



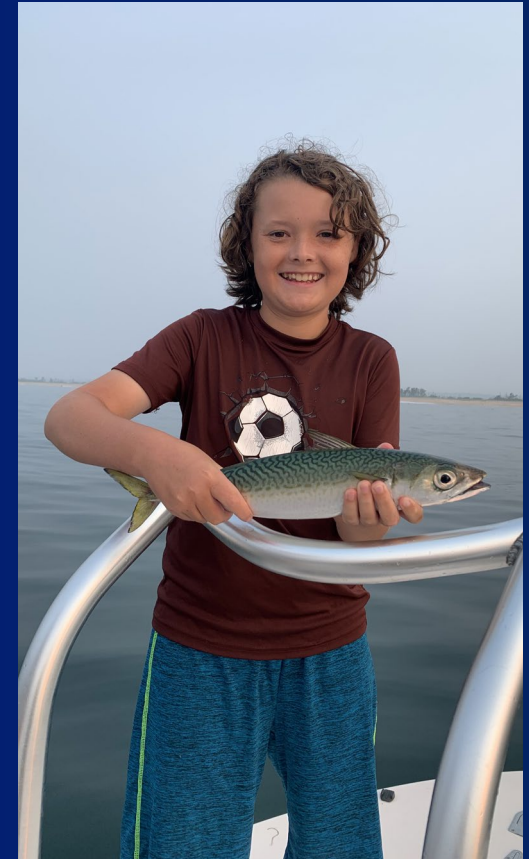
# Atlantic Chub Mackerel 2022 Specifications



SSC Meeting  
September 9, 2021

# Meeting Objective

- Review
  - Management history
  - Recent fishery information
  - AP Fishery Performance Report
- Consider if revisions are needed to 2022 ABC



Jason Didden

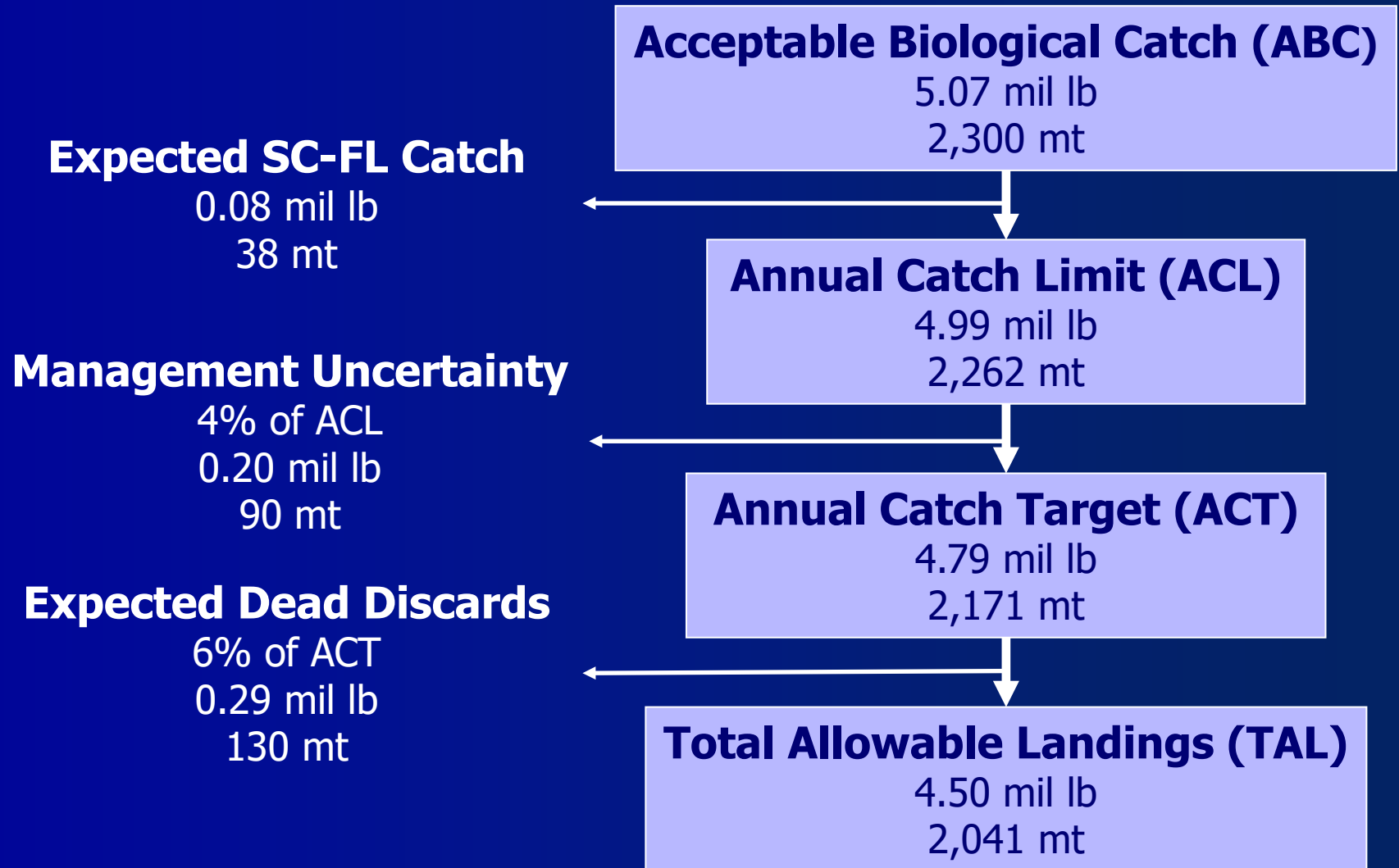
# Management

- First measures implemented through Unmanaged Forage Amendment (effective Sept 2017).
- Amendment 21 to MSB FMP.
  - Effective Sept 2020.
  - ABC, ACL, ACT, TAL.
  - Vessel (commercial and party/charter), and dealer permit and reporting requirements.
  - Commercial possession limits.
    - 40,000 lb after 90% of TAL projected to be landed.
    - 10,000 lb after 100% of TAL projected to be landed.
  - No recreational possession limit.
  - No commercial or recreational fish size, gear, or season restrictions.

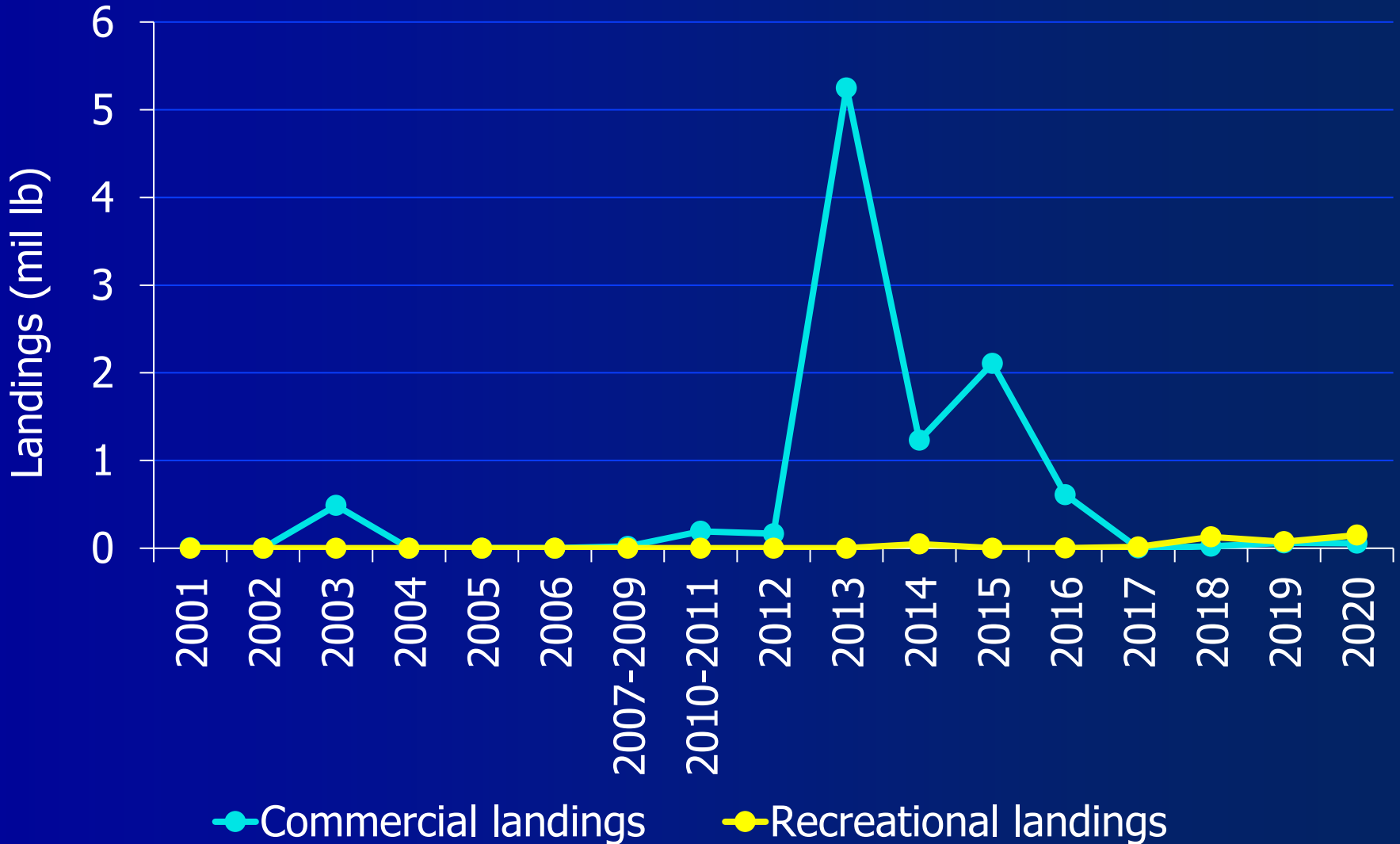
# Previous ABC Recommendation

- Insufficient info exists to assess status and trends in NW Atlantic.
- OFL cannot be specified.
- $ABC = 2,300 \text{ MT} = 5.07 \text{ mil lb.}$ 
  - Based on expert judgement.
  - Based loosely on historic high for landings and assumptions about discards.
  - Prevents fishery from reaching historic high, but allows higher catch than in all other years.
  - Unlikely to result in overfishing given general productivity of species worldwide combined with low fishery capacity in this region.
- ME-FL catch applies to ABC.
- Reviewed in 2020. No changes recommended.

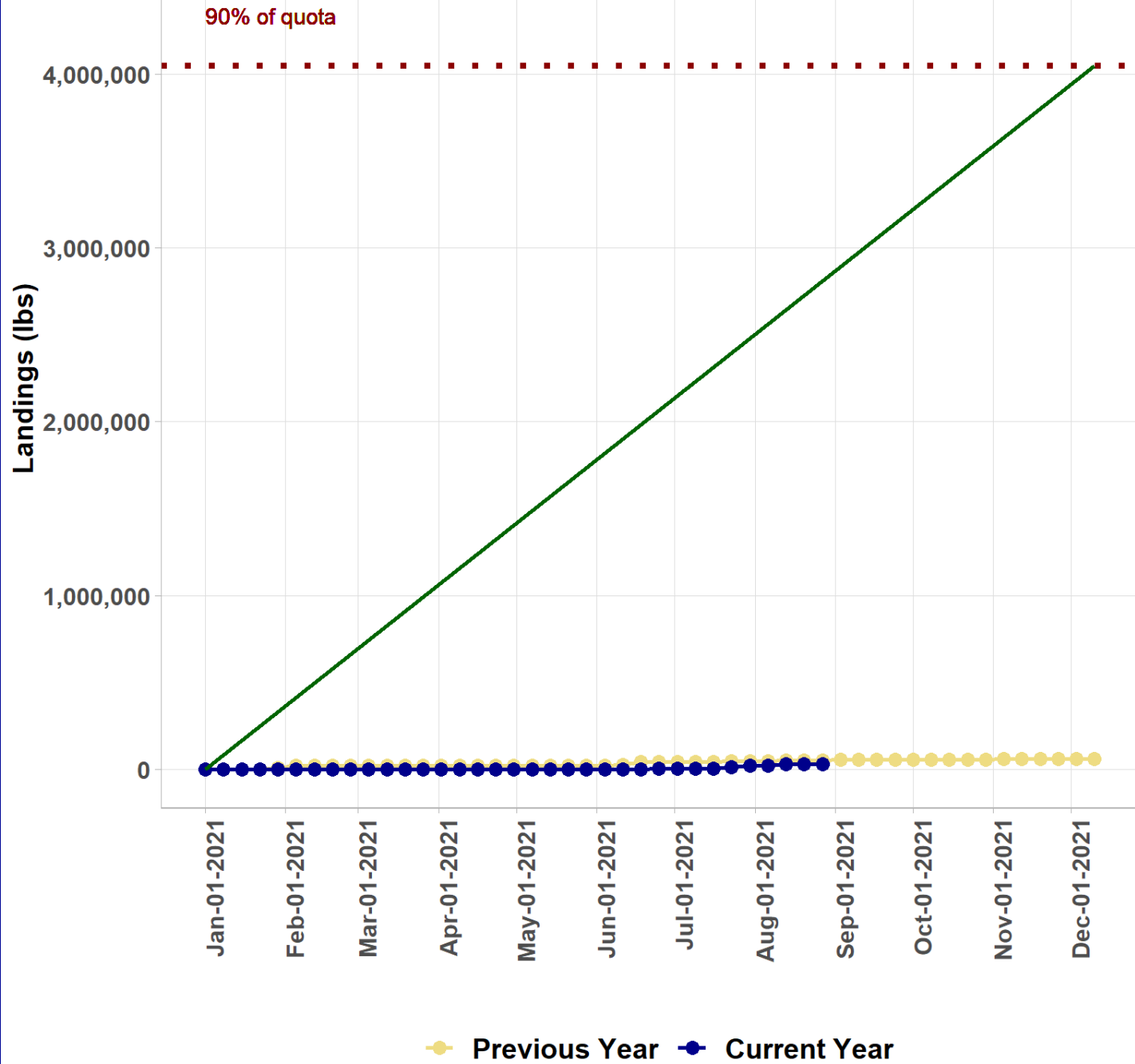
# 2020-2022 Specifications



# Com. & Rec. Landings



Quota: 4,499,486 lbs



# Commercial Fishery

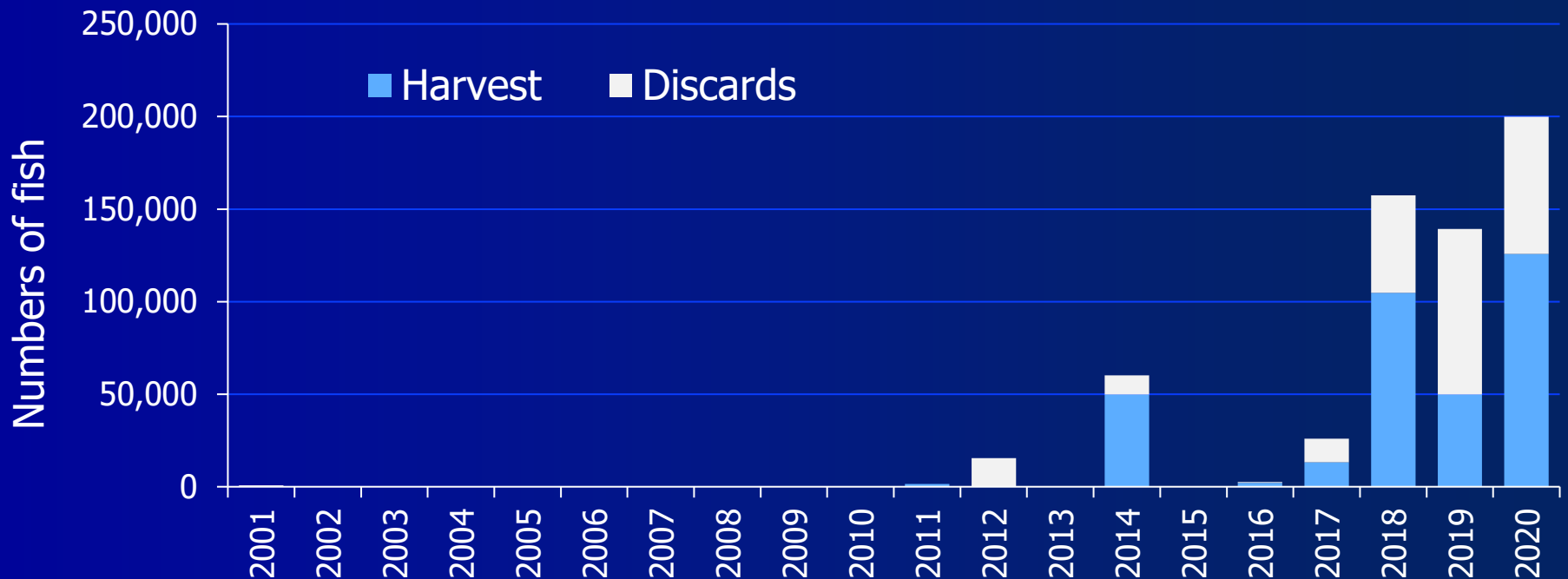
- Overlap with *Illex* squid fishery
  - Vessels, time of year, area
  - “Bailout” species/alternative fishery
- 95% of com. landings over past 20 years from fewer than 5 vessels, fewer than 3 dealers
- 91% landings from bottom trawl (fed VTRs)
- 97% landings from June-October
- \$0.51/lb on avg, 2001-2020 (adjusted to 2020 \$)





# Recreational Fishery

- On avg. 2016-2020:
  - 54% harvest from state waters, 46% federal.
  - Most harvest in NY (48%), RI (22%), NJ (14%), CT (10%).
  - 49% private/rental, 34% party/charter, 7% shore.
  - Most harvest July-Aug (65%), Sept-Oct (30%).



# AP Fishery Performance Report

- No changes recommended to any mgmt. measures in 2022.
- Additional uncertainty in 2020 MRIP data due to imputation.
- Relationship between chub mackerel and *Ilex* availability
  - Do the fisheries and diet trends suggest chub mackerel are not as prevalent when *Ilex* are abundant?
  - In abundant *Ilex* years, chub mackerel still present, but further inshore.



Robert Leaf

# AP Fishery Performance Report

## Research priorities

- 3 advisors: Dr. Golet's research rigorous and conclusive. No additional research needed on chub mackerel in HMS diets.
- 1 advisor: Dr. Golet's findings on the importance of *Illlex* and bullet and frigate mackerel warrant further exploration.
- Another advisor did not recommend the Council funding additional research on *Illlex* in the diet of HMS. Can be addressed in other ways.



# Discussion

- Should the previously-recommended 2022 ABC be revised?
  - 2,300 mt / 5.07 mil lb



**Backup slides**

# Sources of Uncertainty in ABC

## July 2018

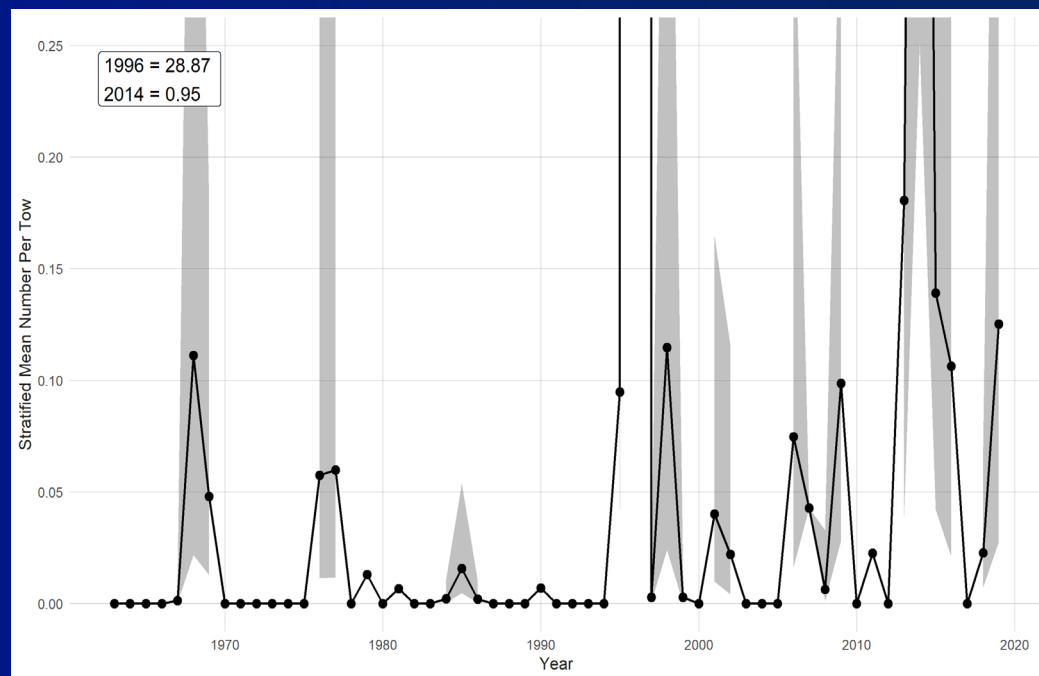
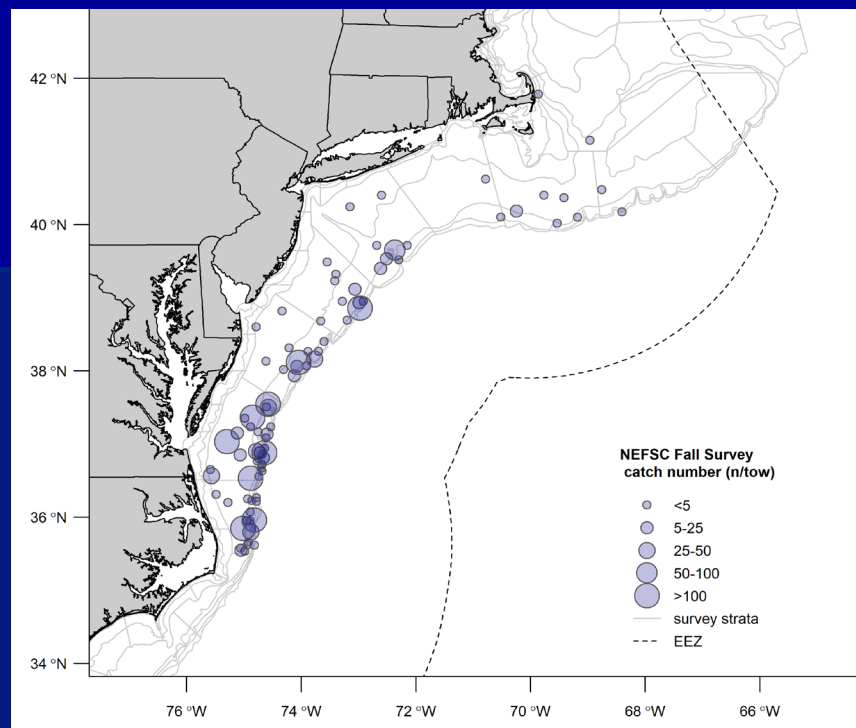
- Stock size and productivity cannot be determined. No information to determine biomass reference points; little information exists to determine F reference points.
- No information on the source of recruits; it is unknown whether chub mackerel are episodic in the Mid-Atlantic, whether this is a range expansion with localized spawning, or neither.
- No information on predation mortality or role of chub mackerel in predator diets.
- Very high uncertainty in rec. landings and discards. Observer coverage on fisheries likely to catch chub mackerel may be low (*Ill*ex fleet, Mid-Atlantic small mesh bottom trawl).

## September 2020 addition

- Cannot distinguish whether years with high catches were result of opportunistic fishing, increased availability, and/or presence of a strong year class in the area.

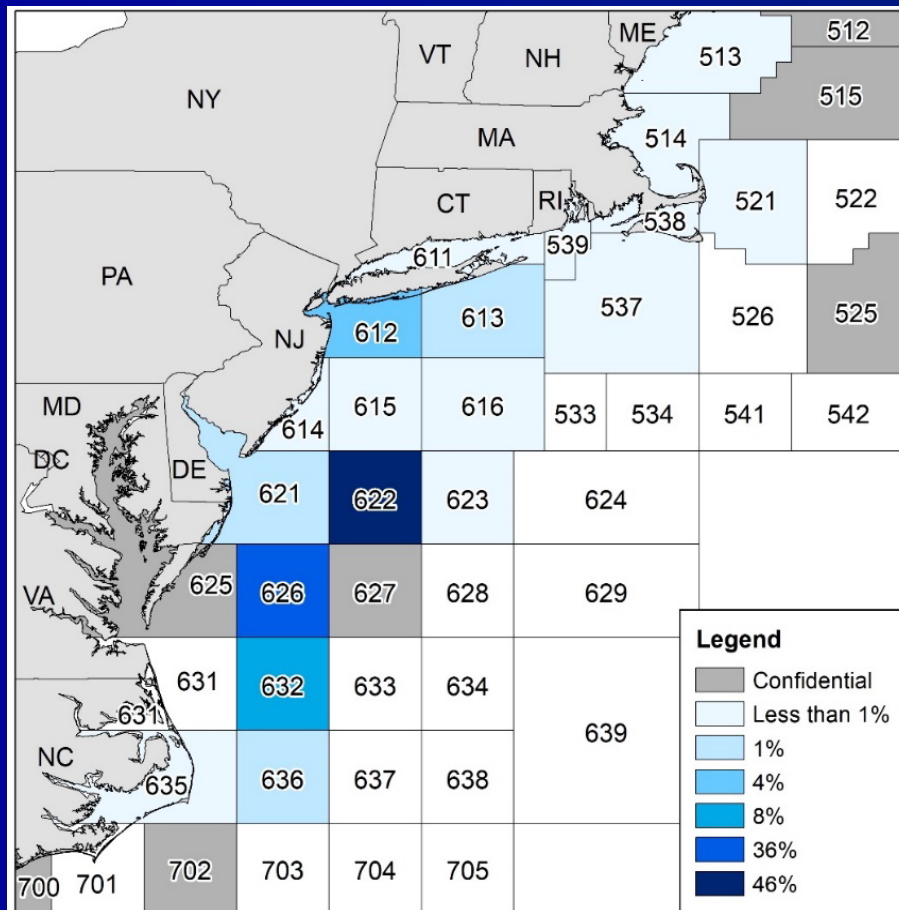
# NEFSC Trawl Survey

- 84 tows during fall survey caught chub mackerel, 1963-2019. No catches in spring survey.
- Stratified mean #/tow low with spike in 1996.
- Have become more prevalent since 2013.





# Commercial Fishery



- Nearly all landings on com VTRs, 2001-2020, from stat areas south of NY.
- Over 90% of landings from stat areas that overlap with shelf break.