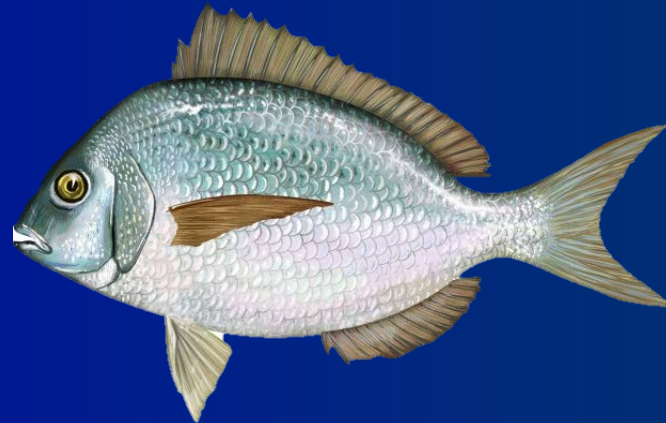




# Scup

## 2019 Management Measures



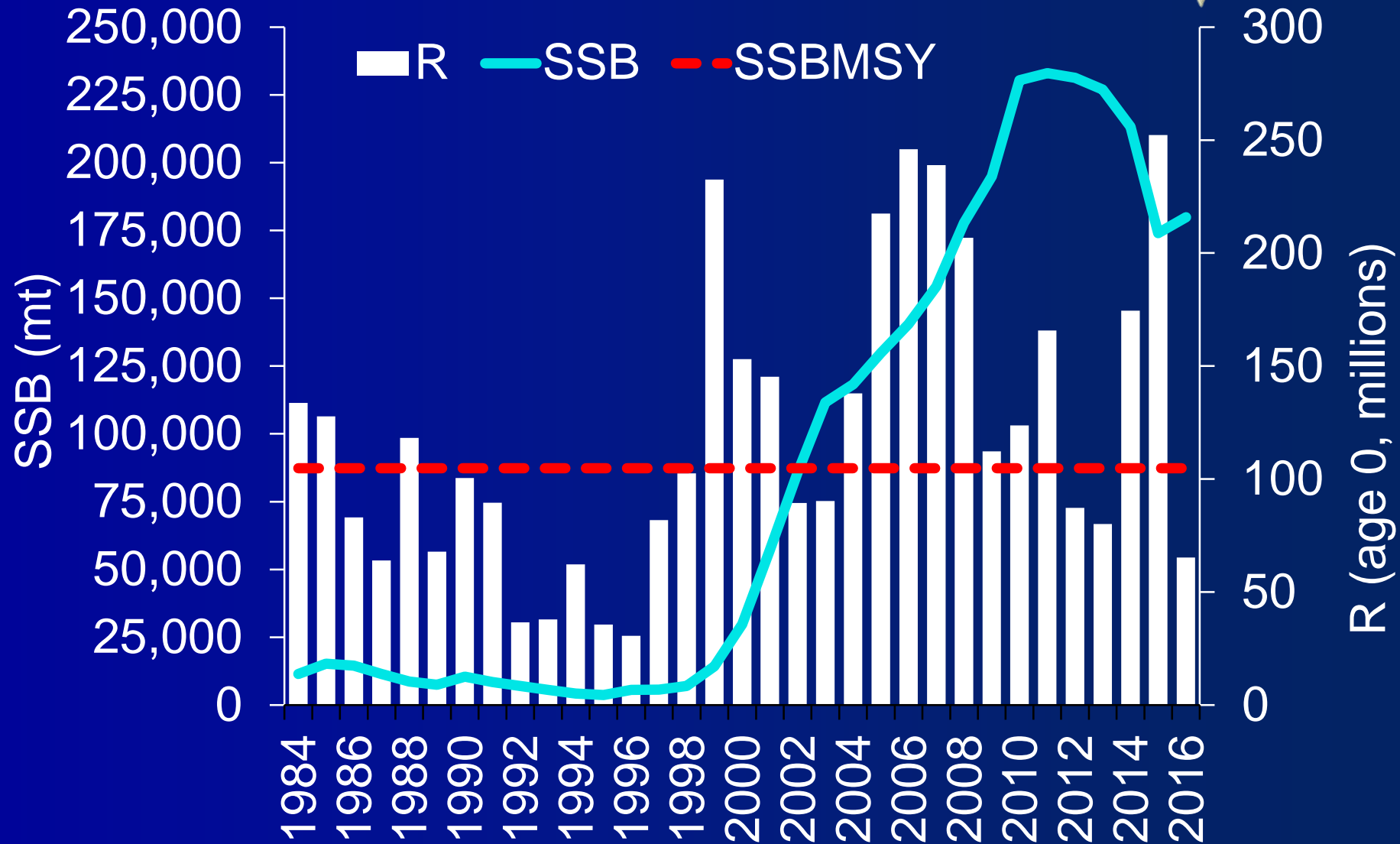
SSC Meeting  
July 17, 2018

# Outline

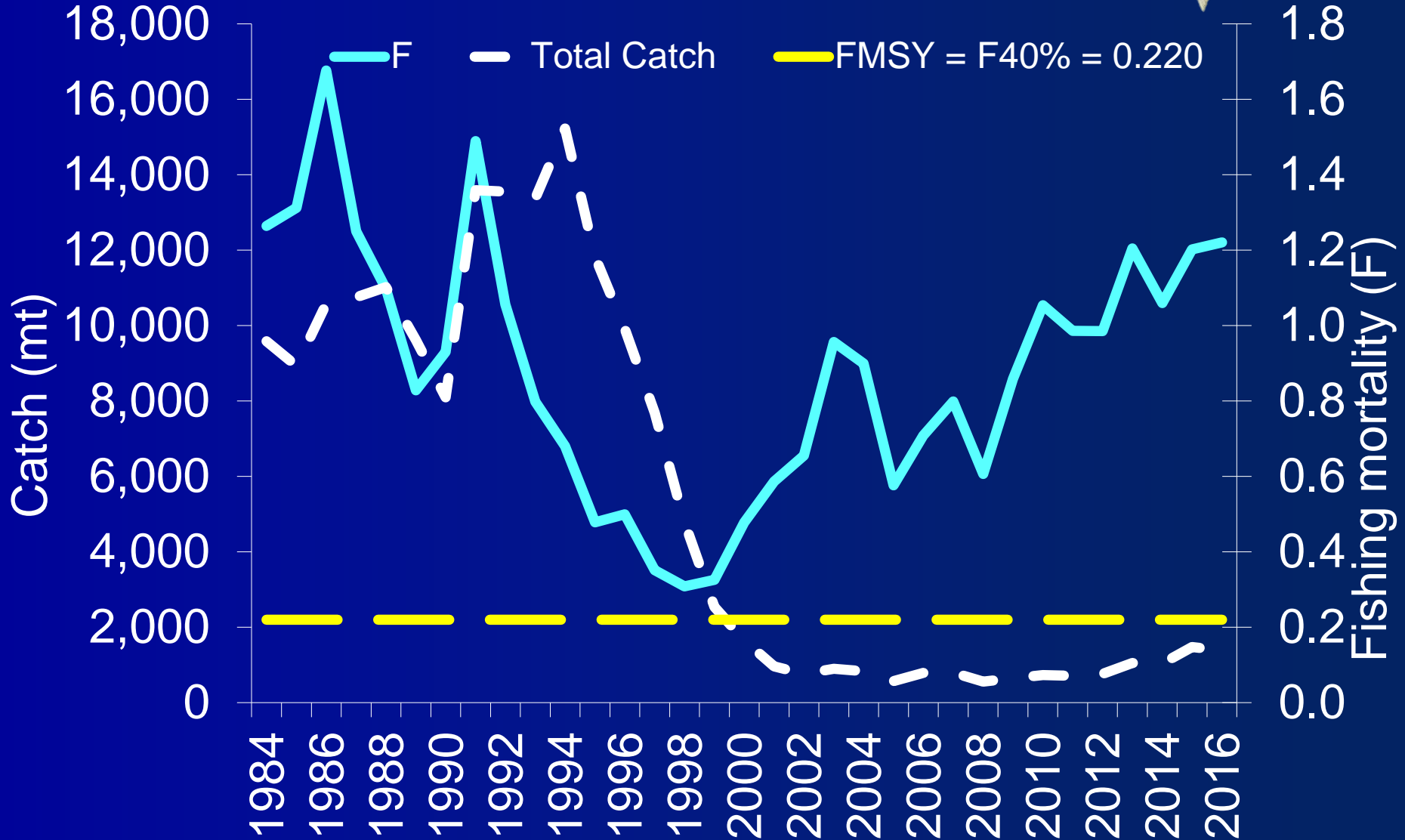
- Stock status
- Fishery performance
- AP comments
- Review 2019 ABC



# Biomass

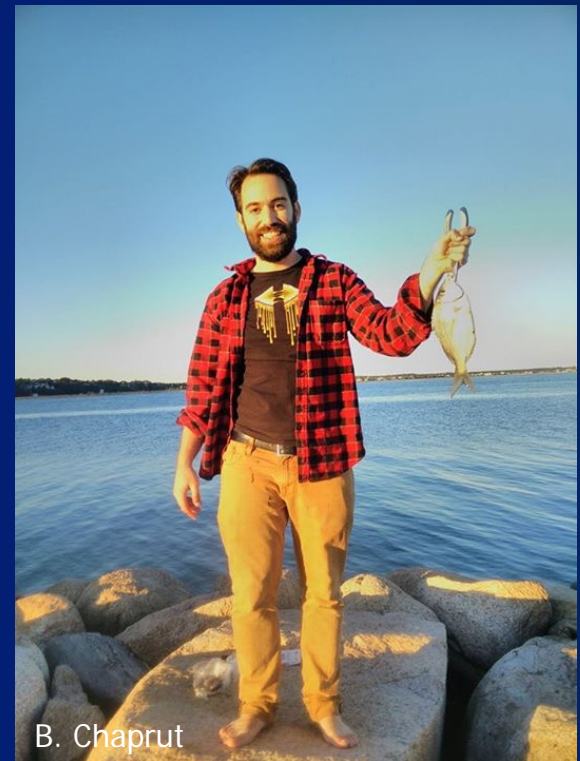


# Fishing Mortality



# 2018 Data Update

- Many survey indices show record or near-record highs in 2015, 2016, or 2017
- Some survey indices (including NEFSC) decreased since peaks in 2015 or 2016
- Large 2015 year class



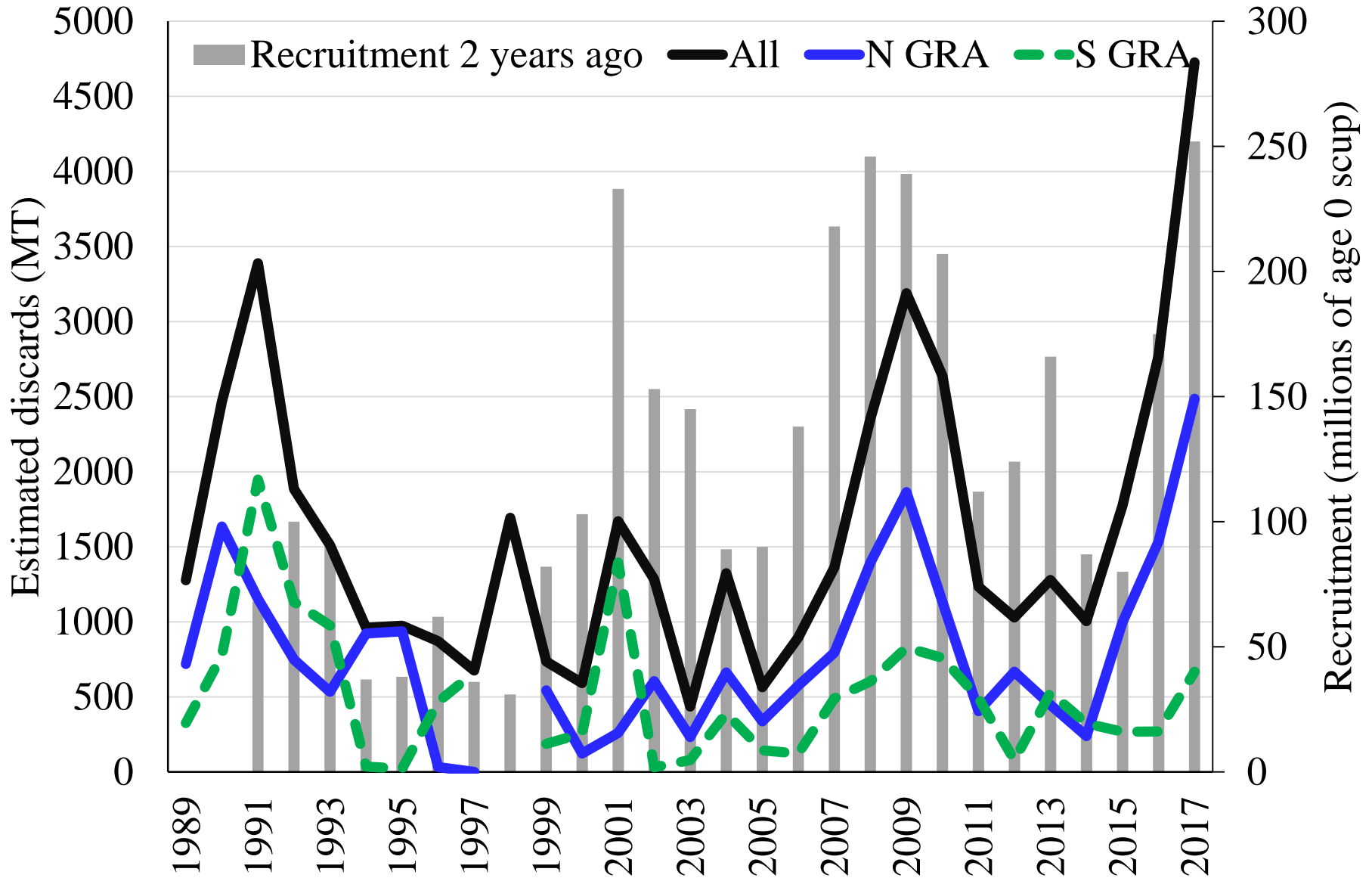
# 2018 Data Update - Fishery

- 2017 commercial landings 15.4 mil lb, 84% of quota
- 2017 rec. harvest 5.4 mil lb, 99% of RHL
- Commercial discards have been increasing since 2014; in 2017 were 10.4 mil lb, highest since 1981 and 71% greater than in 2016
- Rec discards increased but to much lesser extent
- 2017 ABC exceeded by 13%

# Commercial Discards

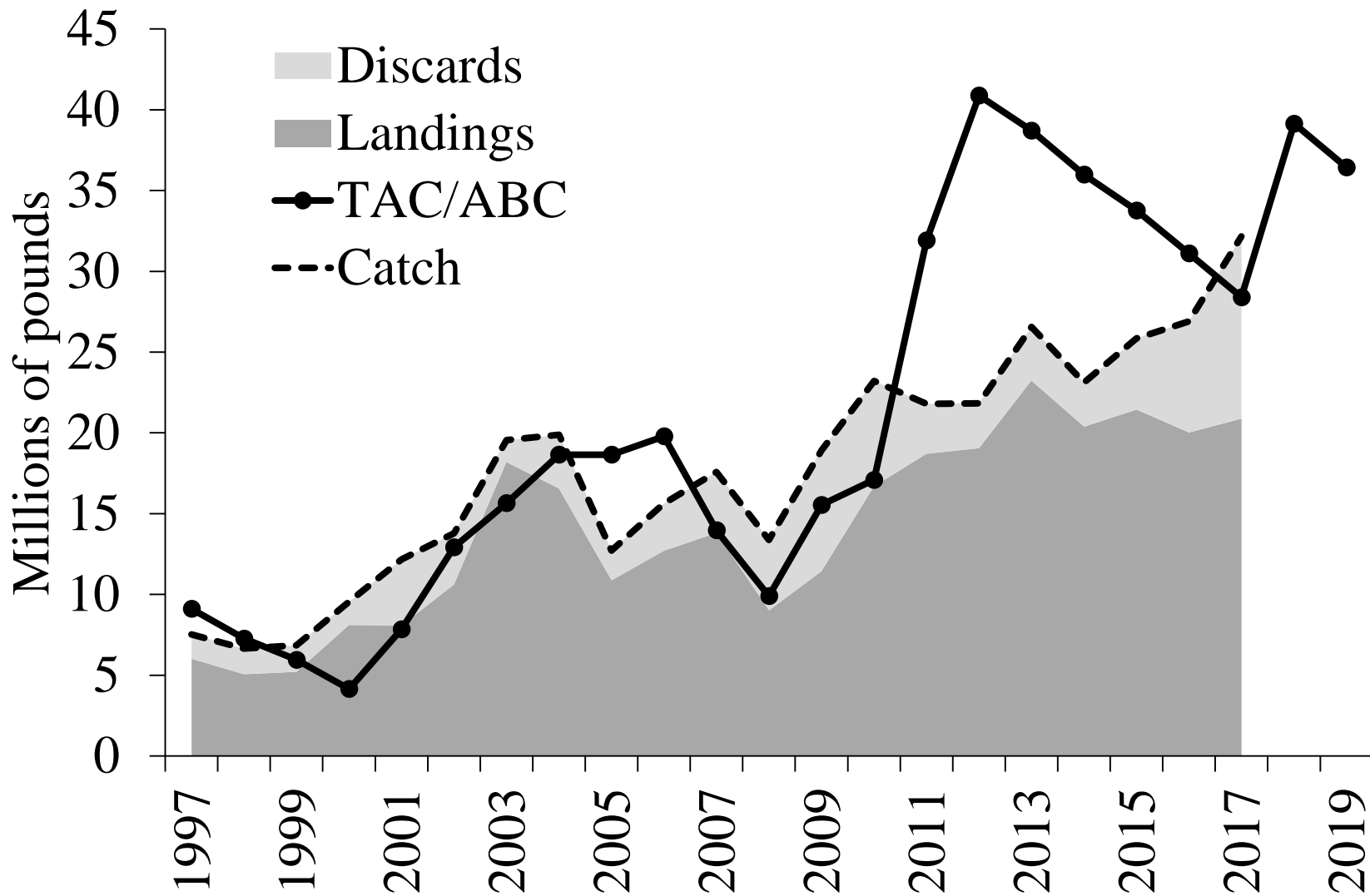
- High 2017 discards driven by record 2015 year class
- Overall magnitude of discarding increased for all mesh sizes and calendar quarters
- Change in S GRA boundary, effective Jan. 2017, may have impacted discards, but likely to much lesser extent than recruitment

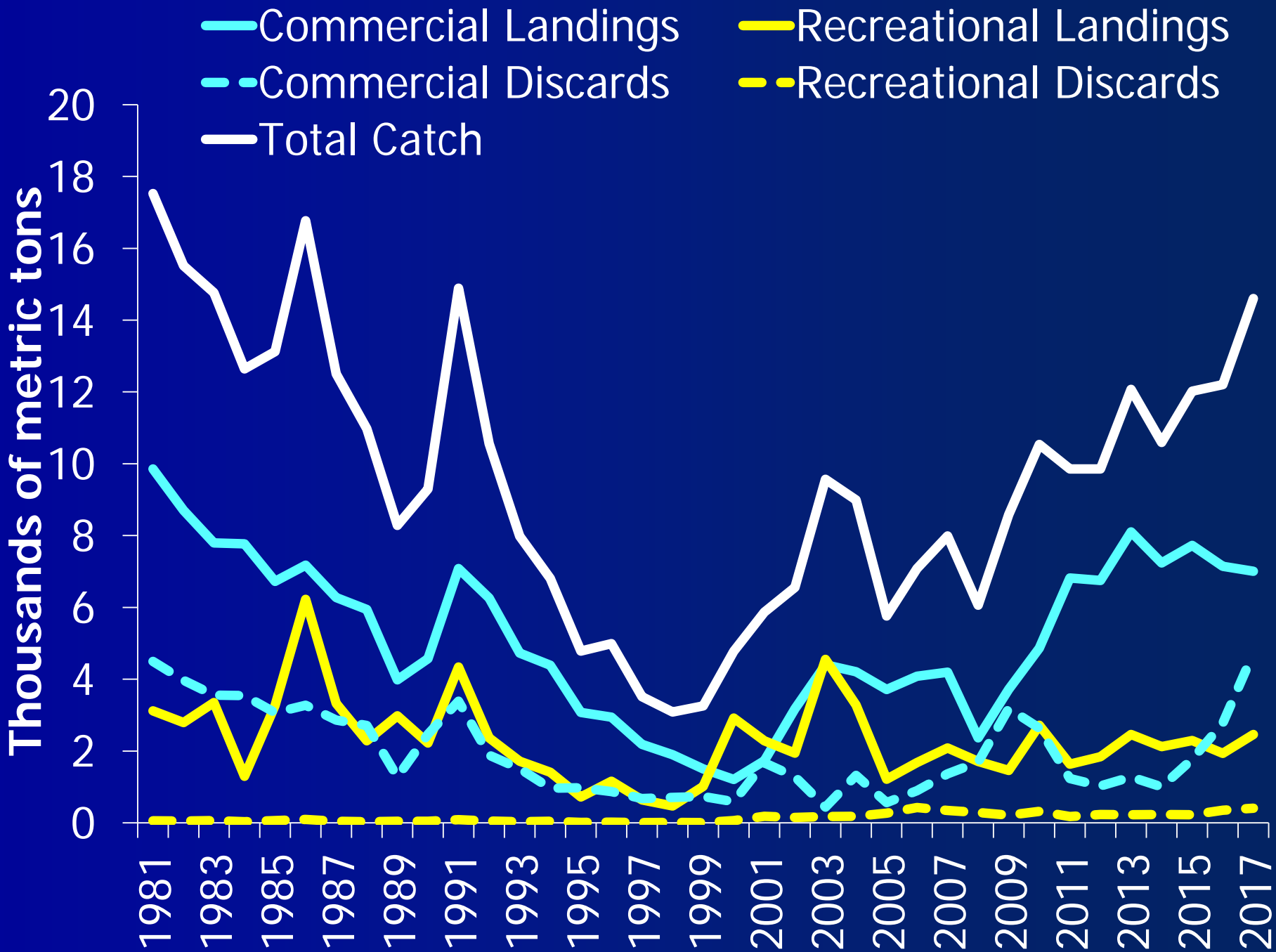
# All Mesh Sizes



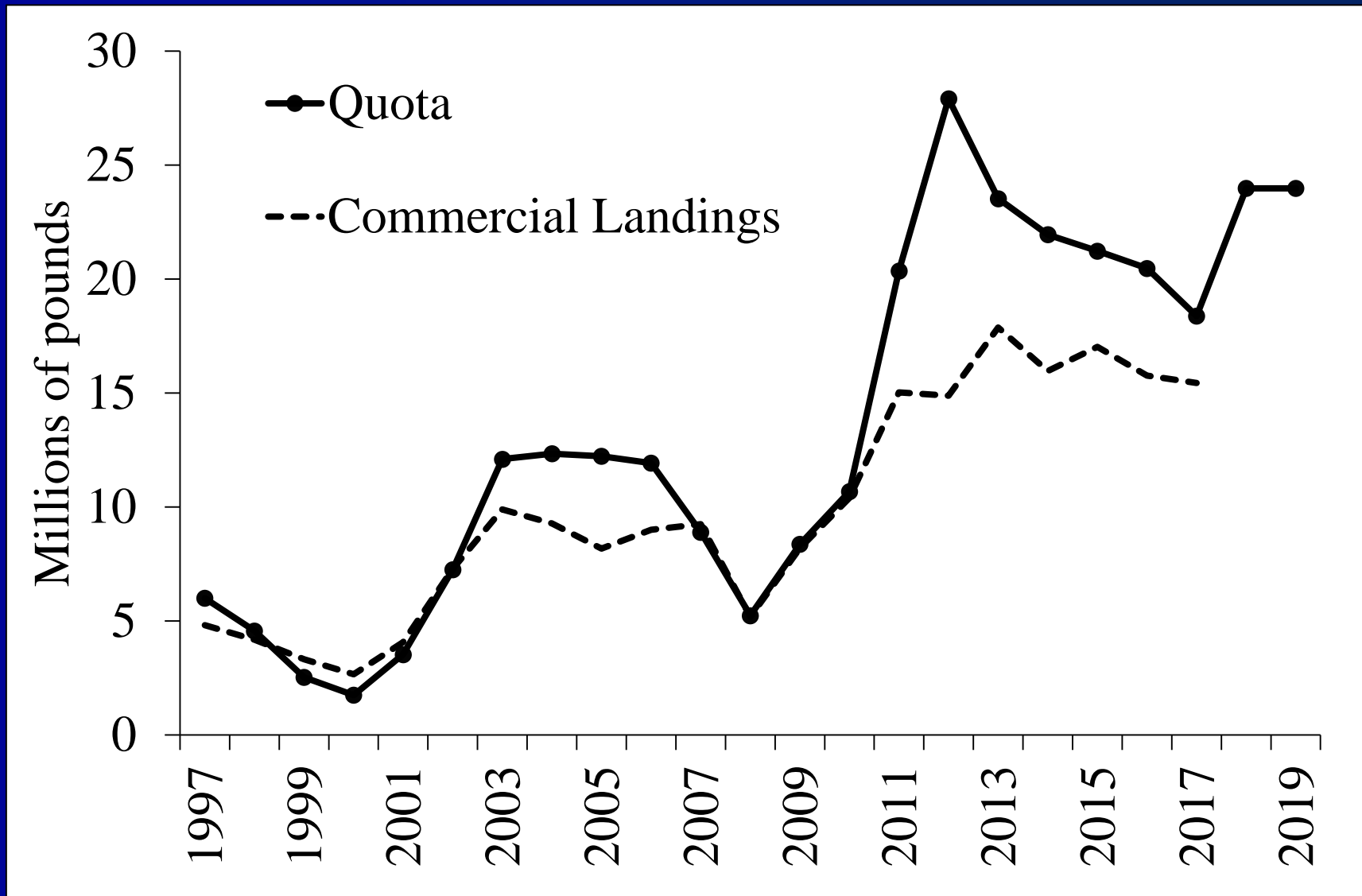


# ABCs vs. Catch

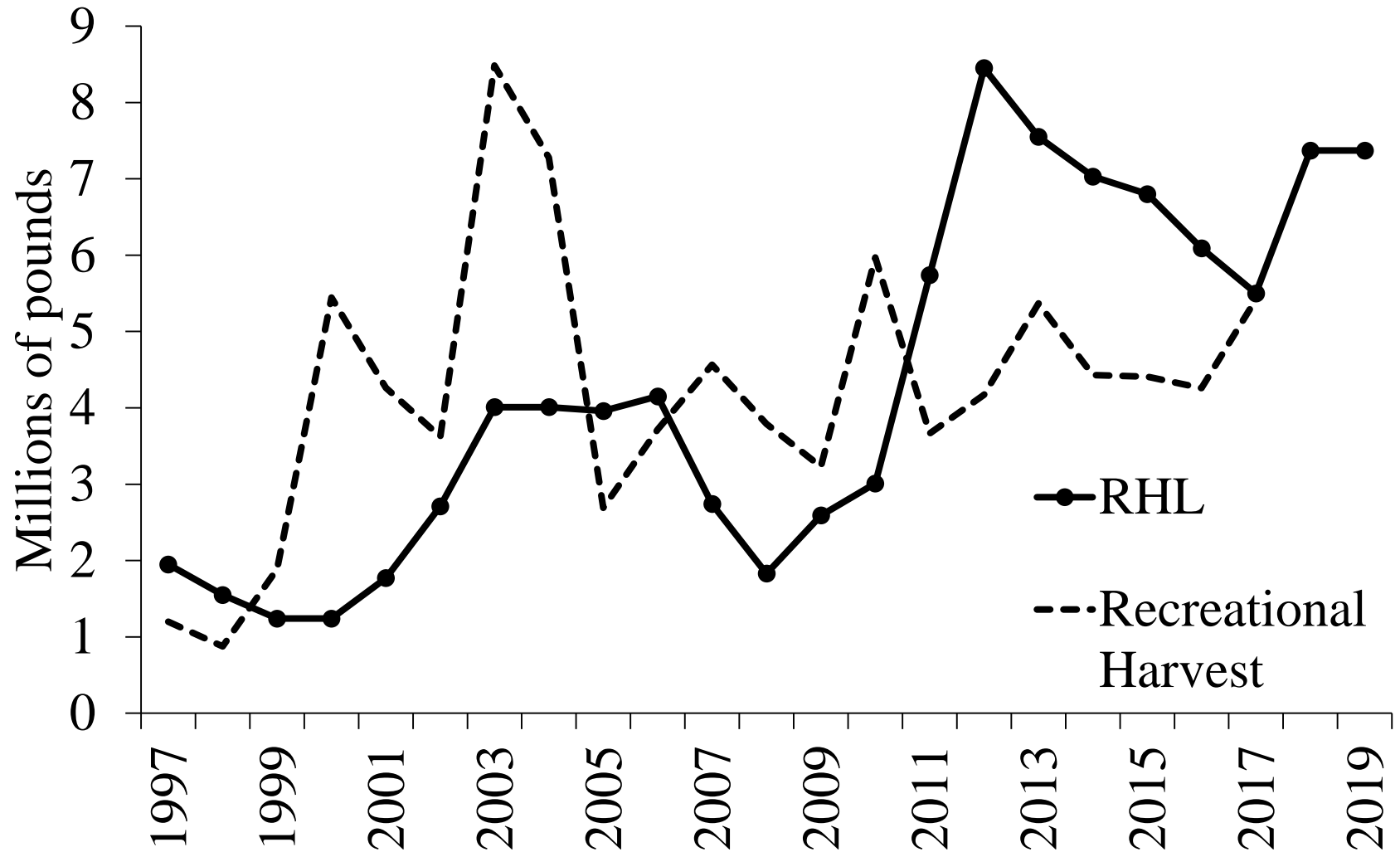




# Quotas vs. Landings

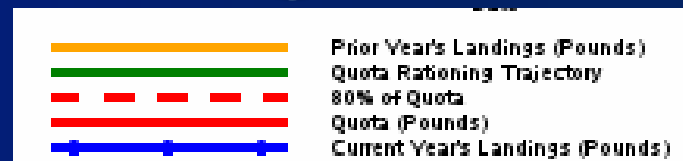


# RHL vs. Landings

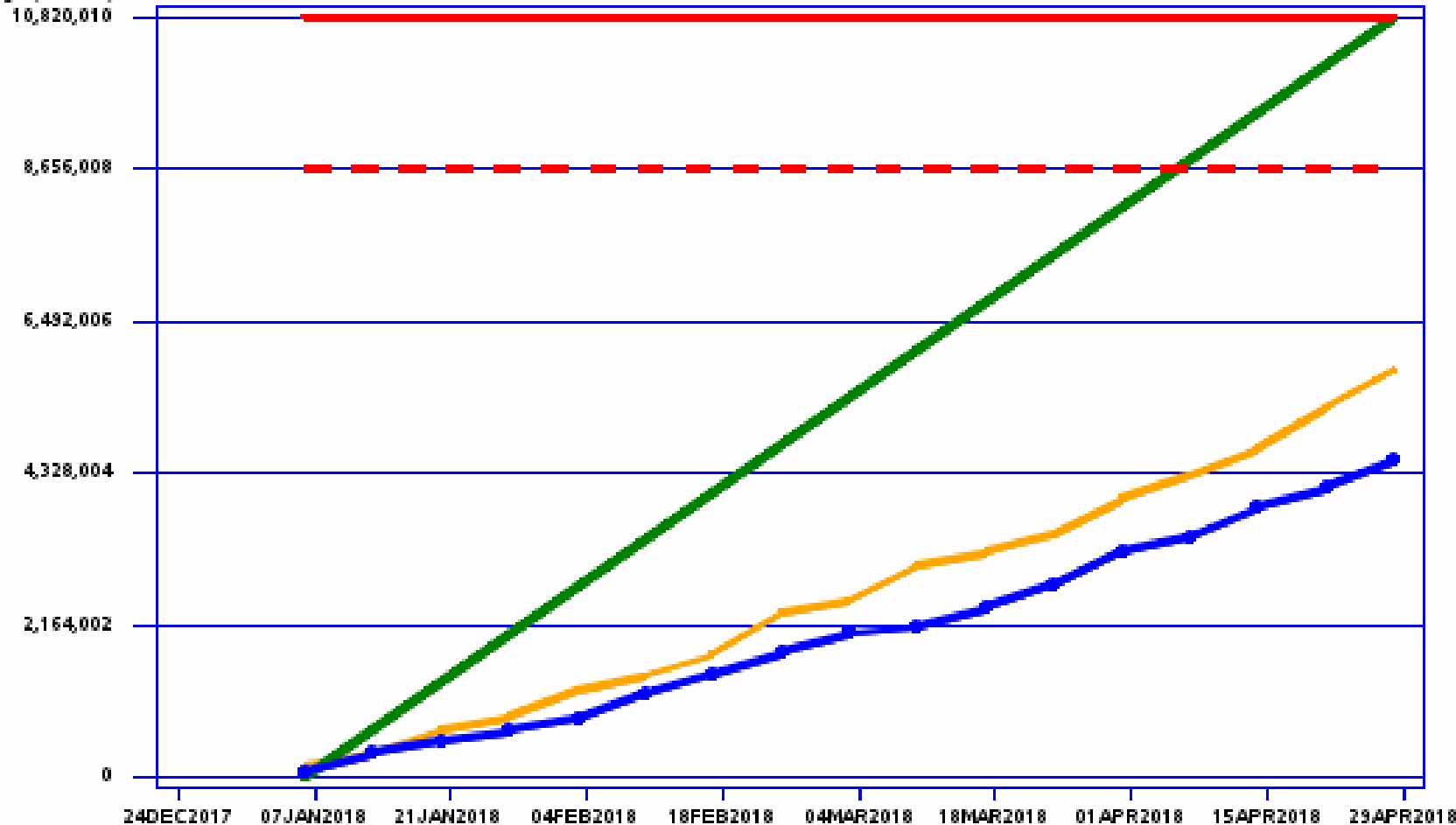


# 2018 Commercial Landings

## Winter I (Jan 1 – April 28)

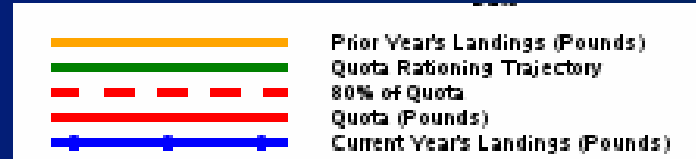


Cumulative Landings (Pounds)

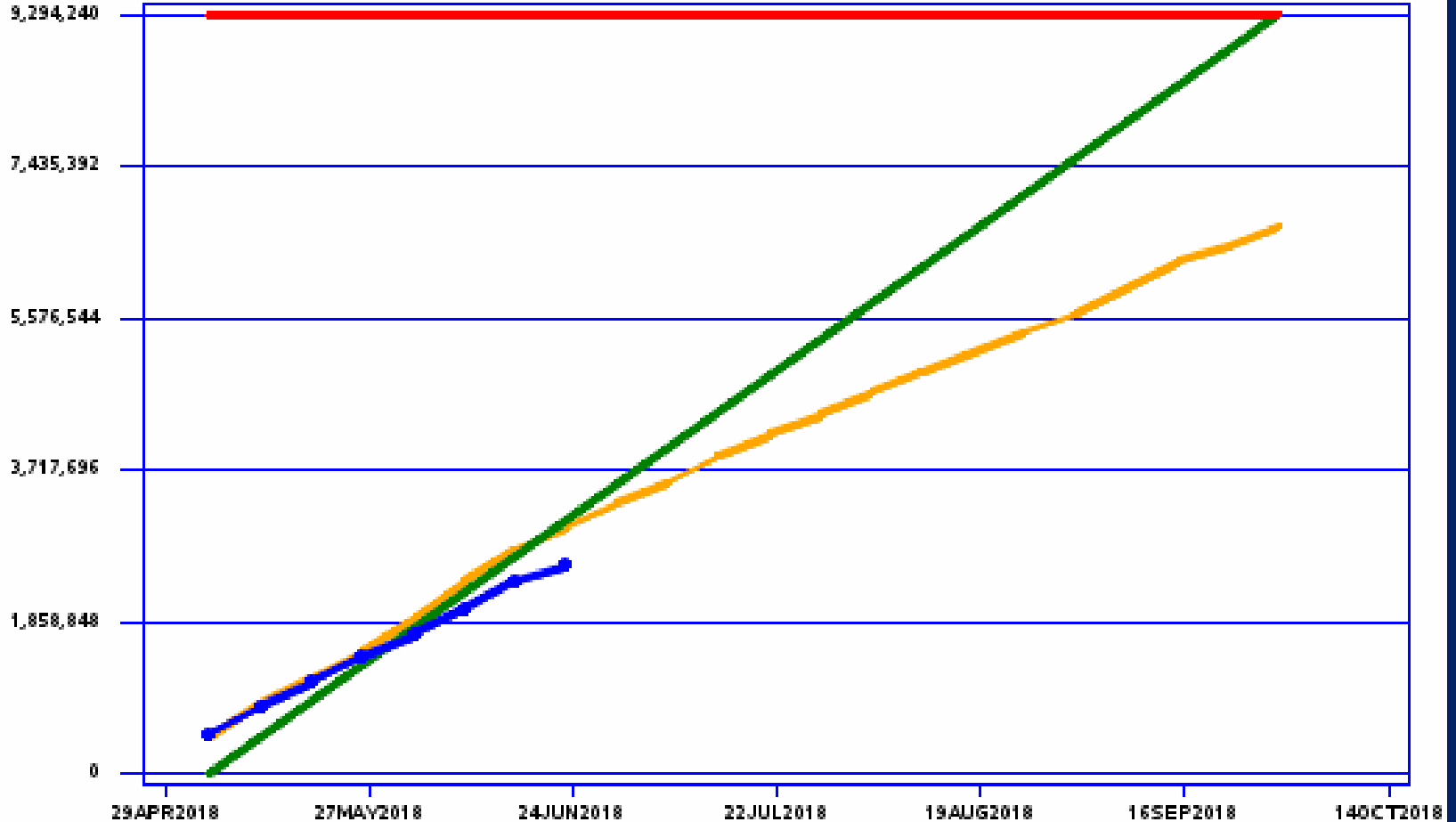


# 2018 Commercial Landings

Summer (May 1 – June 23\*)



Cumulative Landings (Pounds)



# AP Comments

- MRIP data inaccurate, should be replaced with reporting via smart phone app
- Predictability, stability in regulations needed
- Concerns about trawl survey data
- RSA should be used to fund research
- Research should be done on hook sizes, gear configurations to reduce discard mortality
- Council and Board don't listen to AP input

# AP Comments

- Market issues
  - Competition with tilapia
  - Scup do not freeze well
  - Difficult to fillet by machine
  - Good taste and uniform size – could make a great food product if other challenges are overcome
  - Research recommendations



# AP Comments

- MRIP: ~60% scup harvested on private/rental boats – some advisors disagree but varies by state
- Haven't seen increase in rec. catch of small scup – why did rec. discards increase?
- High bag limit better for for-hire vessels than low size limit
- Increased abundance decreased demand for for-hire trips out of RI
- Scup and black sea bass seasons should start at same time
- Use of small scup for striper bait

# 2018-2019 projections

- Assume 87% of 2017 ABC is caught, then  $F = F_{\text{MSY proxy}} = 0.220$
- OFL CV = 60%
- Risk policy, typical life history ( $p^* = 40\%$ )



Year	OFL		ABC	
	mil lb	mt	mil lb	mt
2018	45.05	20,433	39.14	17,755
2019	41.03	18,612	36.43	16,525

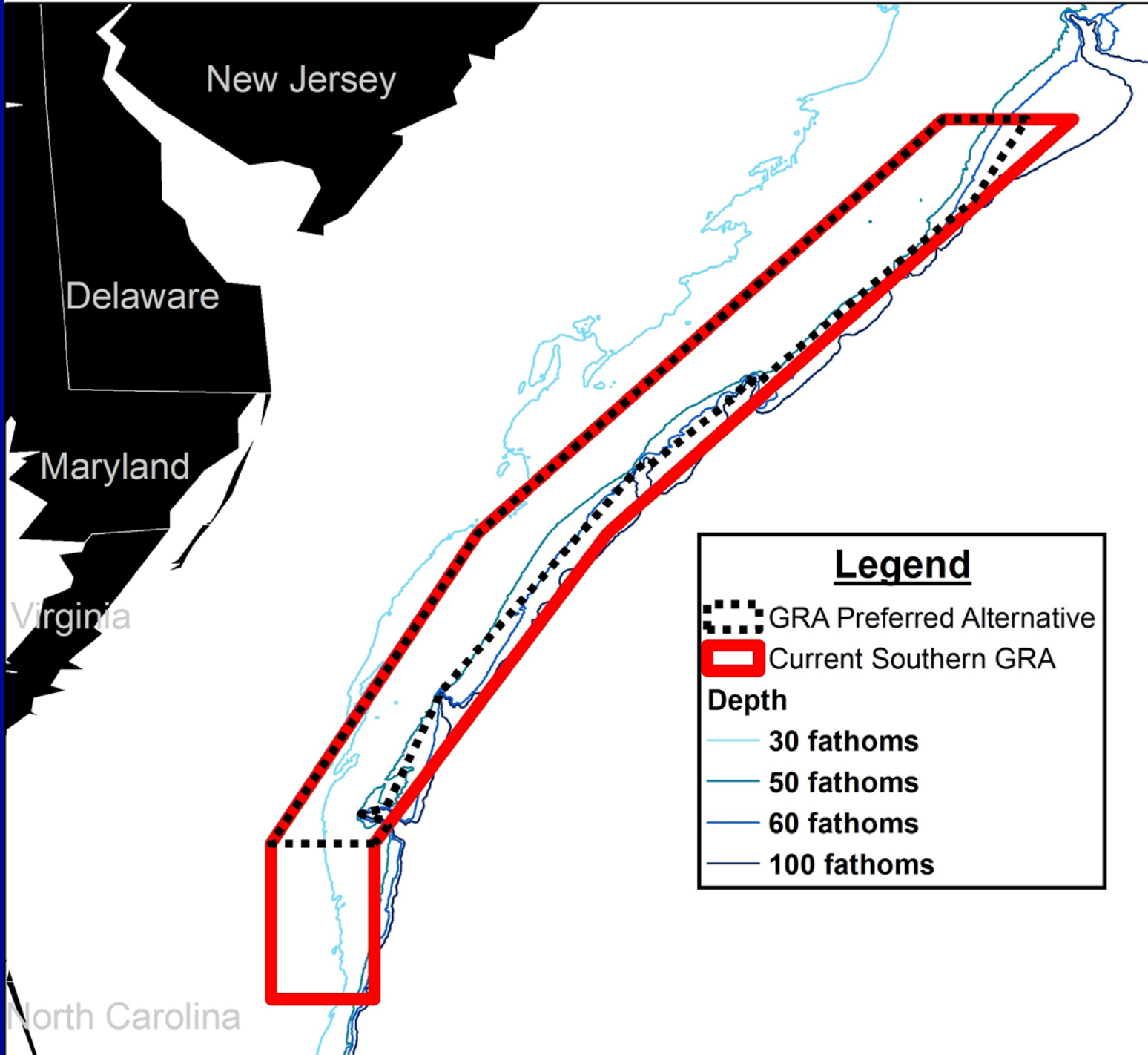




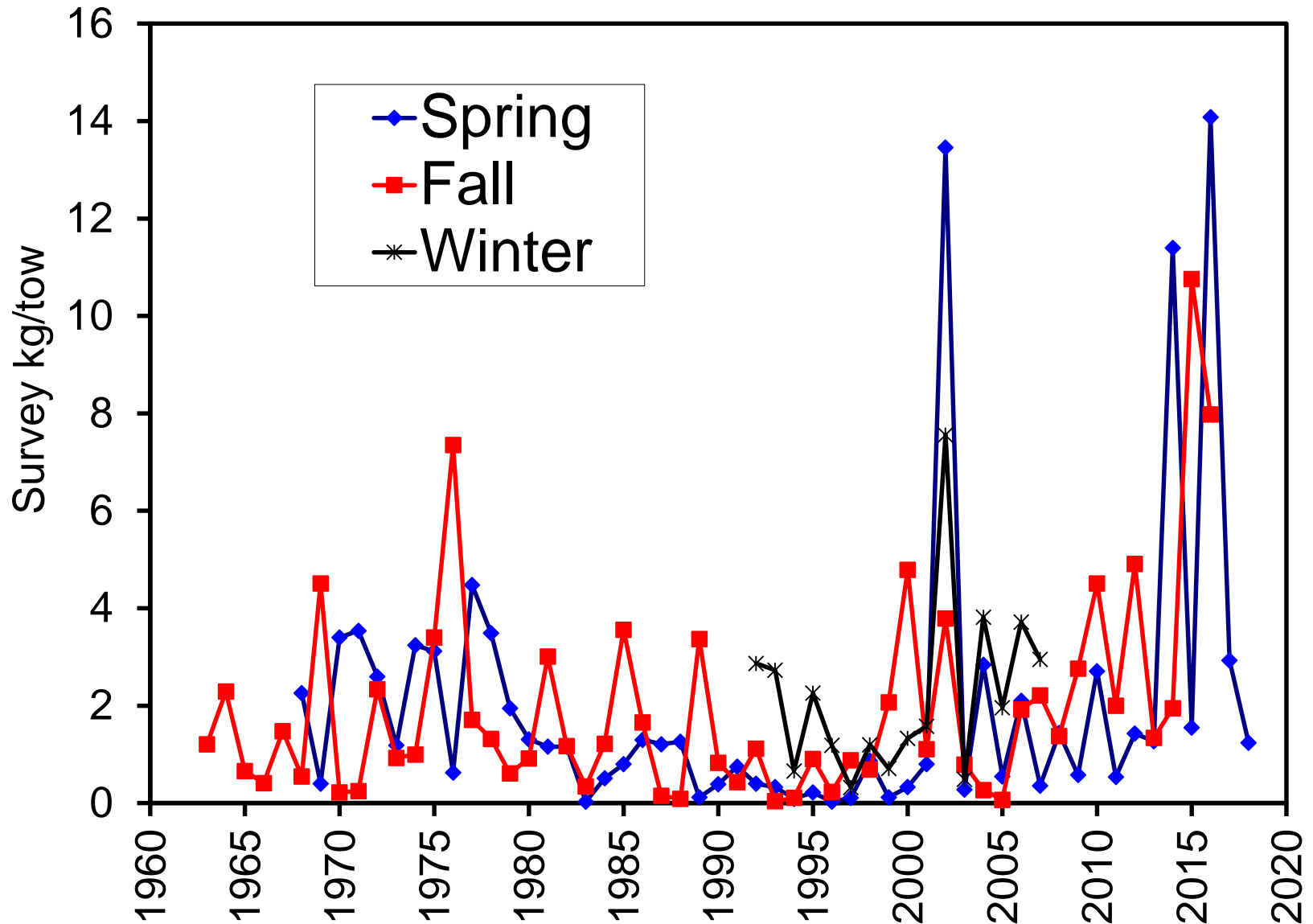
# Questions?



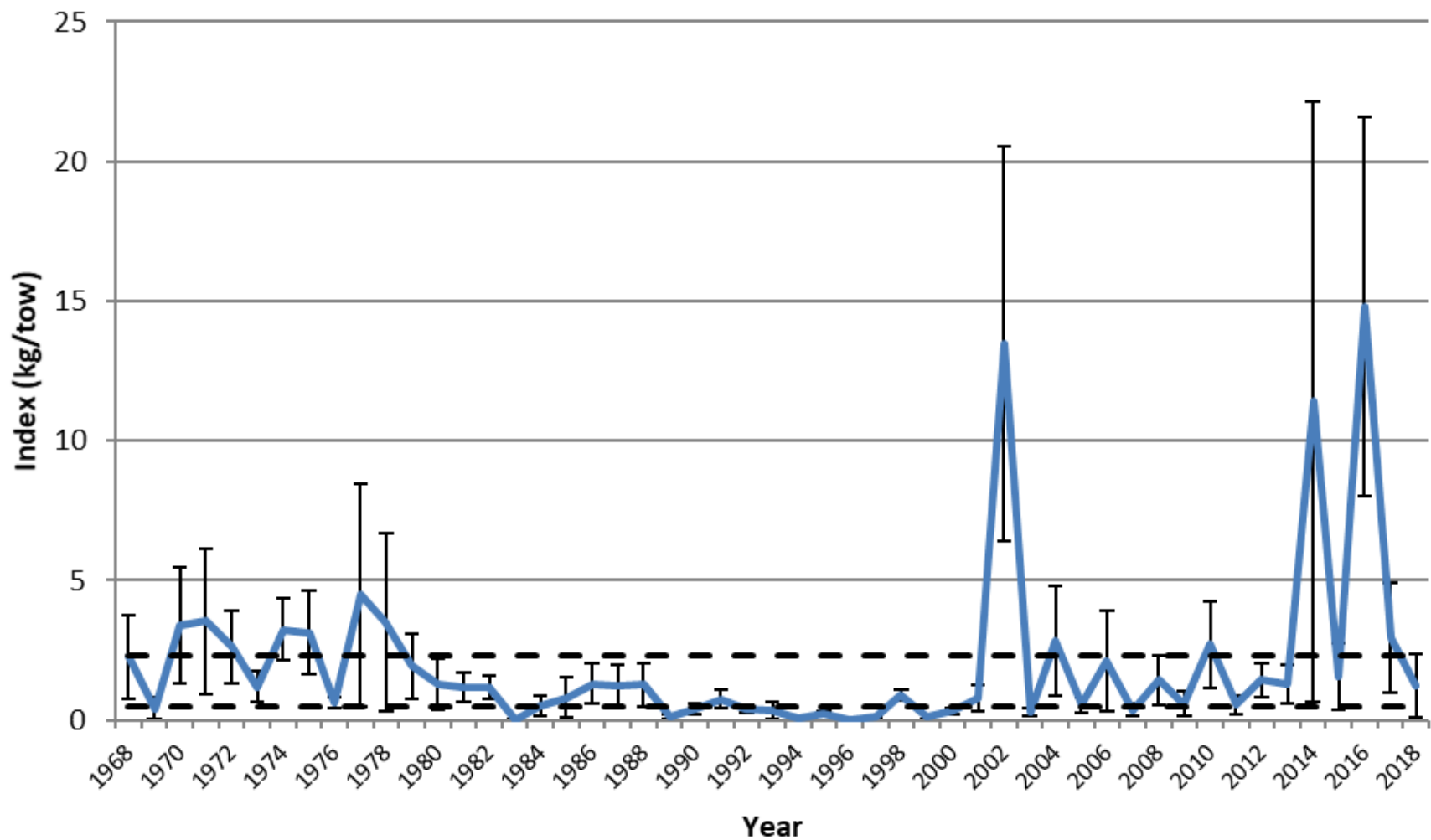




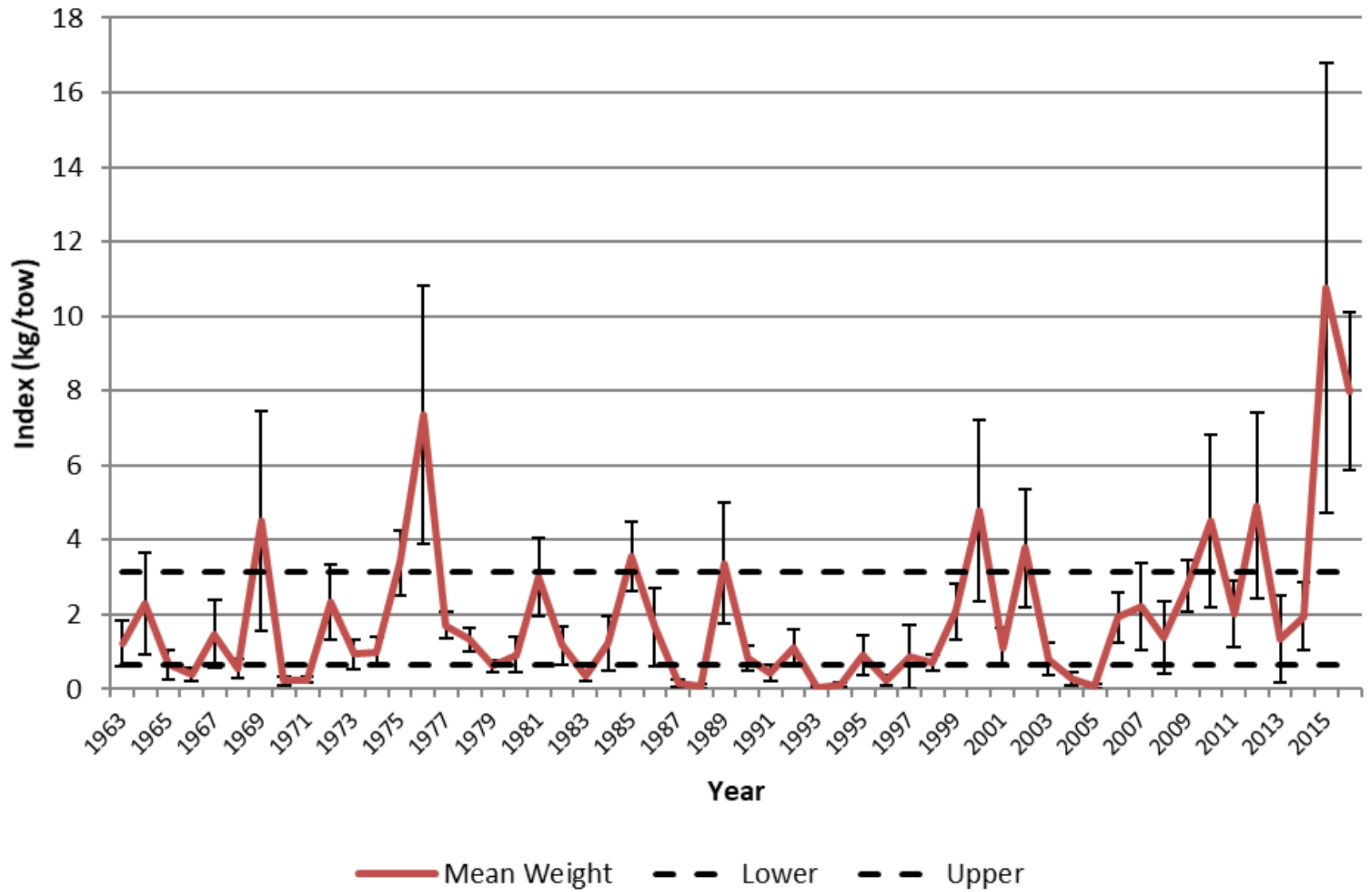
# NEFSC Biomass Indices



## Scup: Spring kg/tow

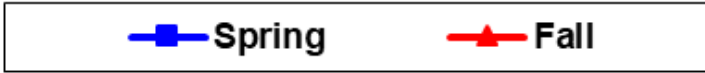
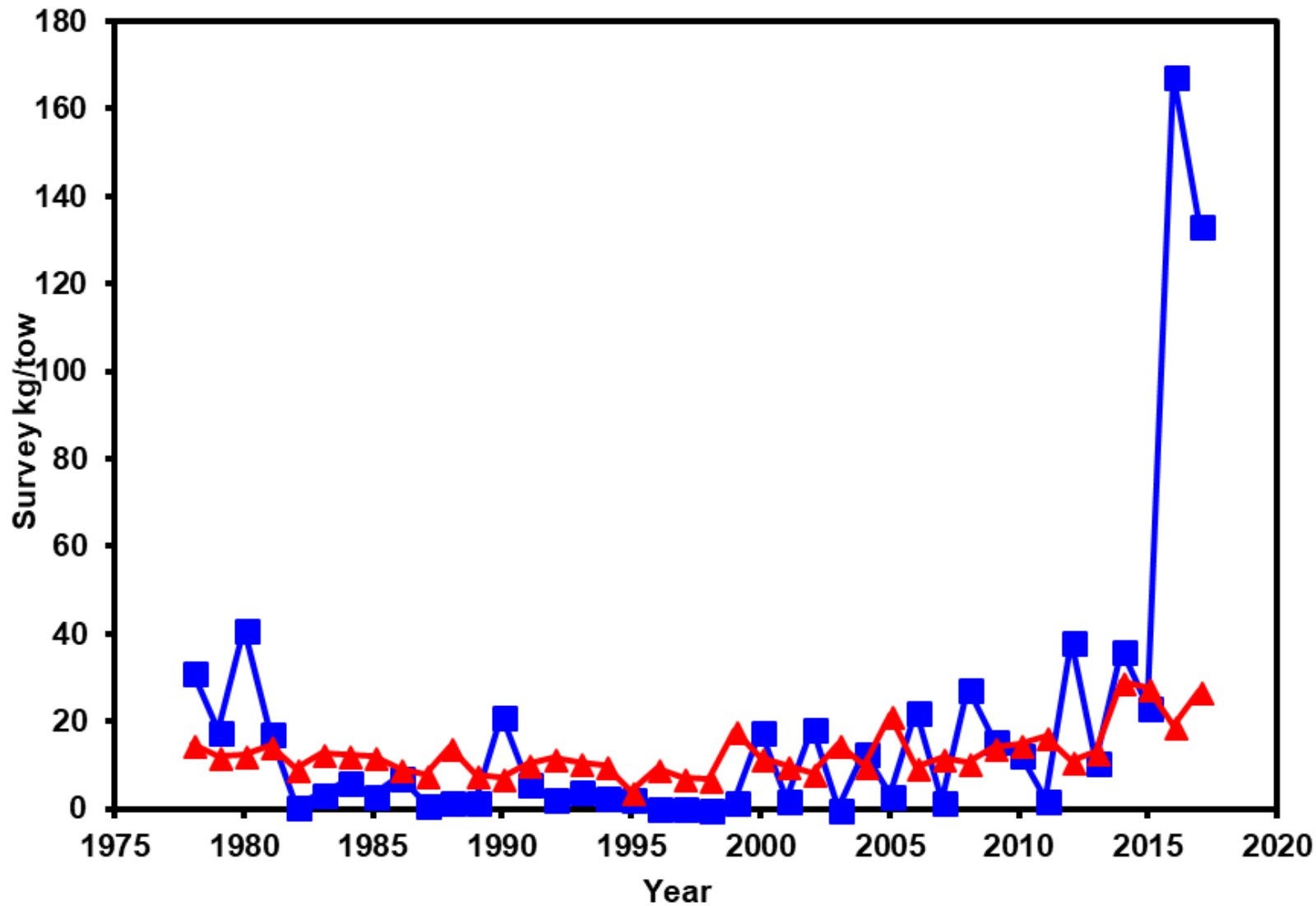


# Scup: NEFSC Fall kg/tow

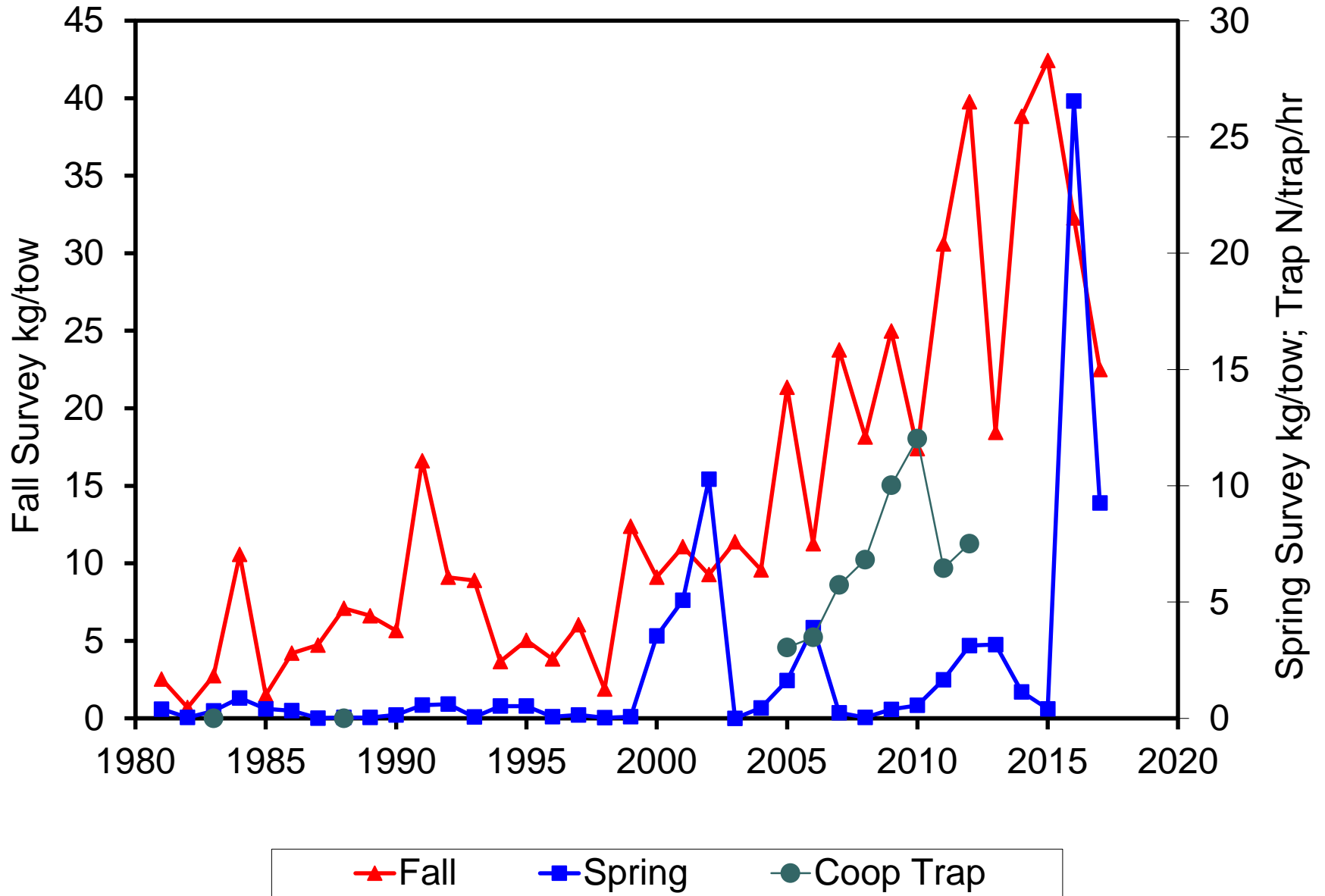




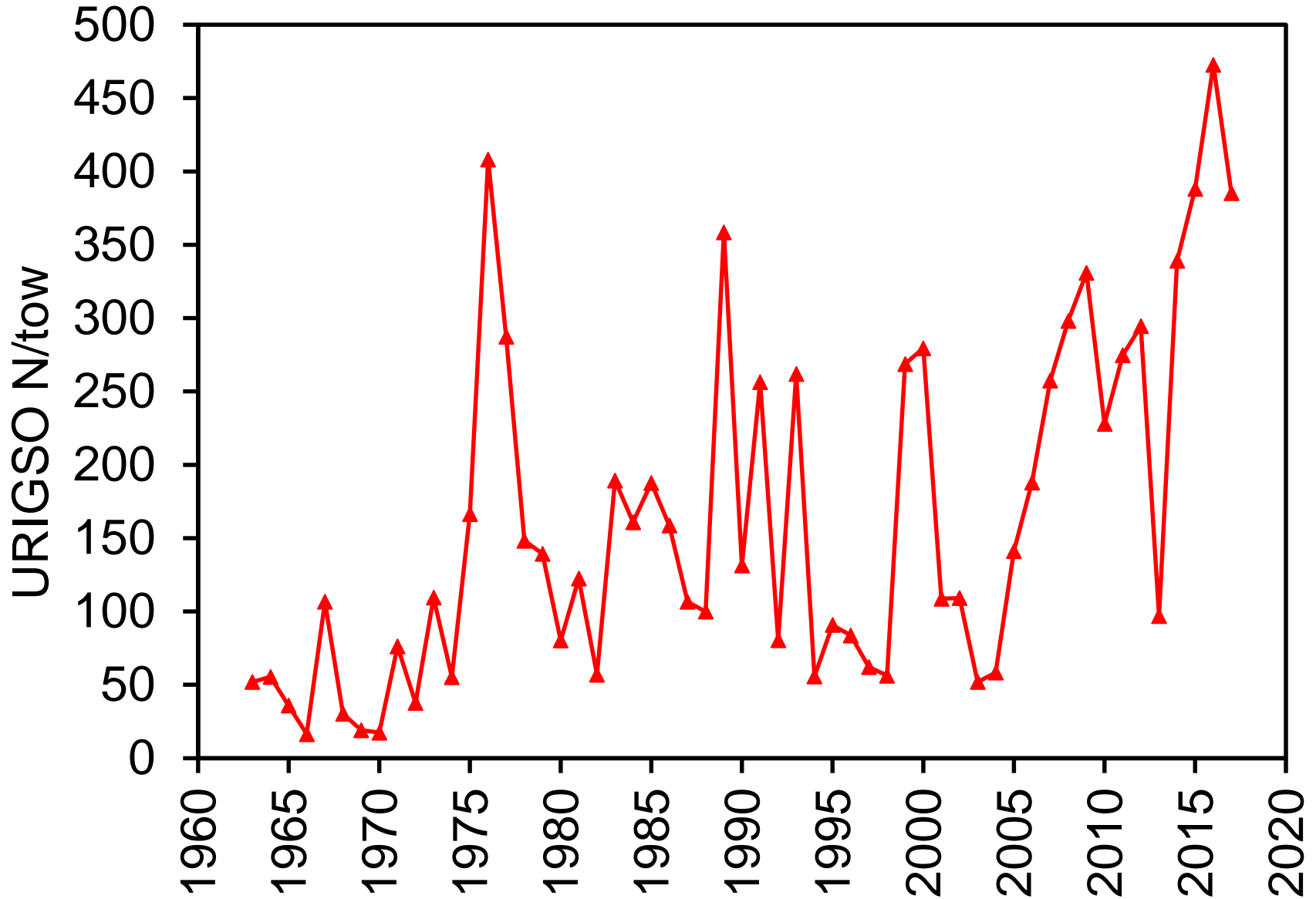
# MADMF Biomass Indices



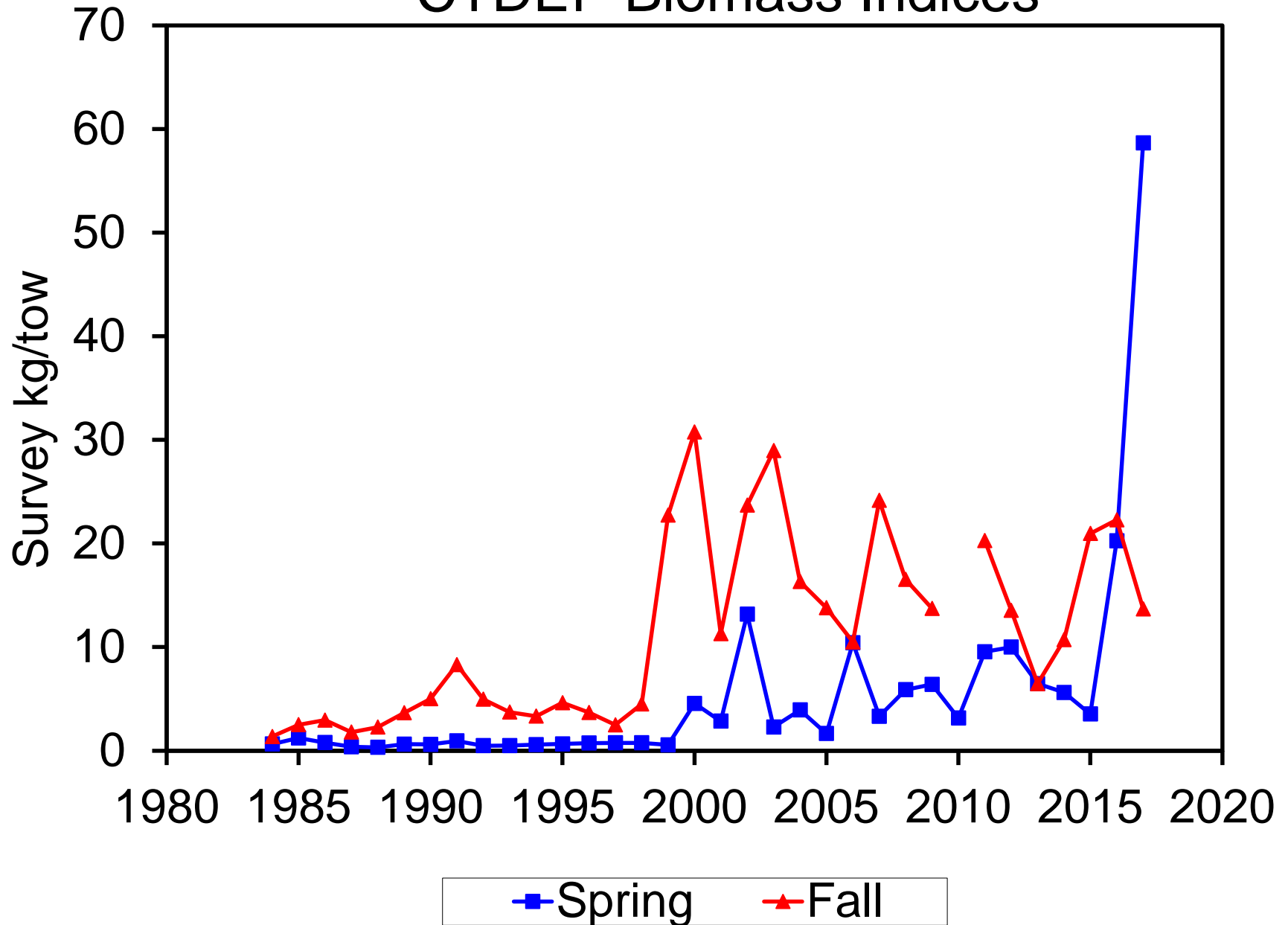
# RIDFW Indices



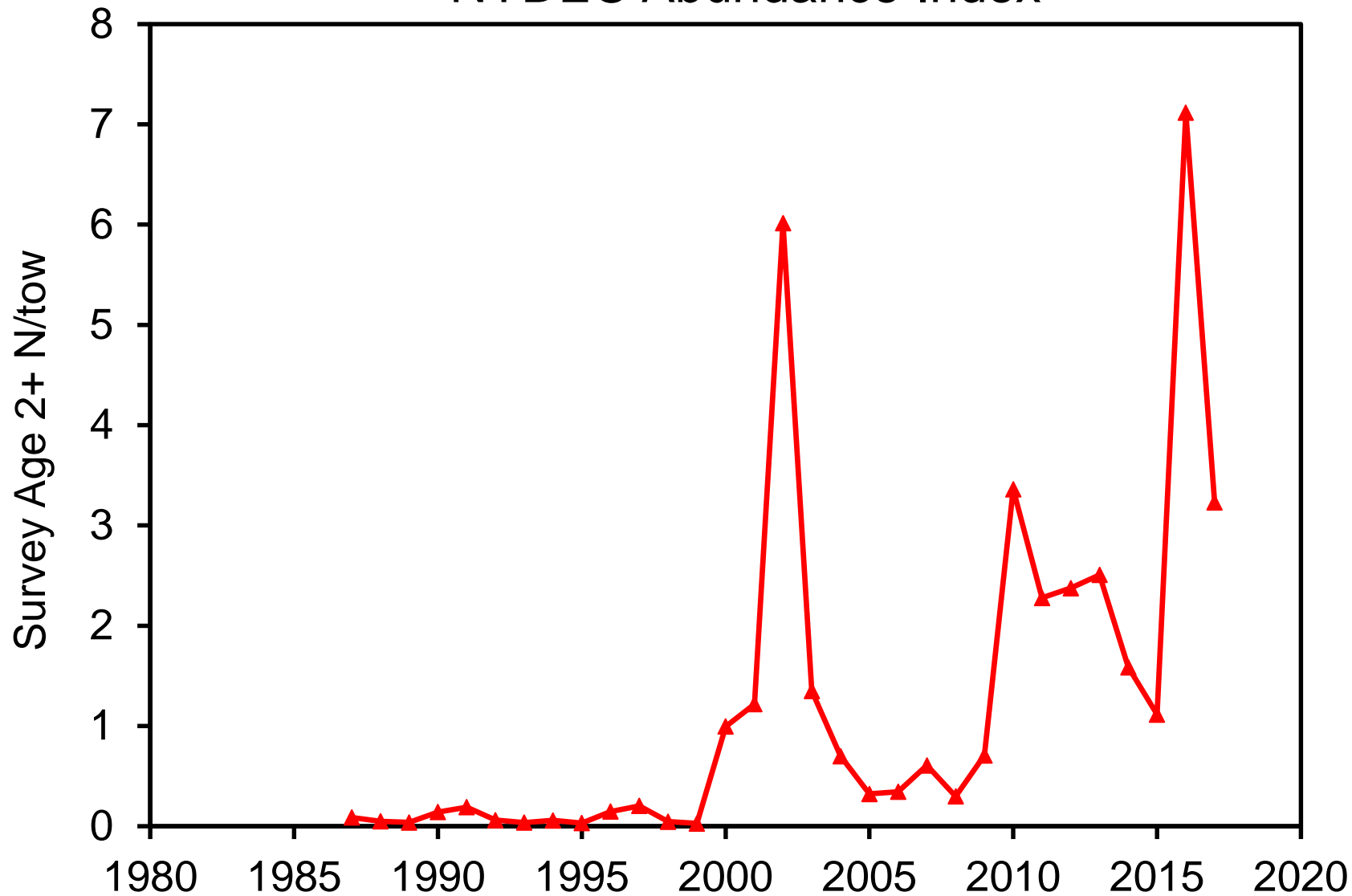
# URIGSO Abundance Index



# CTDEP Biomass Indices

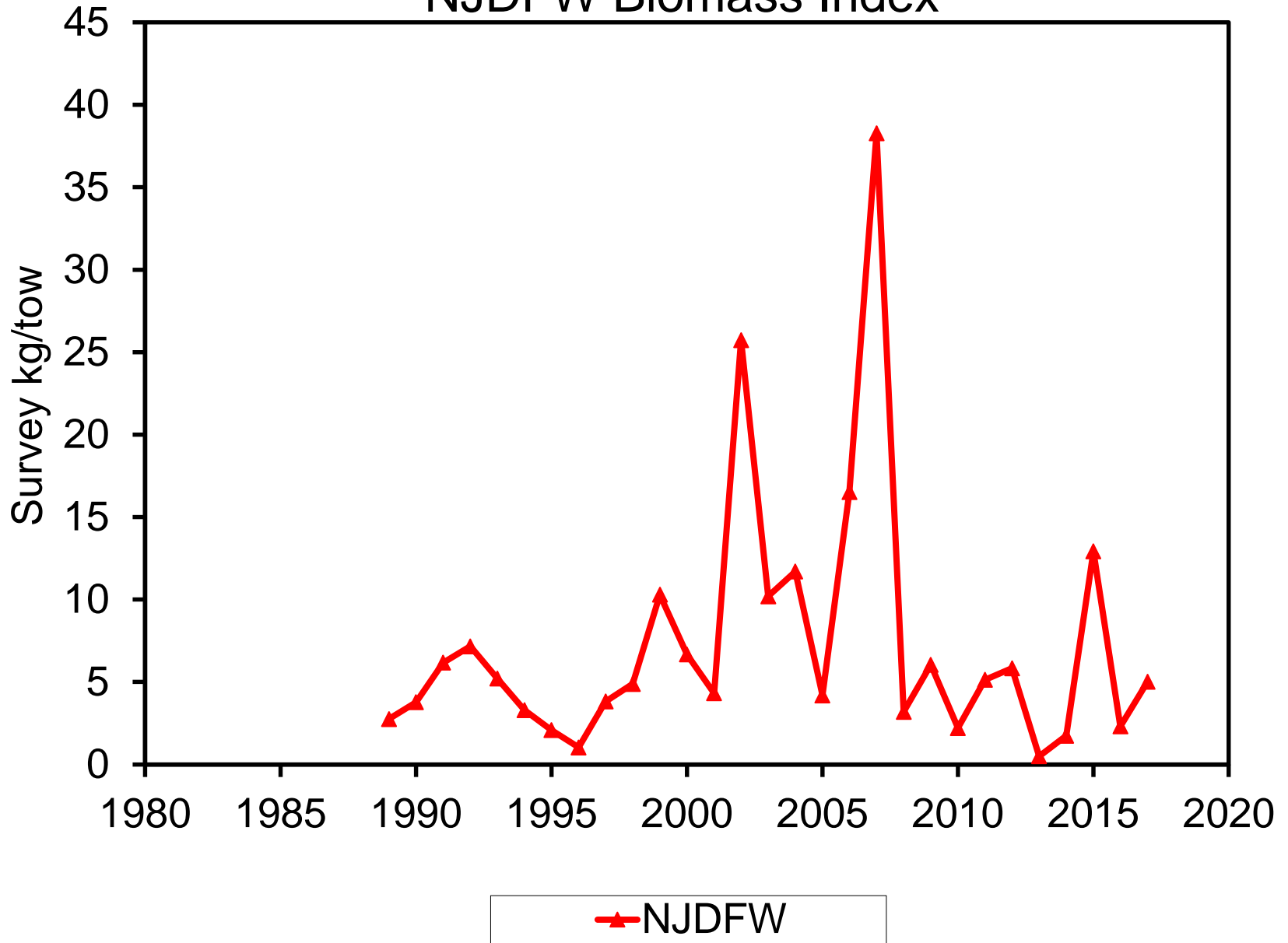


# NYDEC Abundance Index

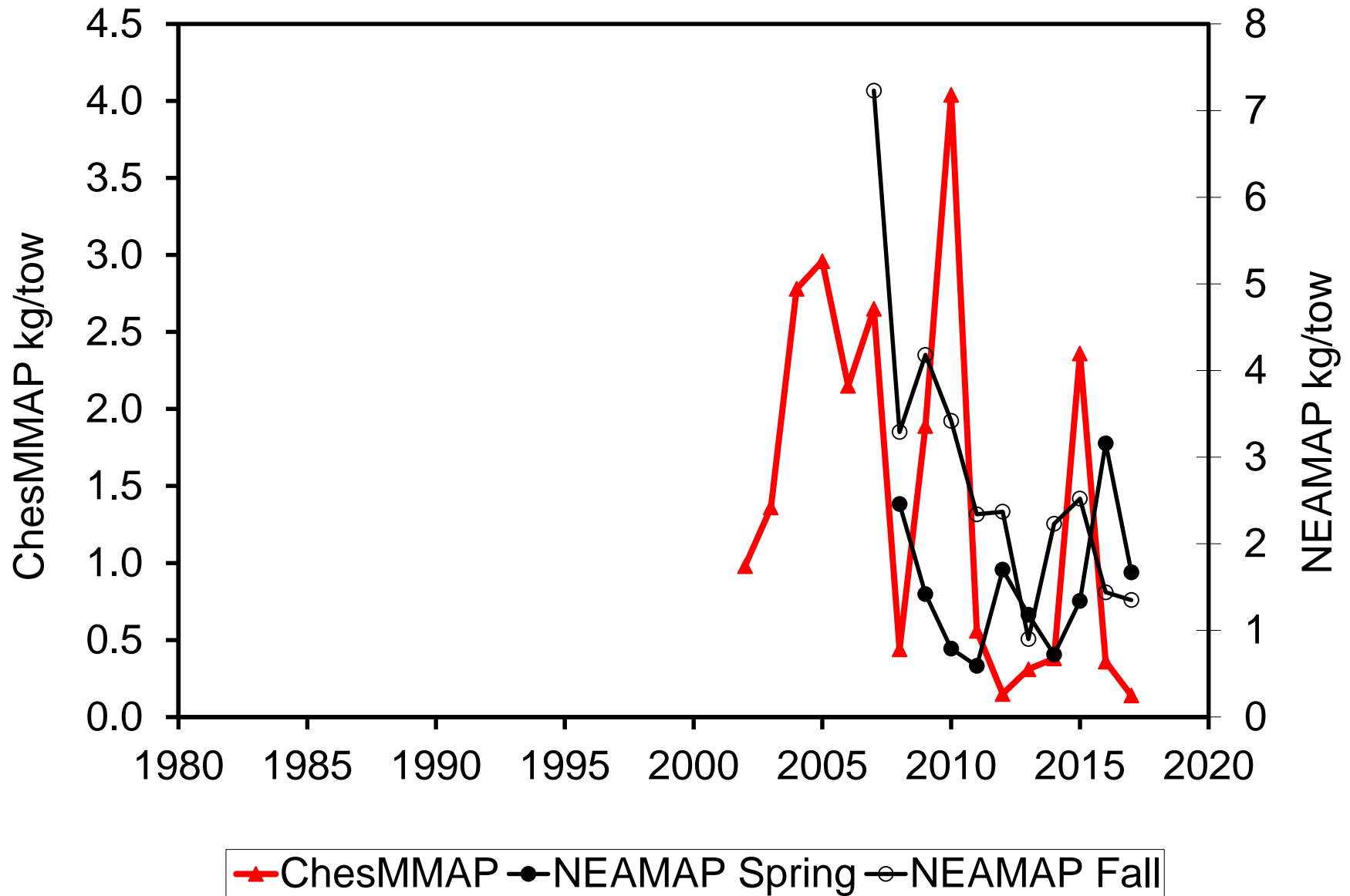


—▲— NYDEC

# NJDFW Biomass Index



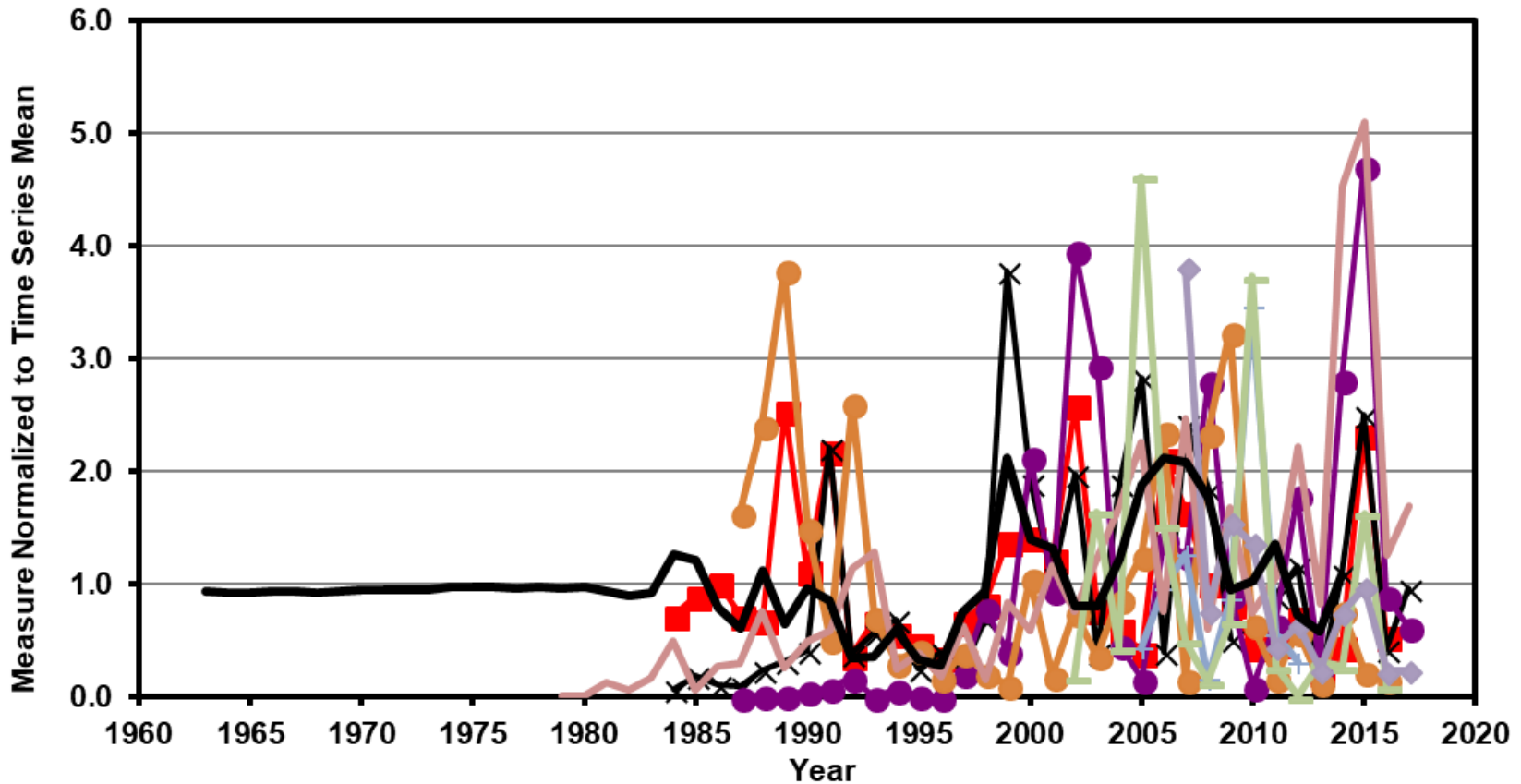
# ChesMMAP and NEAMAP Biomass Indices



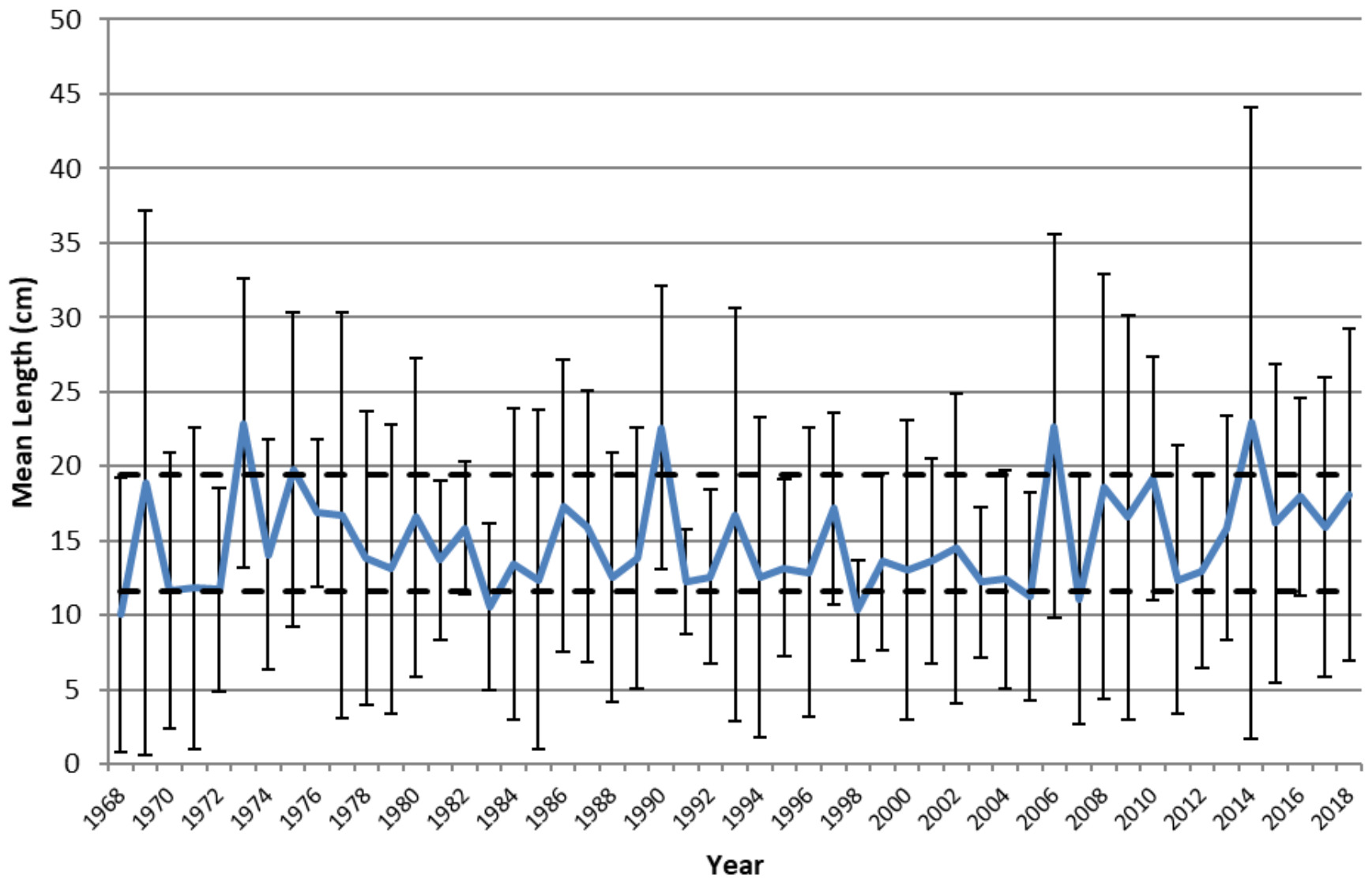




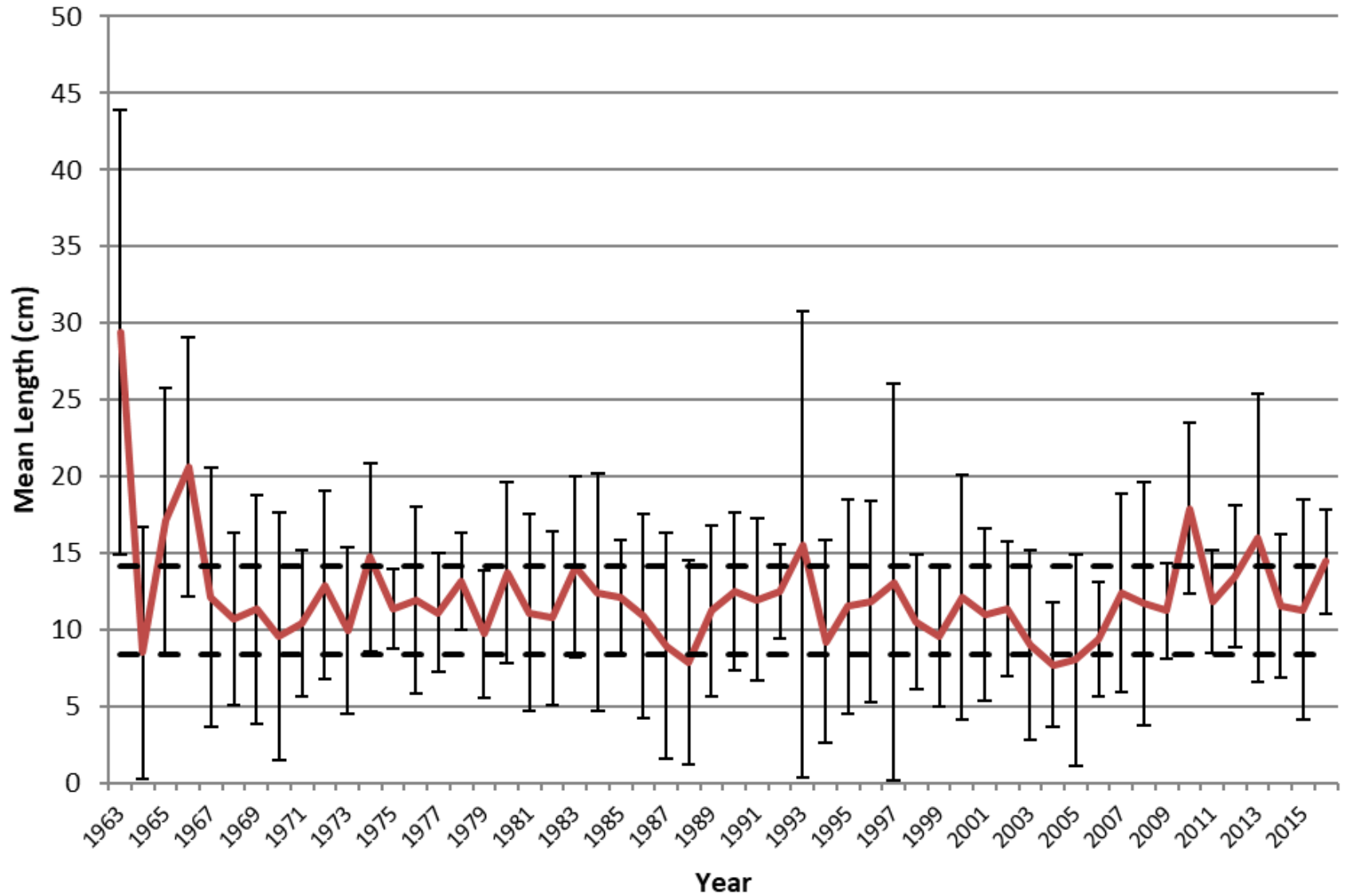
## Scup Age 0 Measures of Abundance



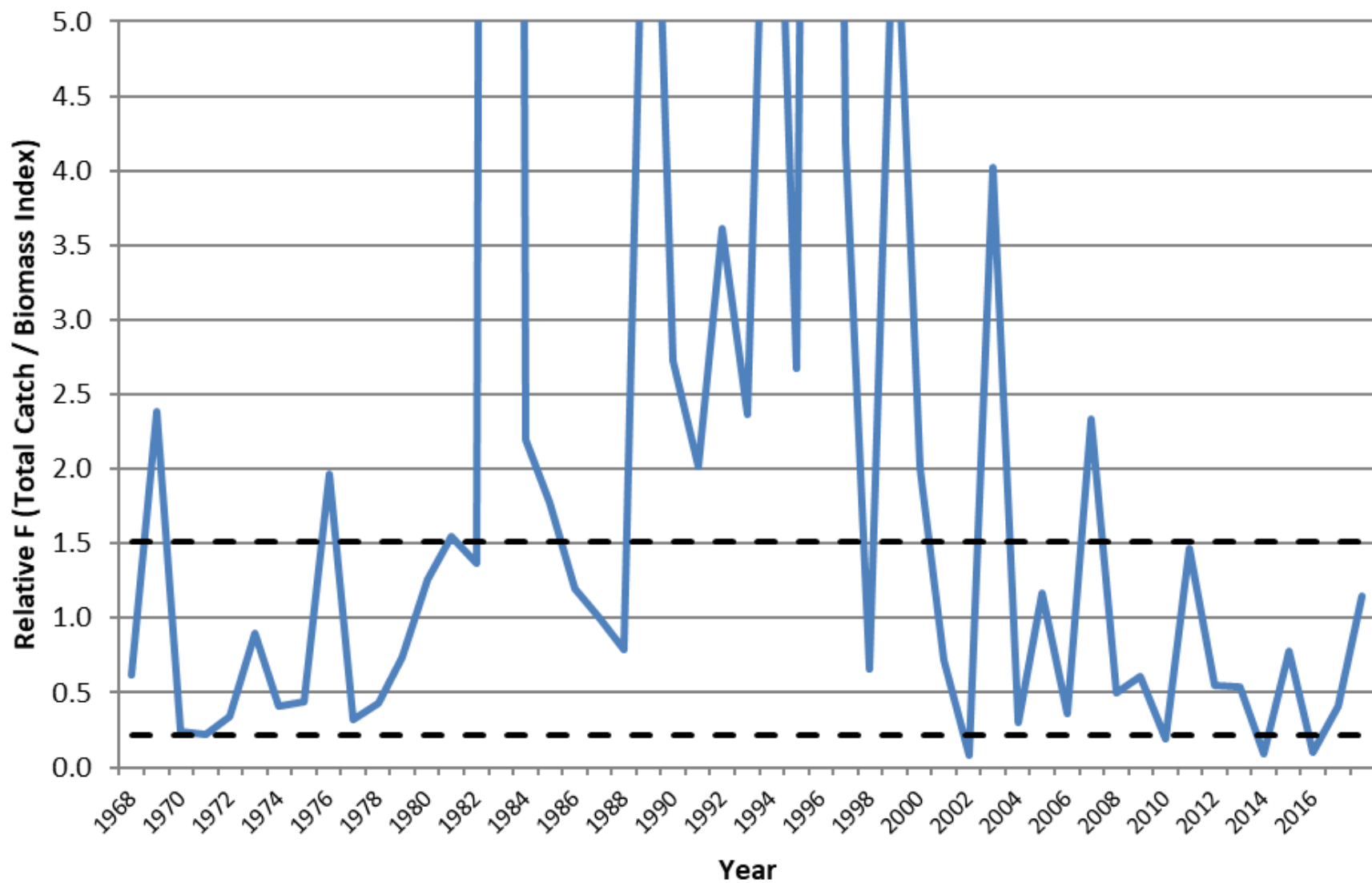
## Scup: Spring Mean Length (cm)



## Scup: Fall Mean Length (cm)



## Scup: Spring Relative F



## Scup: Fall Relative F

