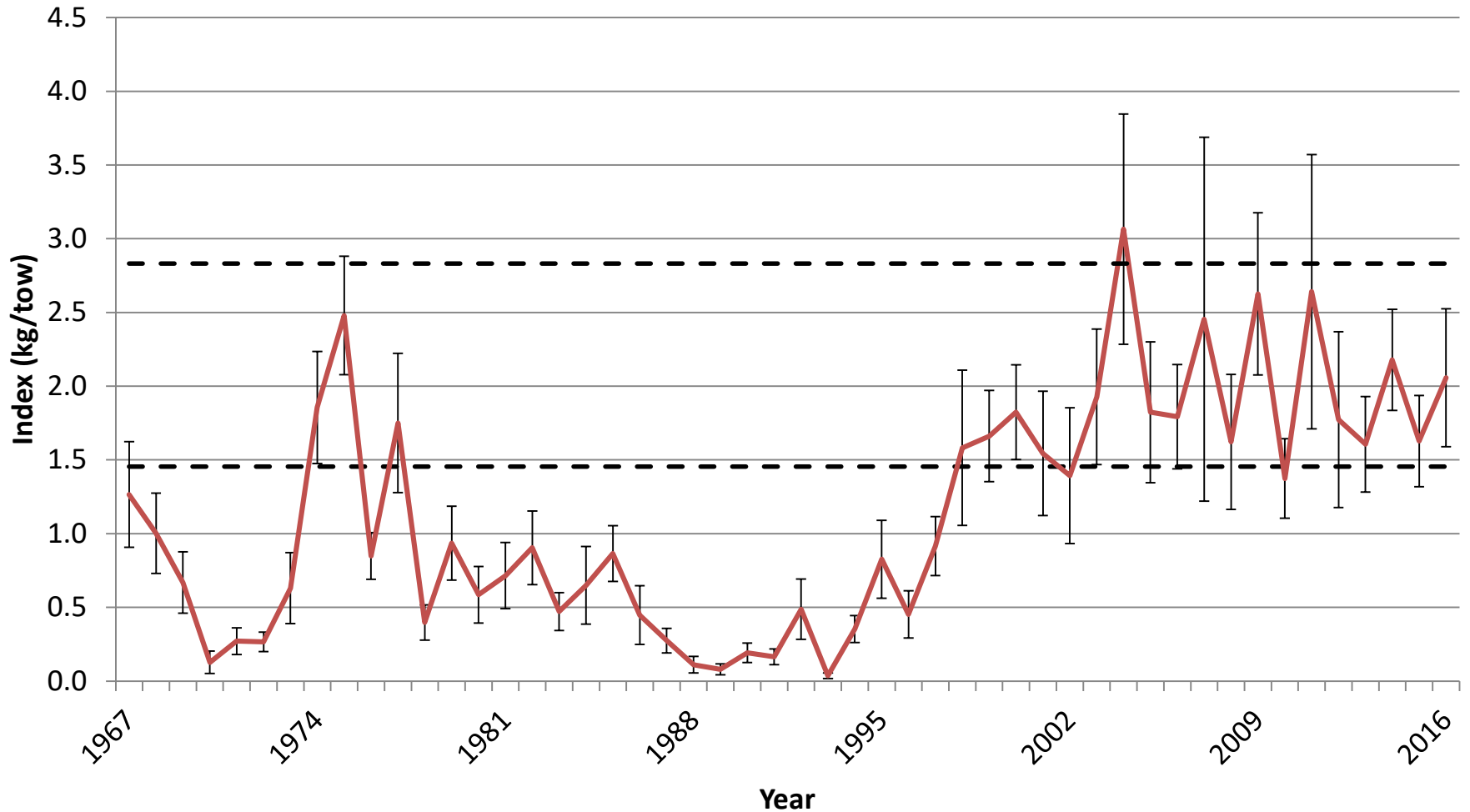
# 2018 Data Update

Summer flounder: Spring kg/tow

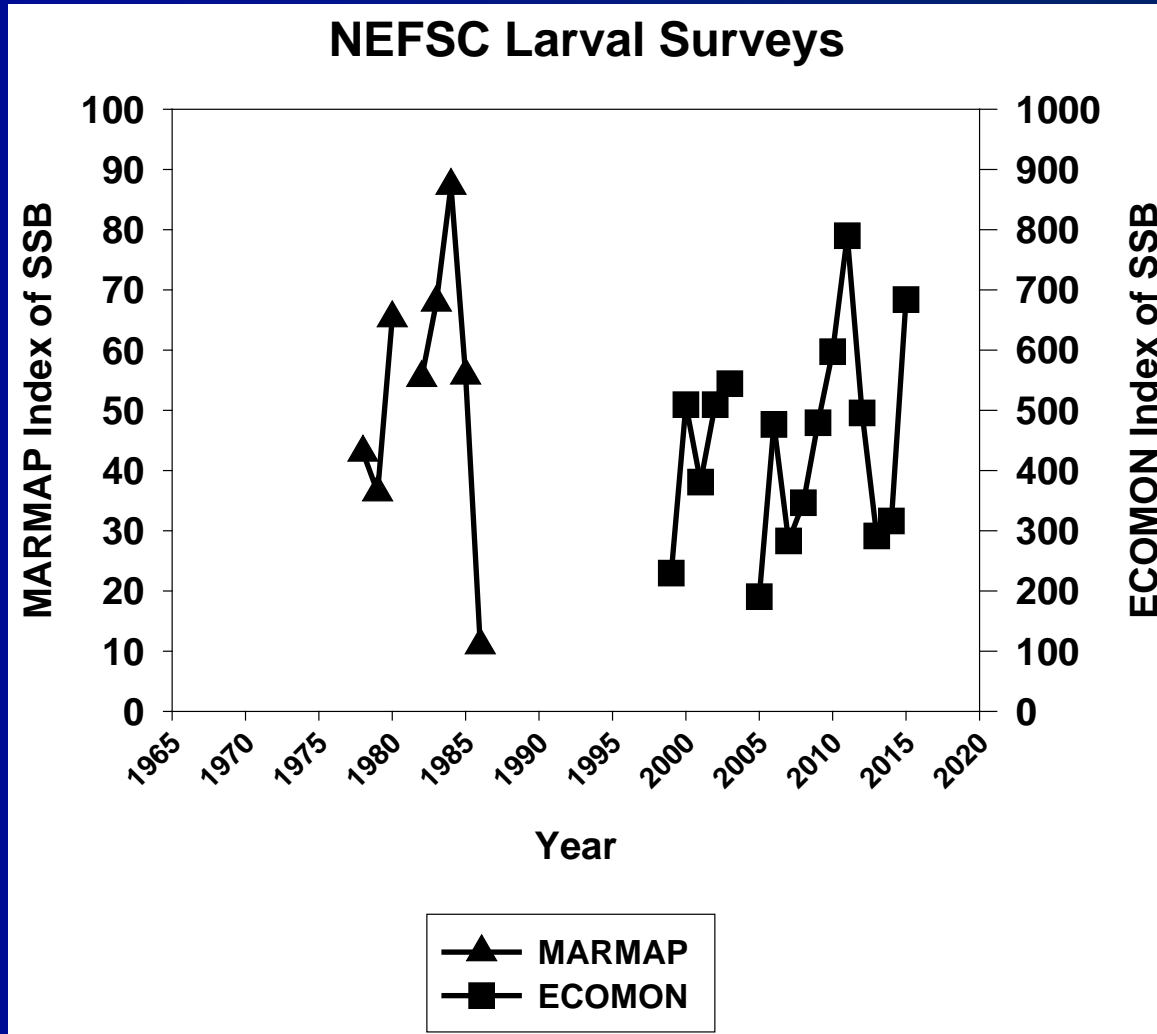


# 2018 Data Update

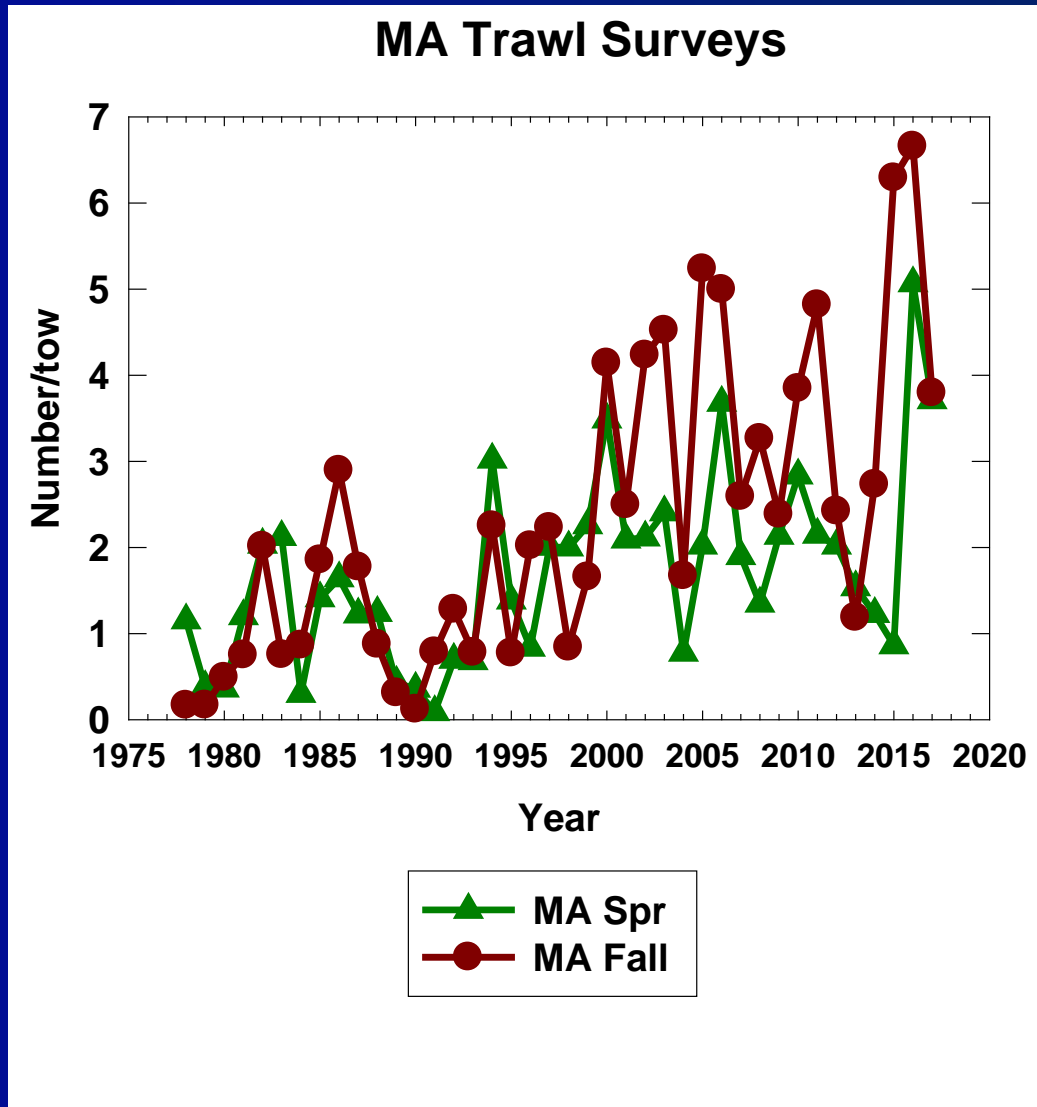
Summer flounder: Fall kg/tow Through 2016



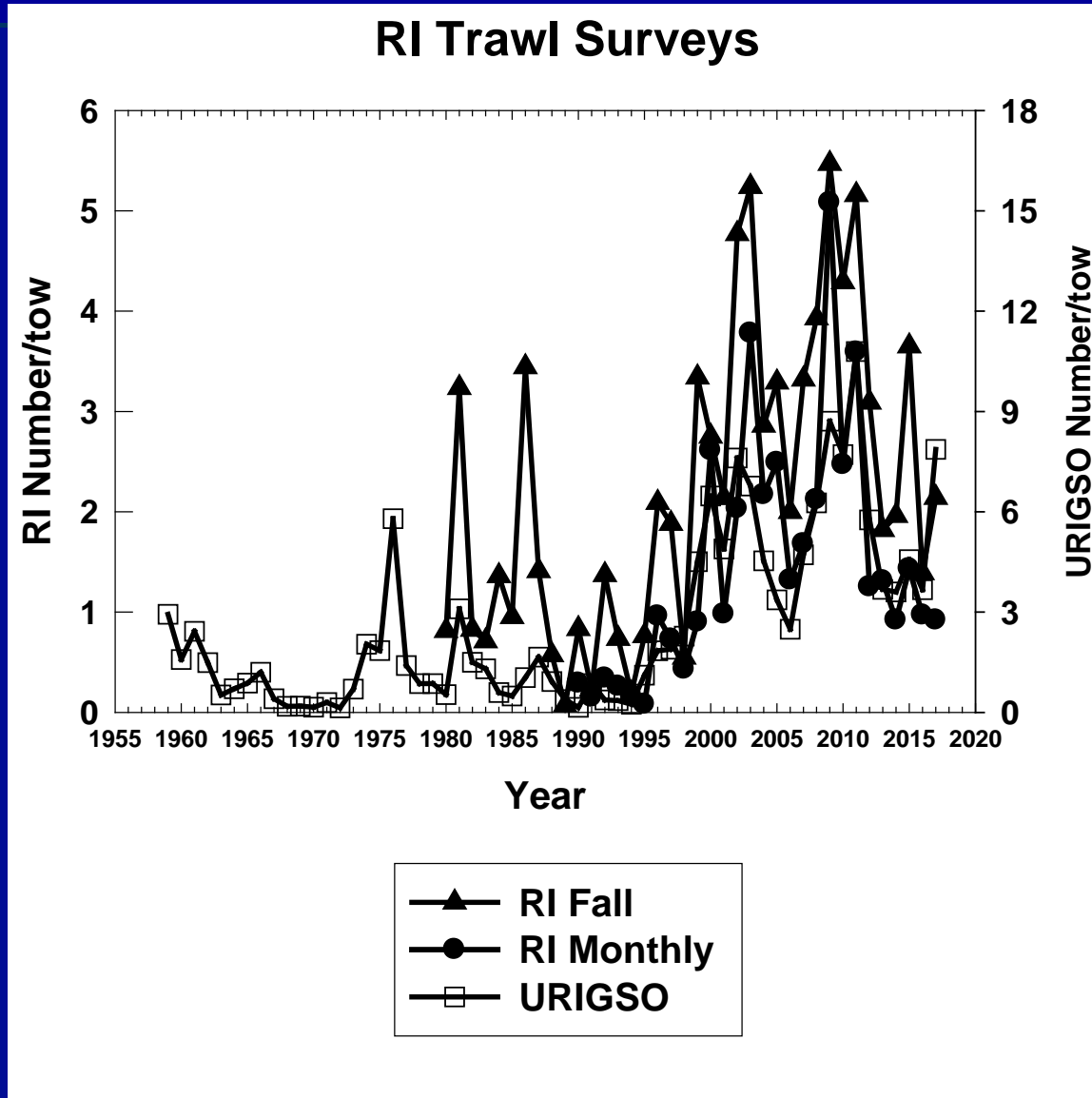
# 2018 Data Update



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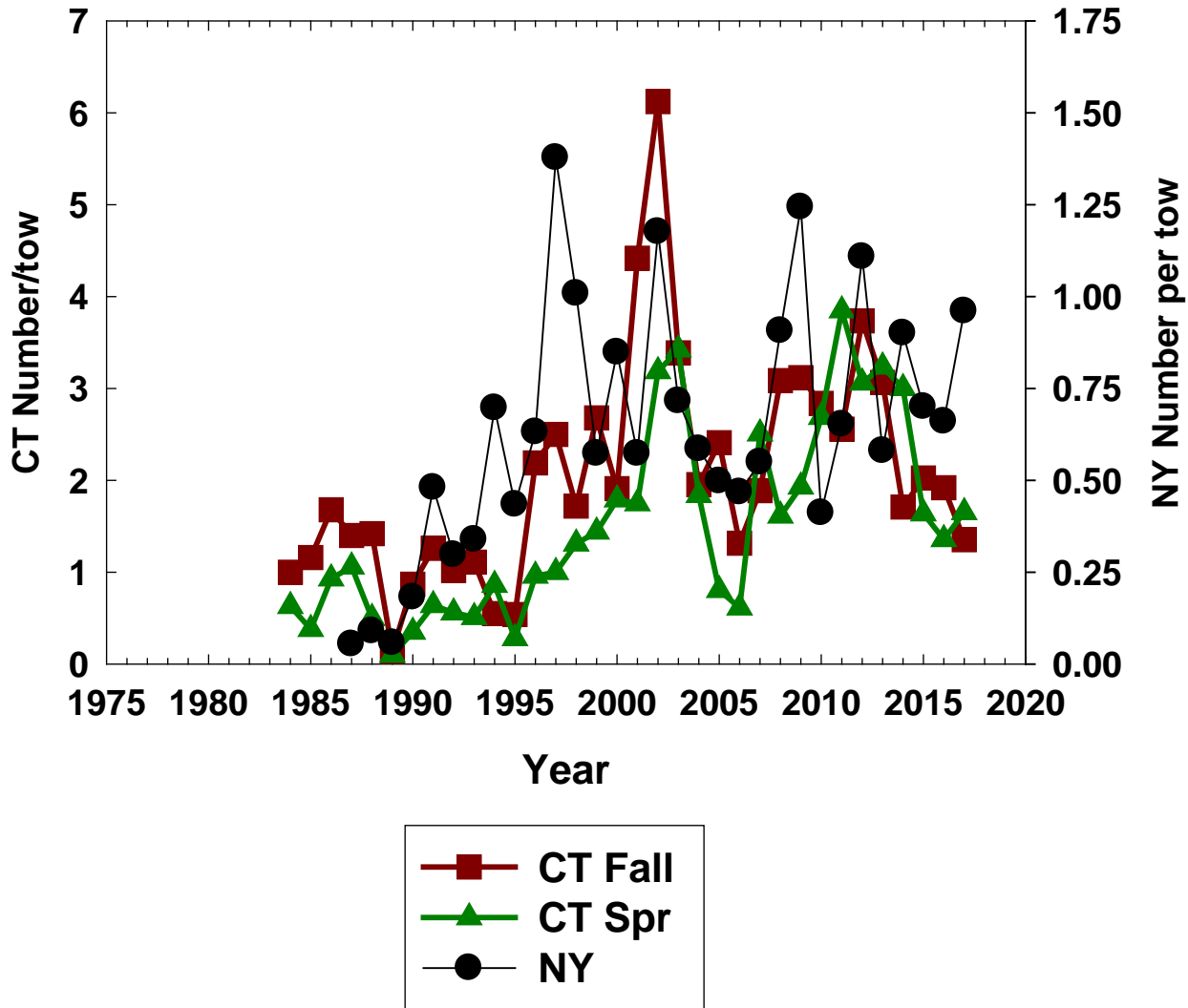


# 2018 Data Update



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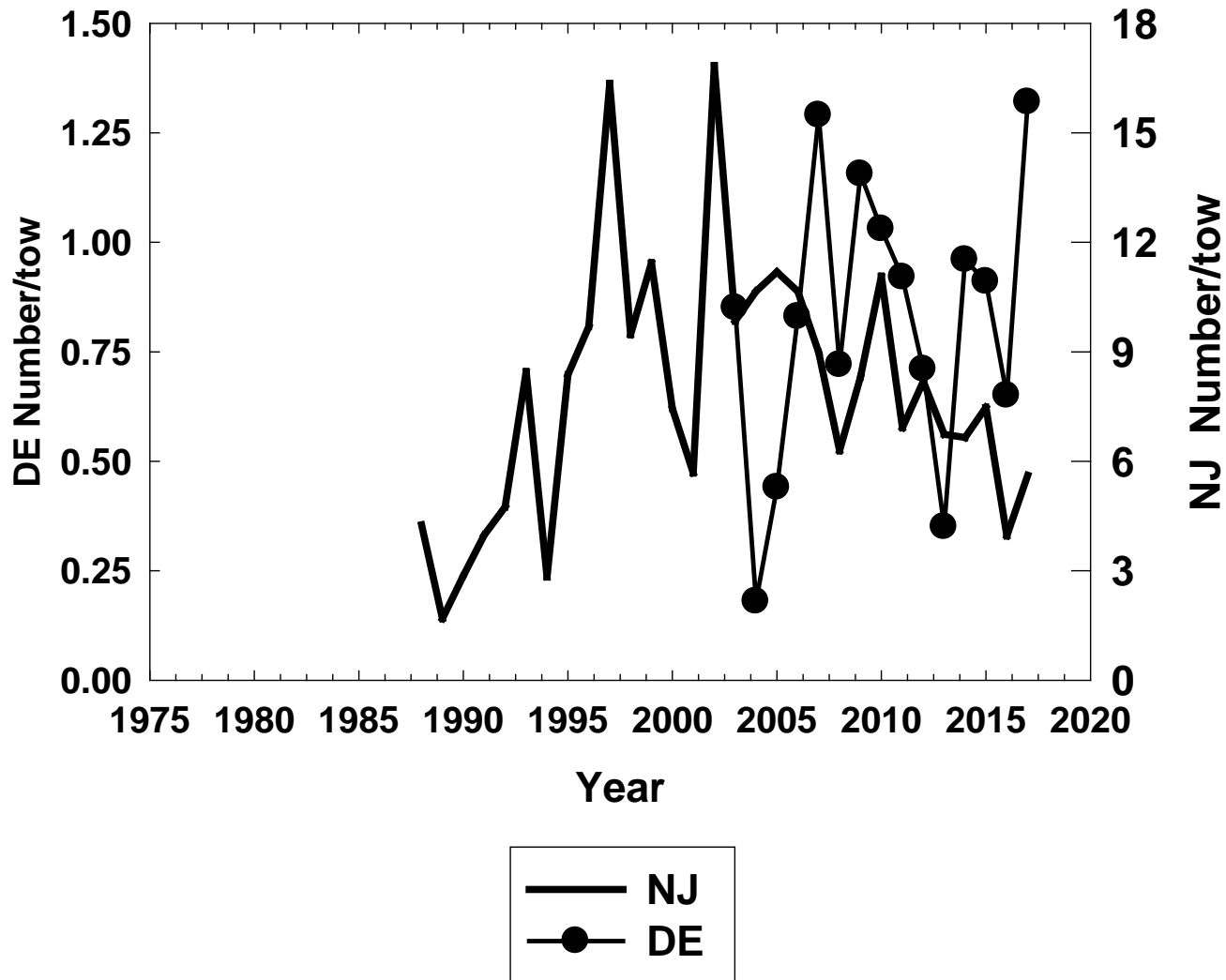
## CT and NY Trawl Surveys



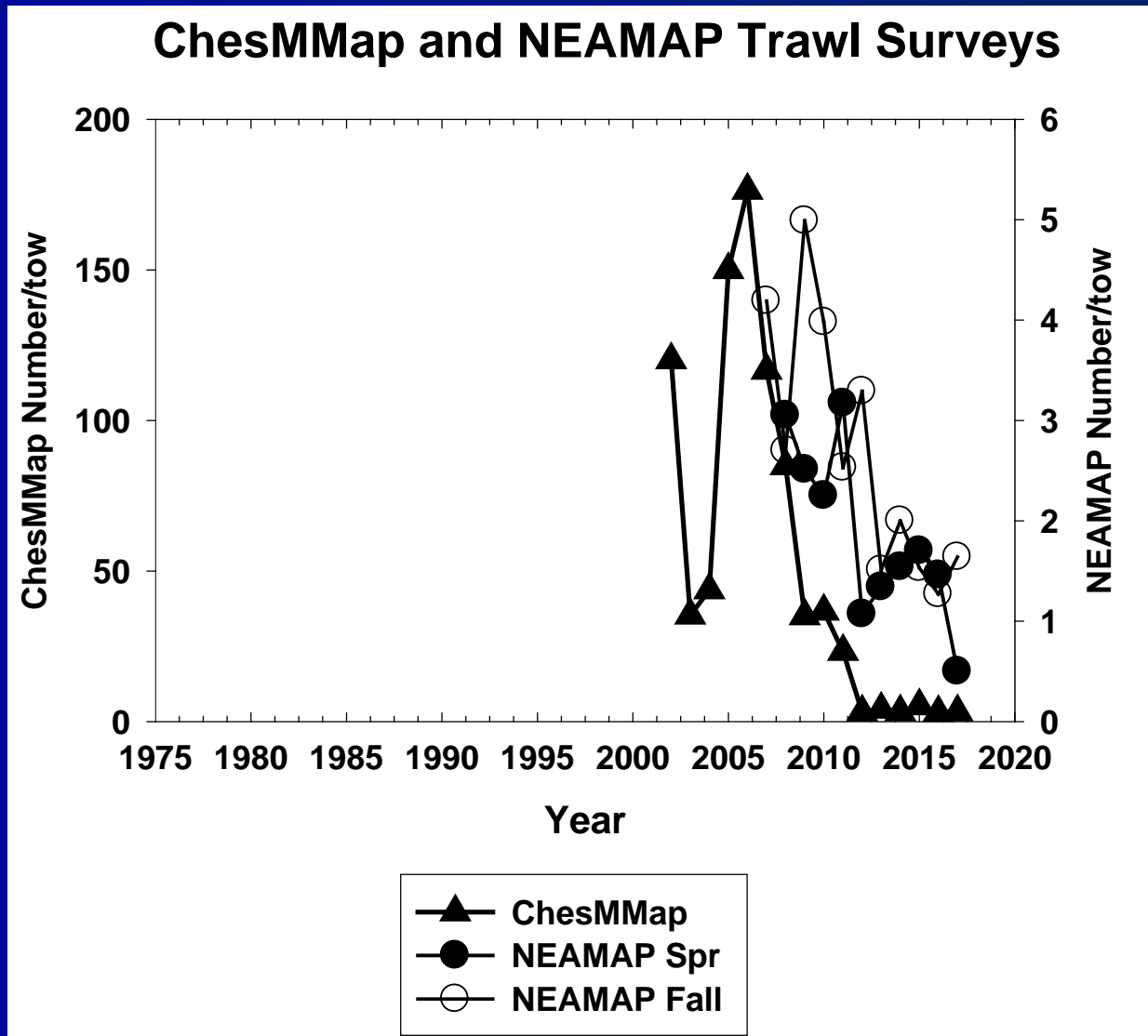


# 2018 Data Update

## NJ and DE Trawl Surveys



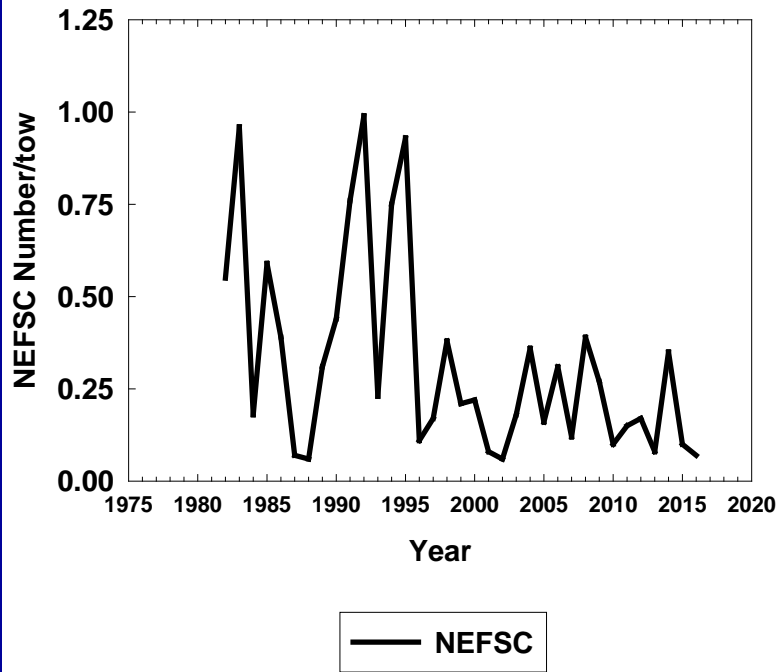
# 2018 Data Update



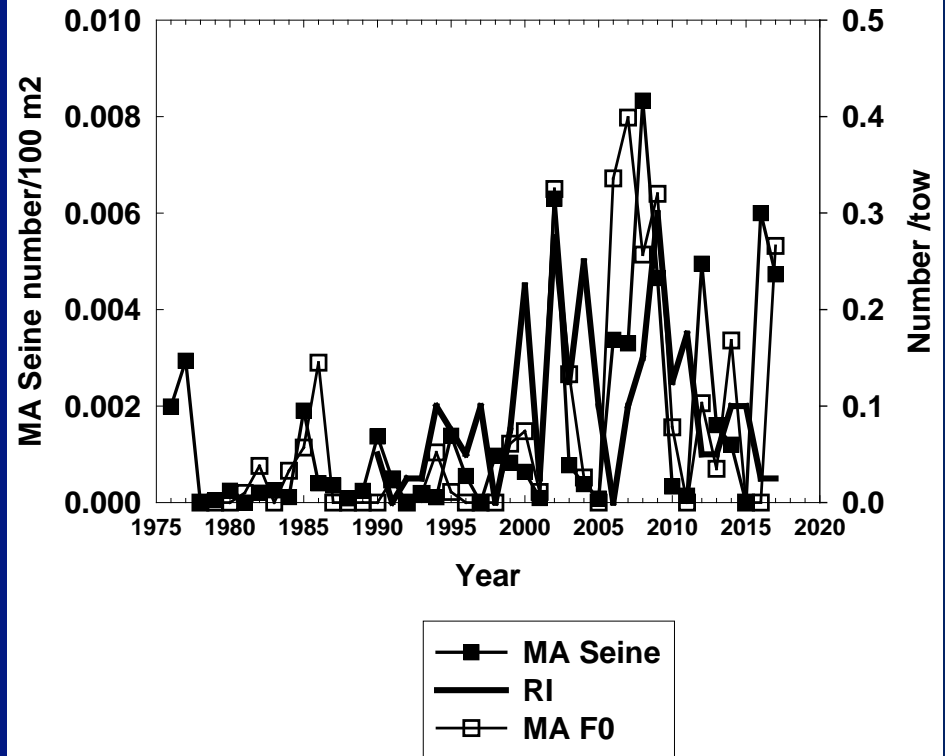


# 2018 Data Update

### NEFSC Fall Age 0 Index

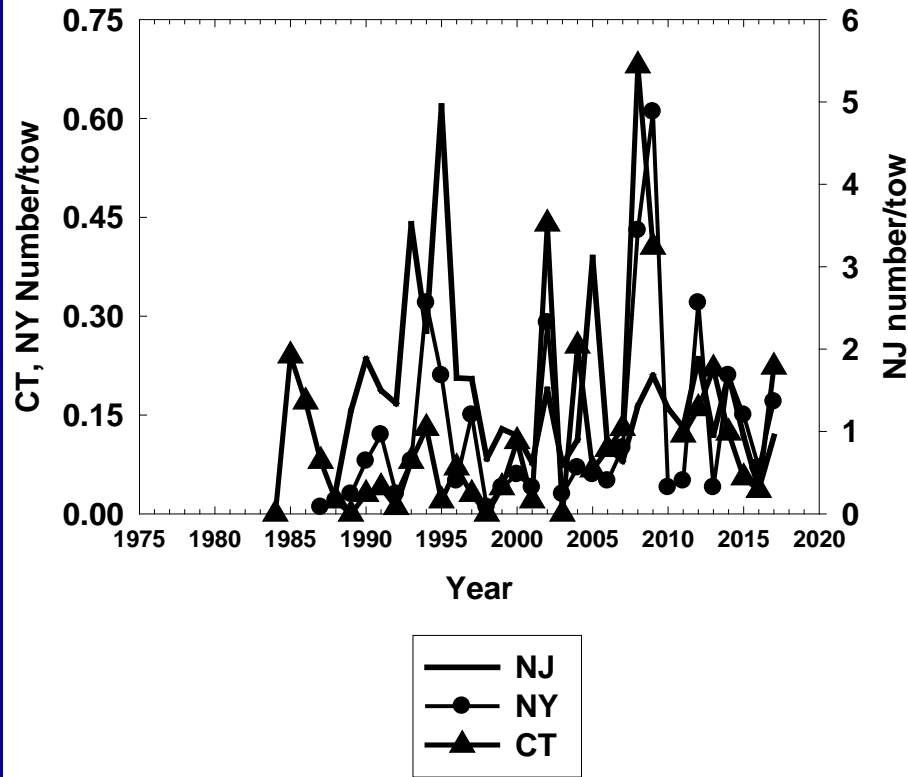


### MA and RI Age 0 Indices

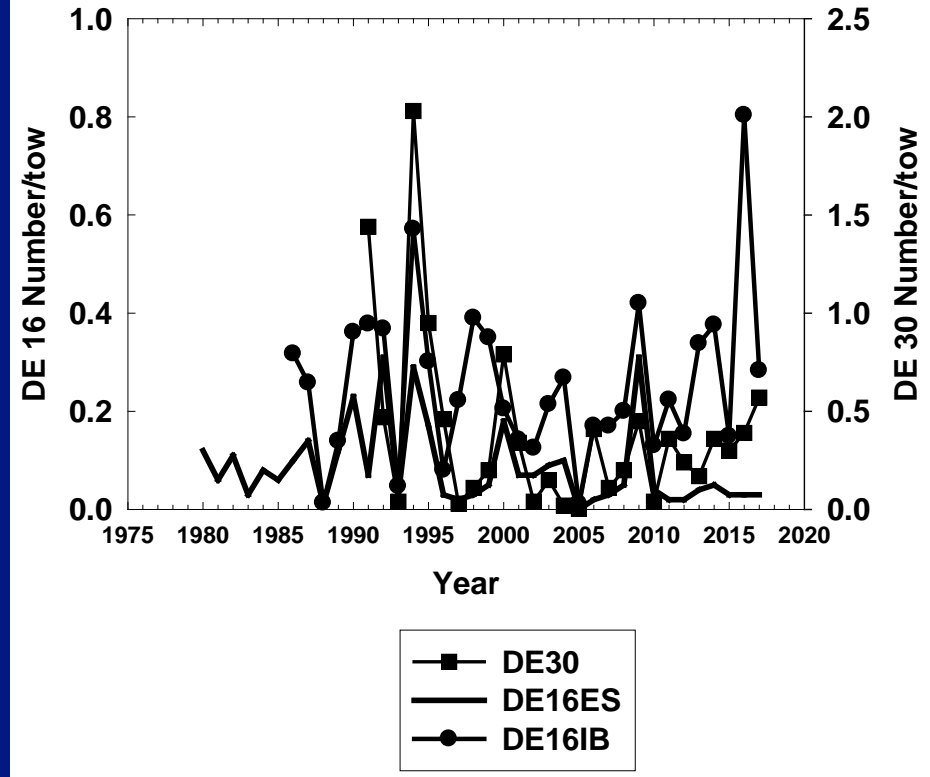


# 2018 Data Update

## CT, NY and NJ Age 0 Indices

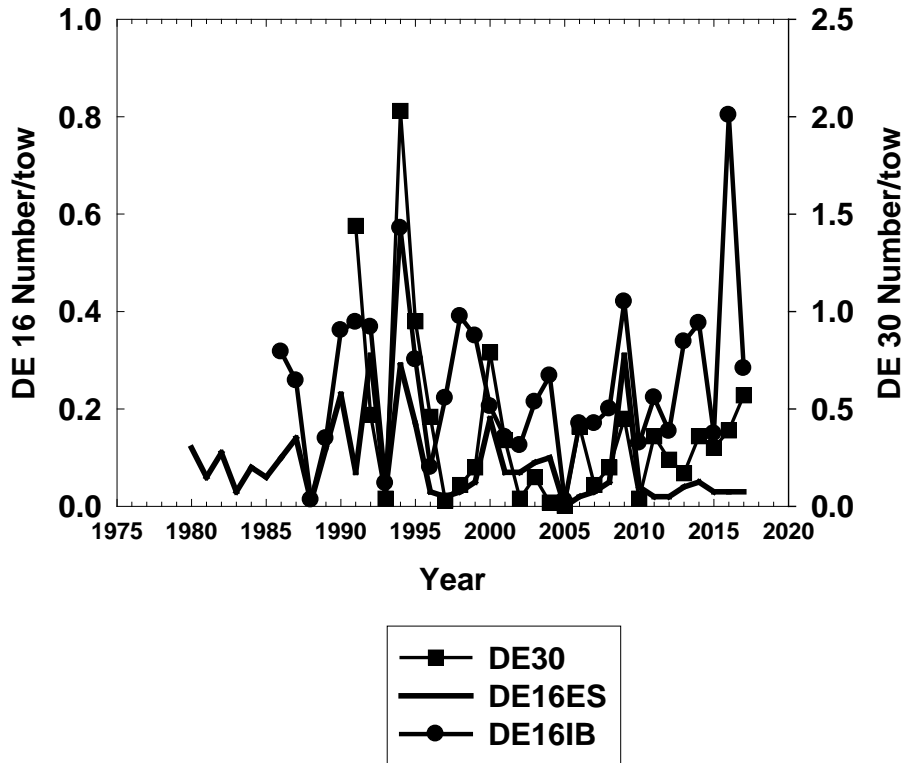


## DE Age 0 Indices

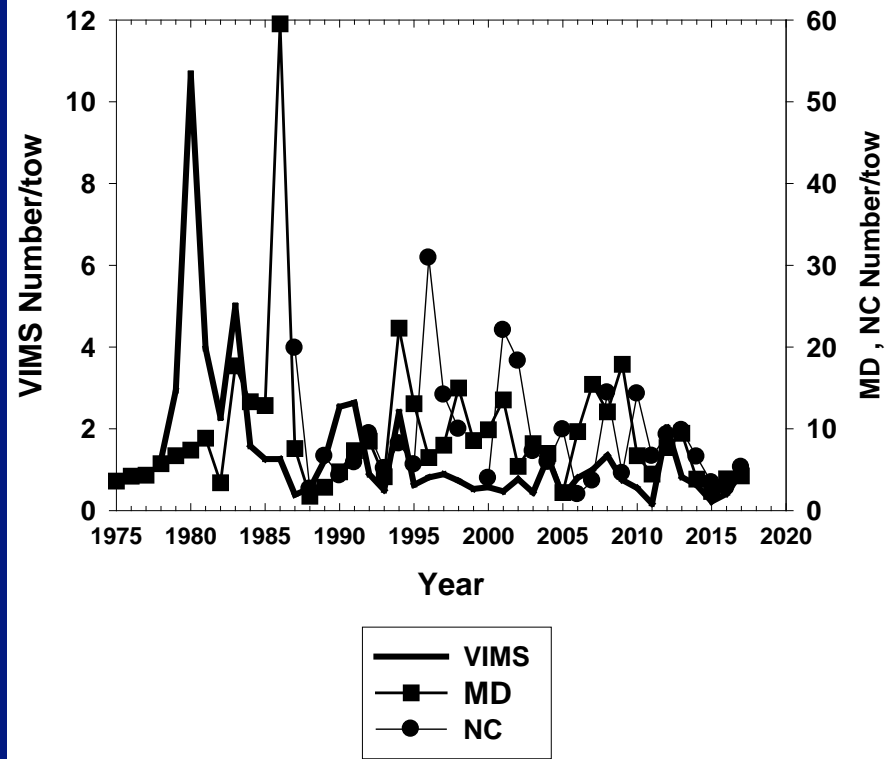


# 2018 Data Update

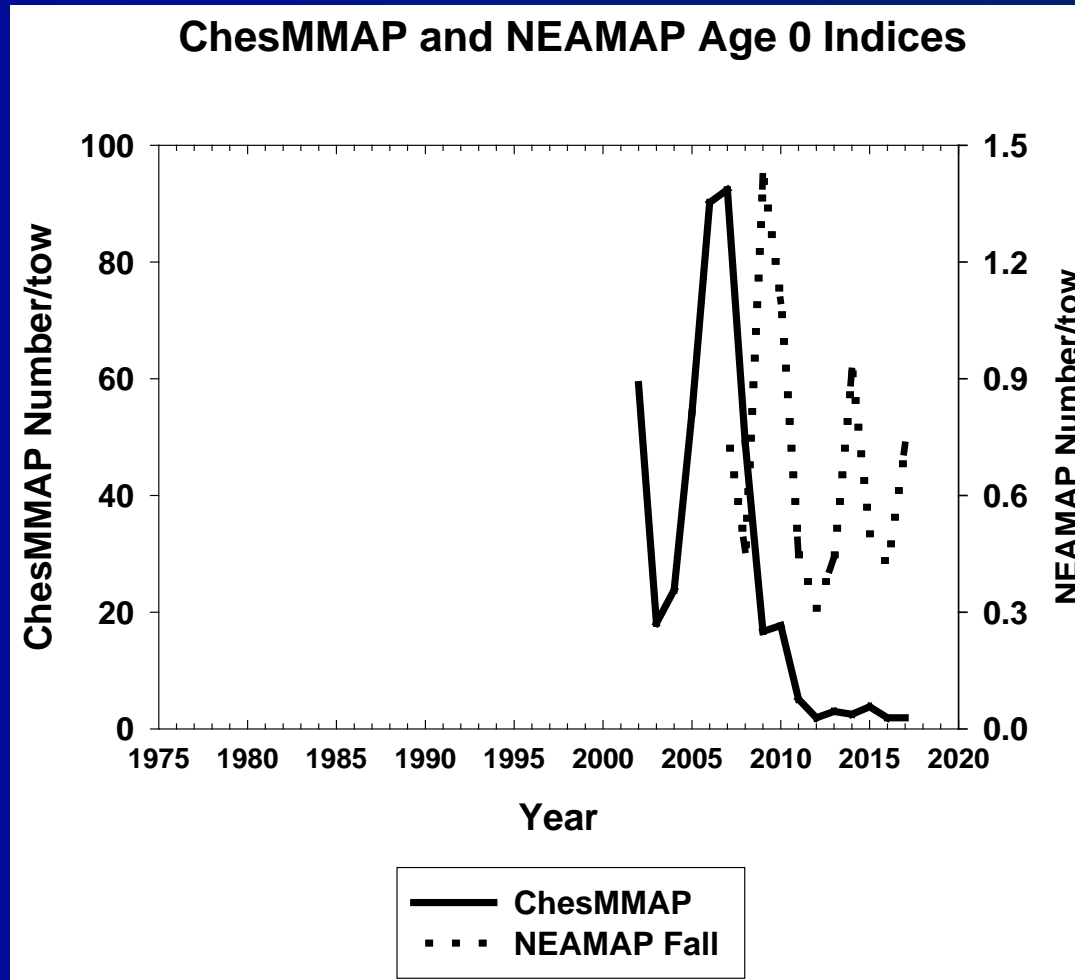
## DE Age 0 Indices



## MD, VIMS and NC Age 0 Indices

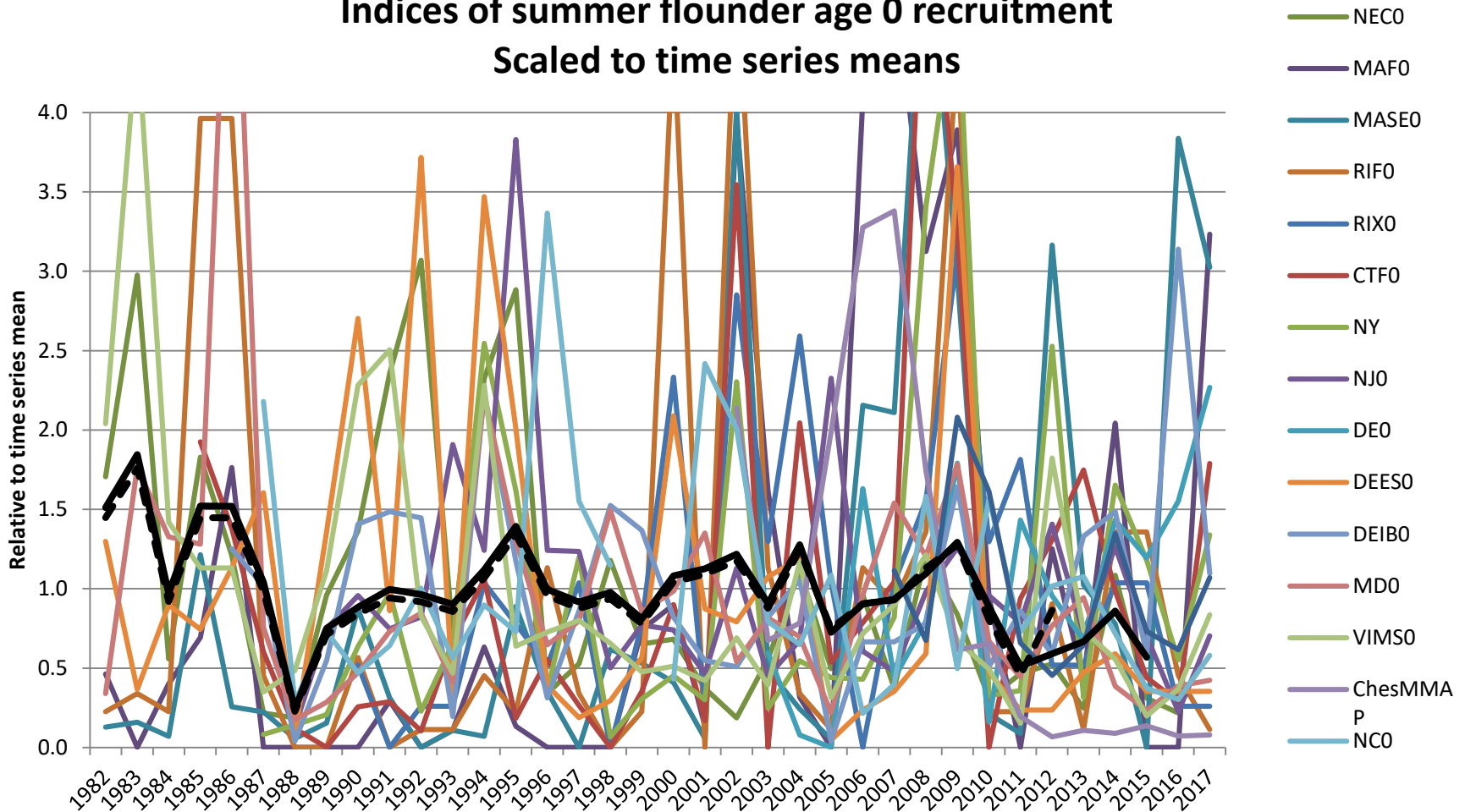


# 2018 Data Update



# 2018 Data Update

Indices of summer flounder age 0 recruitment  
Scaled to time series means





# AP Fishery Performance Report



## *General Management Issues*

- Request Council/SSC presence at AP meetings
- MRIP data fundamentally flawed; many want mobile app reporting
- Stability/predictability in specifications important
- Concerns with trawl surveys
- Support for return of RSA

# AP Fishery Performance Report



## *Stock Status*

- “Need to look into numbers rather than at them” - 2015 catch was better than shown by data.
- One observation of seeing more small (likely juvenile) fish lately
- Reference points need to be addressed ASAP – the biomass reference point is unattainable
- Concern that observers are not capturing useful data as they are too concerned with turtles

# AP Fishery Performance Report



## *Environmental and Ecological Issues*

- Climate change needs to be considered more thoroughly in terms of area/timing of trawl surveys
  - Inshore areas need to be better addressed (e.g., Nantucket Shoals and Buzzard's Bay)
  - Larger fish are observed inshore more often these days

# AP Fishery Performance Report



## *Market and Economic Issues*

- Less overlap between state open seasons = better price
- IFQ quota holders in MD make more money leasing quota than fishing it
- Not enough quota along coast to keep everyone going
- Derby conditions occur when fishery opens, driving price down

# AP Fishery Performance Report



## *Research Recommendations*

- Investigate ocean ranching of juvenile fluke to improve recruitment (as Japan has done)
- Several support reviving RSA or similar program
- More collaborative research, with focus on species in apparent decline like summer flounder

# Advisor Written Comments



- Additional support for RSA program
- Additional comments regarding ocean ranching/stock enhancement
- Support for commercial landings limits instead of possession limits (transit to offload catch in multiple states)

# Advisor Written Comments



- Different NJ recreational regulations for Delaware Bay are helpful, though fishing businesses in southern NJ are still suffering
- Fluke stocks appear to be at a low level in DE Bay
- Suggest additional research on both genetics and migration patterns; could help explain stock declines and/or shifts

# Advisor Written Comments



- Must stop removing only large females in recreational fishery (support for slot limits)
- Rec. fishing in CT waters of Long Island Sound has been “off” in recent years
  - Fluke fishing ends earlier in the year than it used to
- Private anglers underrepresented in the AP/public input process



# Prior SSC Recommendations



- July 2016: SSC recommended two-year ABCs (2017-2018) based on 2016 assessment update
- This revised previous multi-year recommendations (2015 3-yr phased-in reduction approach)
  - Reverted to standard application of risk policy

# Prior SSC Recommendations



- SSC-modified OFL probability distribution
- 2018: Typical life history; Proj. 2017  $B/B_{MSY} = 70\%$ ; Lognormal distribution of OFL with  $CV = 60\%$ 
  - 2018 ABC = 13.23 million lb = 5,999 mt ( $P^* = 0.267$ )

# 2019 OFL Projections

- See 2018 data update
- Uses 2016 assessment update outputs with realized 2016 and 2017 catch
- Assumes 100% of 2018 ABC (5,999 mt) is caught
- Resulting OFL associated with  $F_{MSY} = 0.309$  is 20.60 mil lb (9,343 mt)

# Staff ABC Recommendation



- Assumes:
  - Lognormal distribution of OFL with 60% CV
  - Projected 2018 SSB = 76% of  $SSB_{MSY}$
  - Typical life history
- Resulting 2019 ABC = 15.41 mil lb = 6,988 mt

# 2019 Staff ABC Recommendation

Memo Table 3

OFL	ABC	ABC % of OFL	F	P*
20.60 mil lb (9,343 mt)	15.41 mil lb (6,988 mt)	75%	0.225	0.300

# 2019 Staff Recommendation with Comparison to 2018



	2018		2019	
	Mil lb.	mt	Mil lb.	mt
<b>OFL</b>	18.24	8,272	20.60	9,343
<b>ABC</b>	13.23	5,999	15.41	6,988