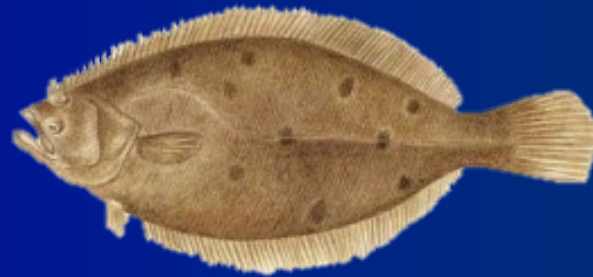




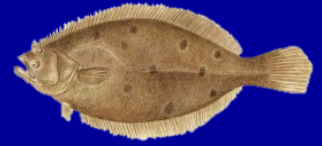
# Summer Flounder 2023 Specifications Review



SSC

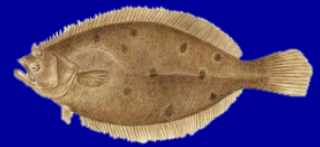
*July 26, 2022*

# Overview



- Stock status and data update
- Recent catch and landings
- Advisory Panel Fishery Performance Report
- Review 2023 ABC and consider if revisions needed
  - Staff recommend no changes

# Stock Status: 2021 Management Track Assessment



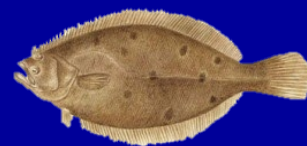
## SSB

- Not overfished in 2019
- 2019 SSB = 47,397 mt, 86% of  $SSB_{MSY}$  = 55,217 mt

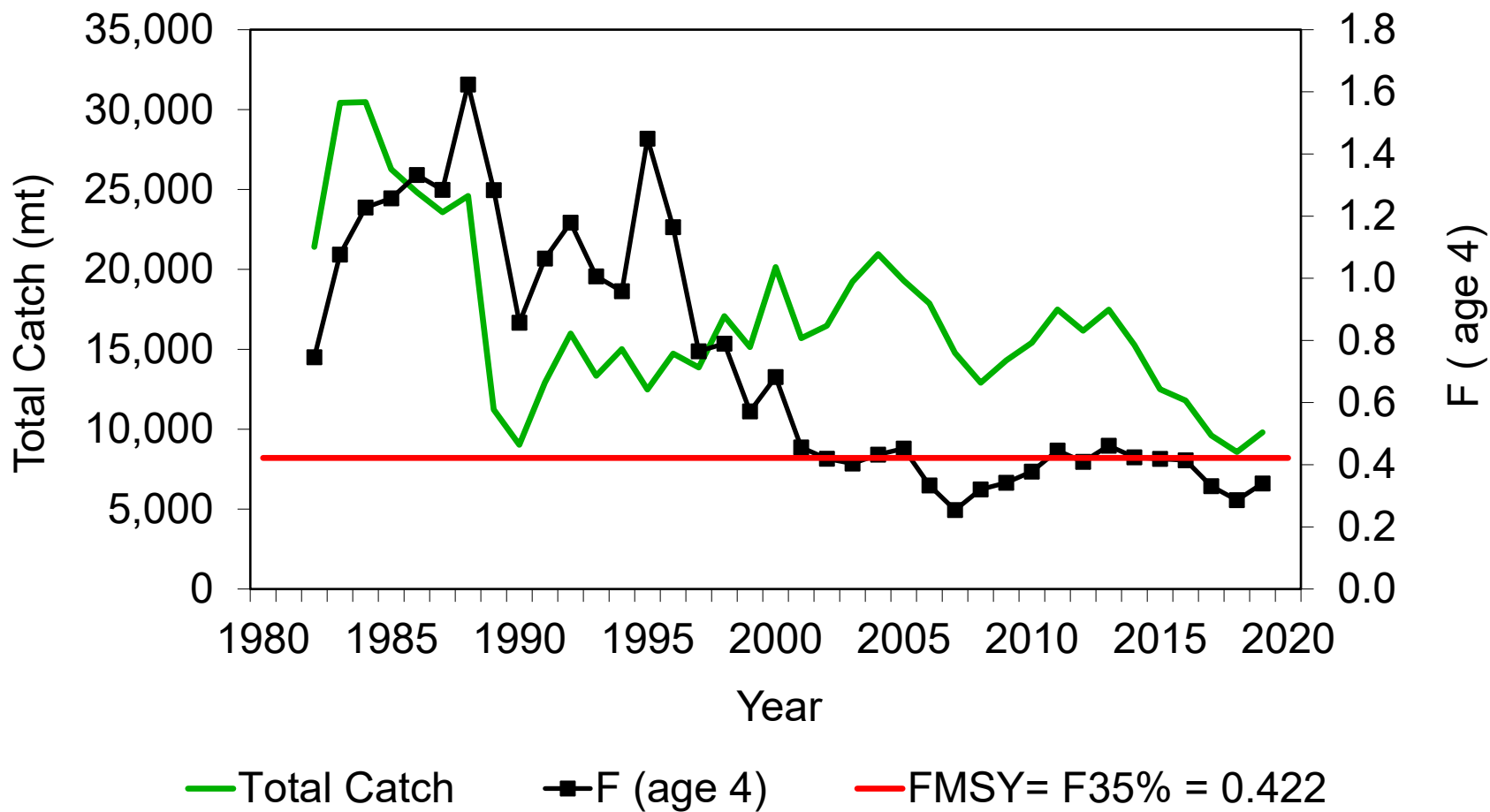
## F

- Overfishing not occurring in 2019
- 2019  $F = 0.340$ , 81% of  $F_{MSY}$  proxy = 0.422

# Fishing Mortality 2021 MTA



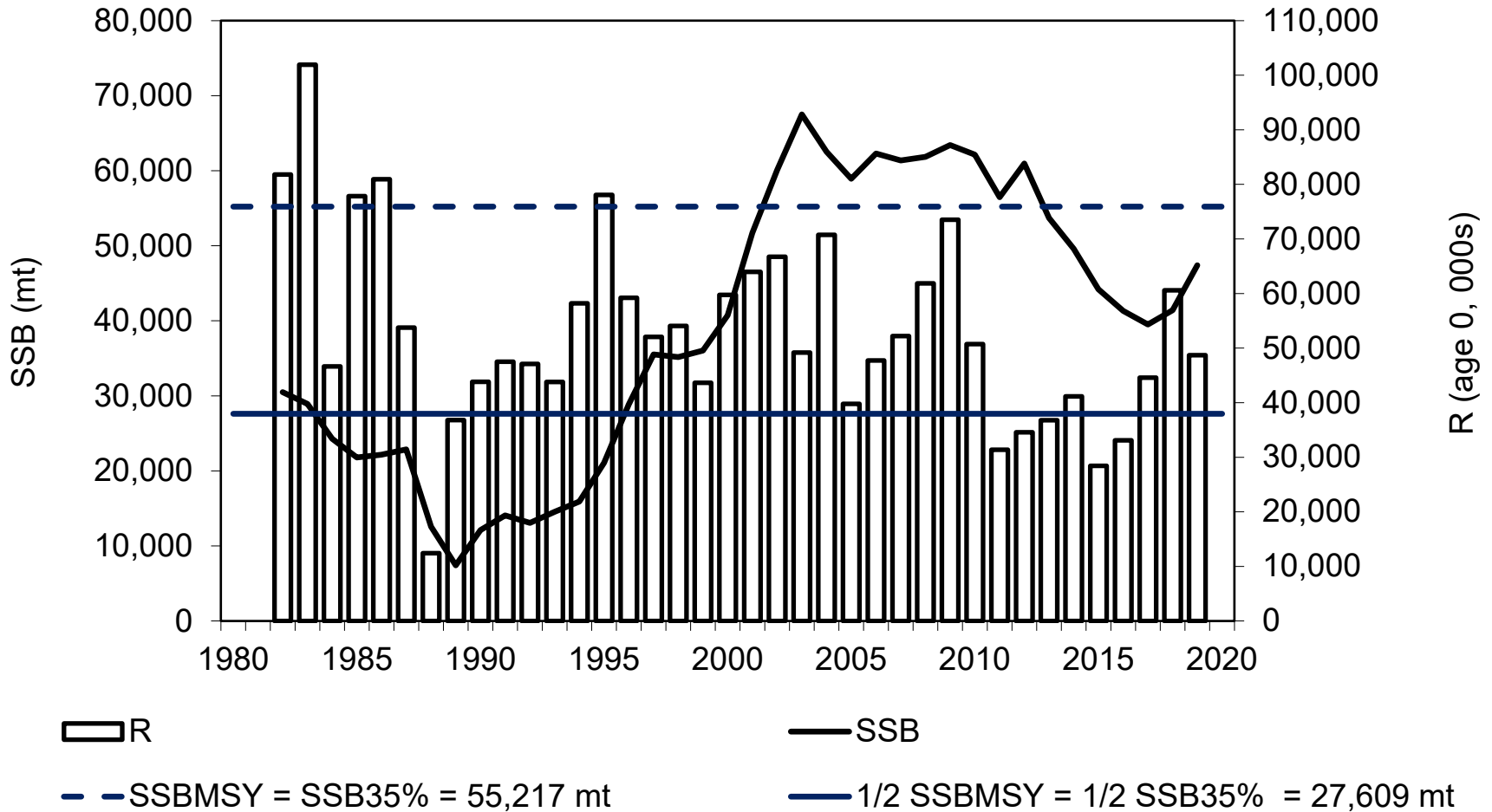
## Total Catch and Fishing Mortality (F)



# SSB and Recruitment 2021 MTA

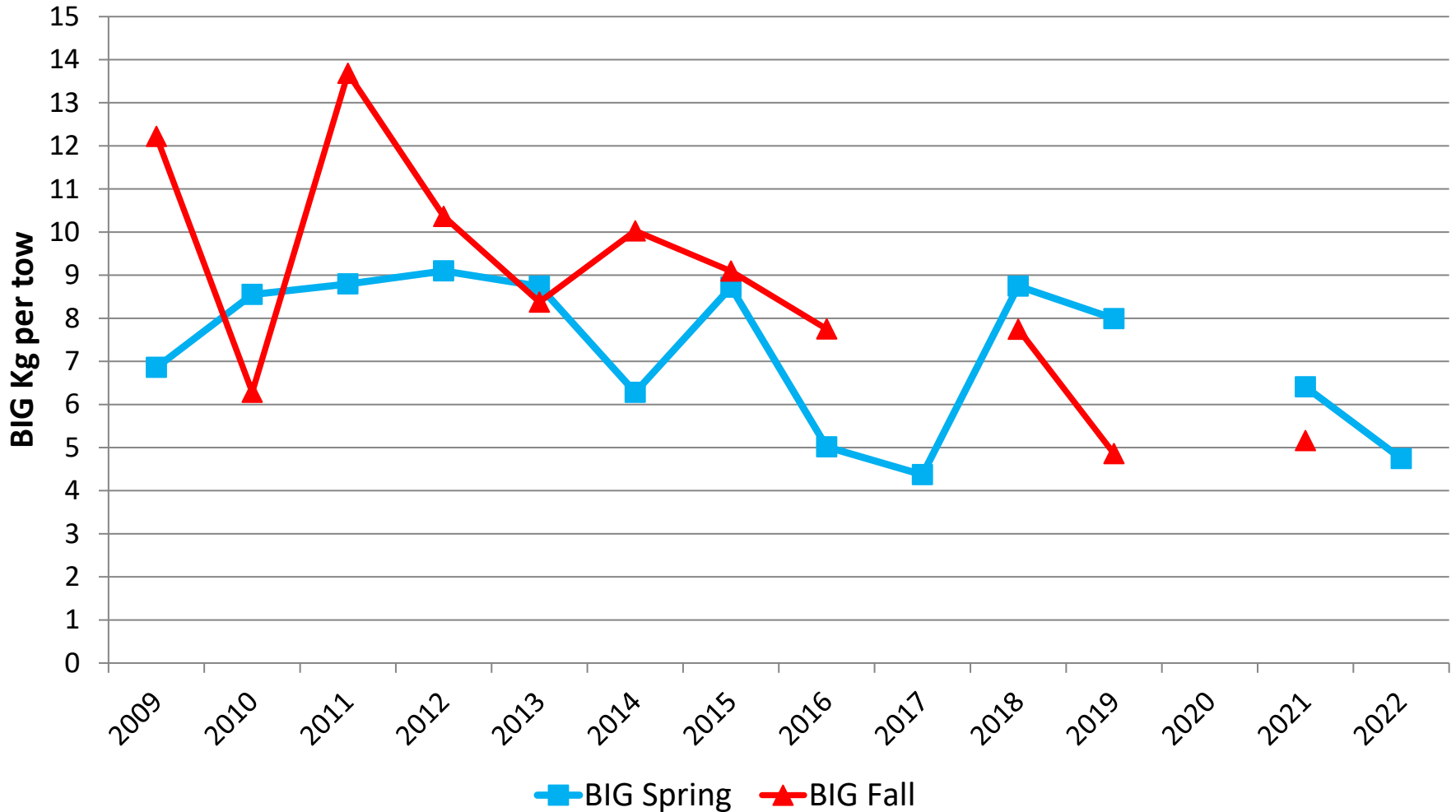


Spawning Stock Biomass (SSB) and Recruitment (R)



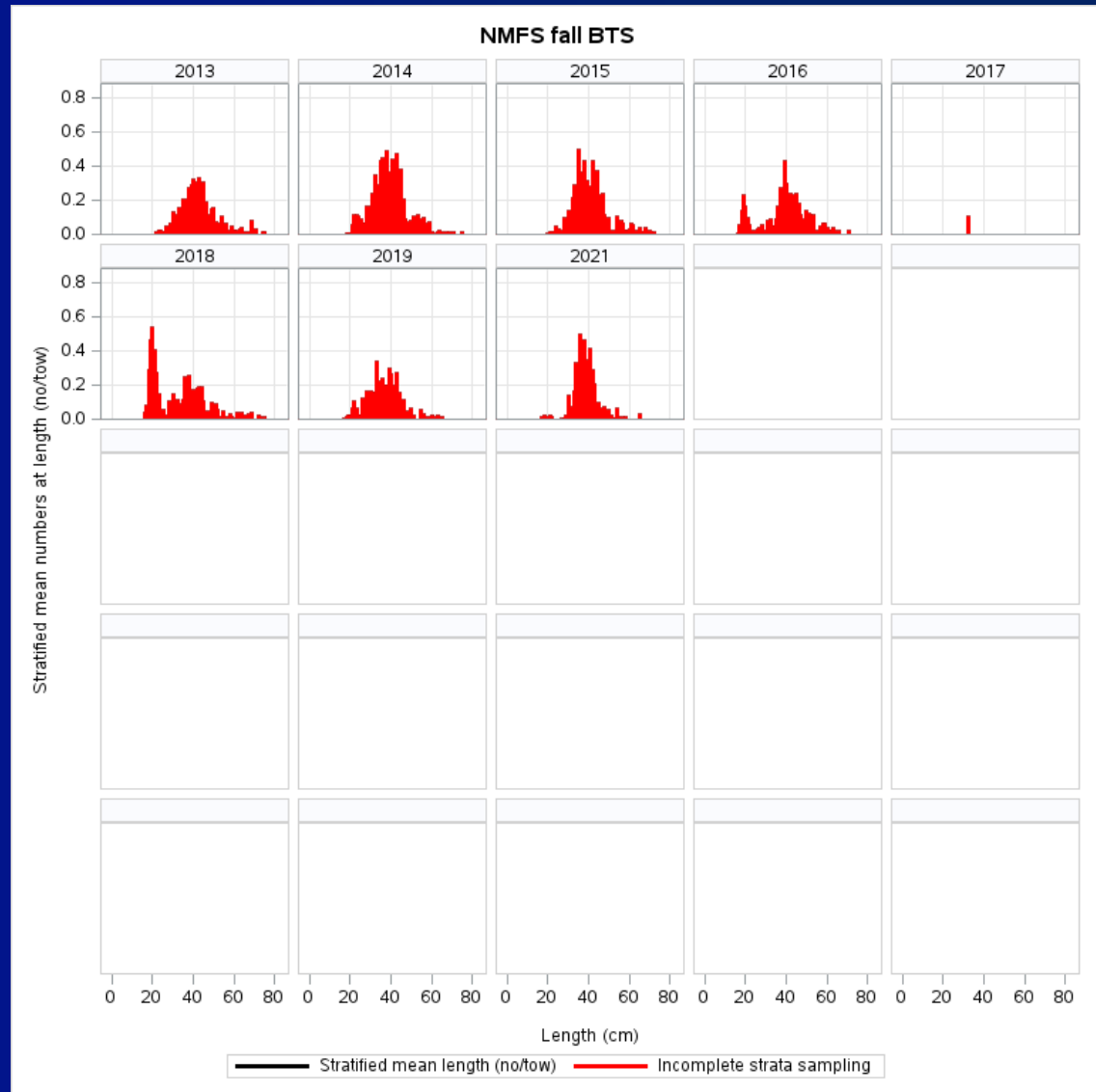
# 2022 Data Update

NEFSC Summer Flounder Biomass Indices: BIG 2009-2022



# 2022 Data Update

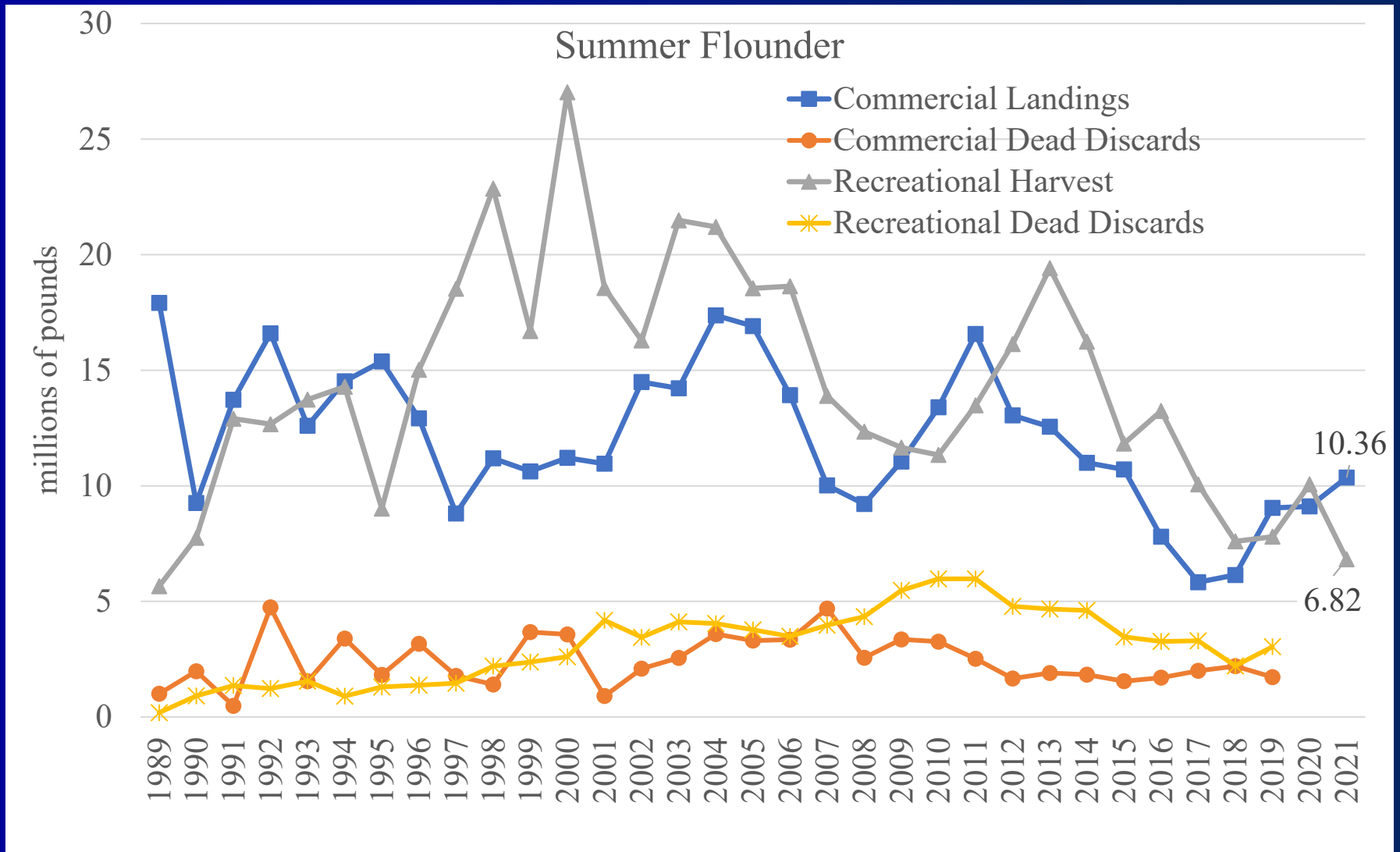
NEFSC fall survey length frequency distributions suggest above average year class in 2018 with average to below average recruitment since



# Fishery Landings & Discards 1989-2021\*

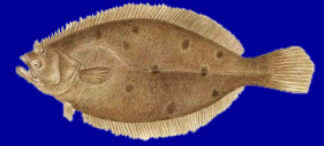


\*No dead disc. available for 2020 or 2021





# Recreational Fishery Performance



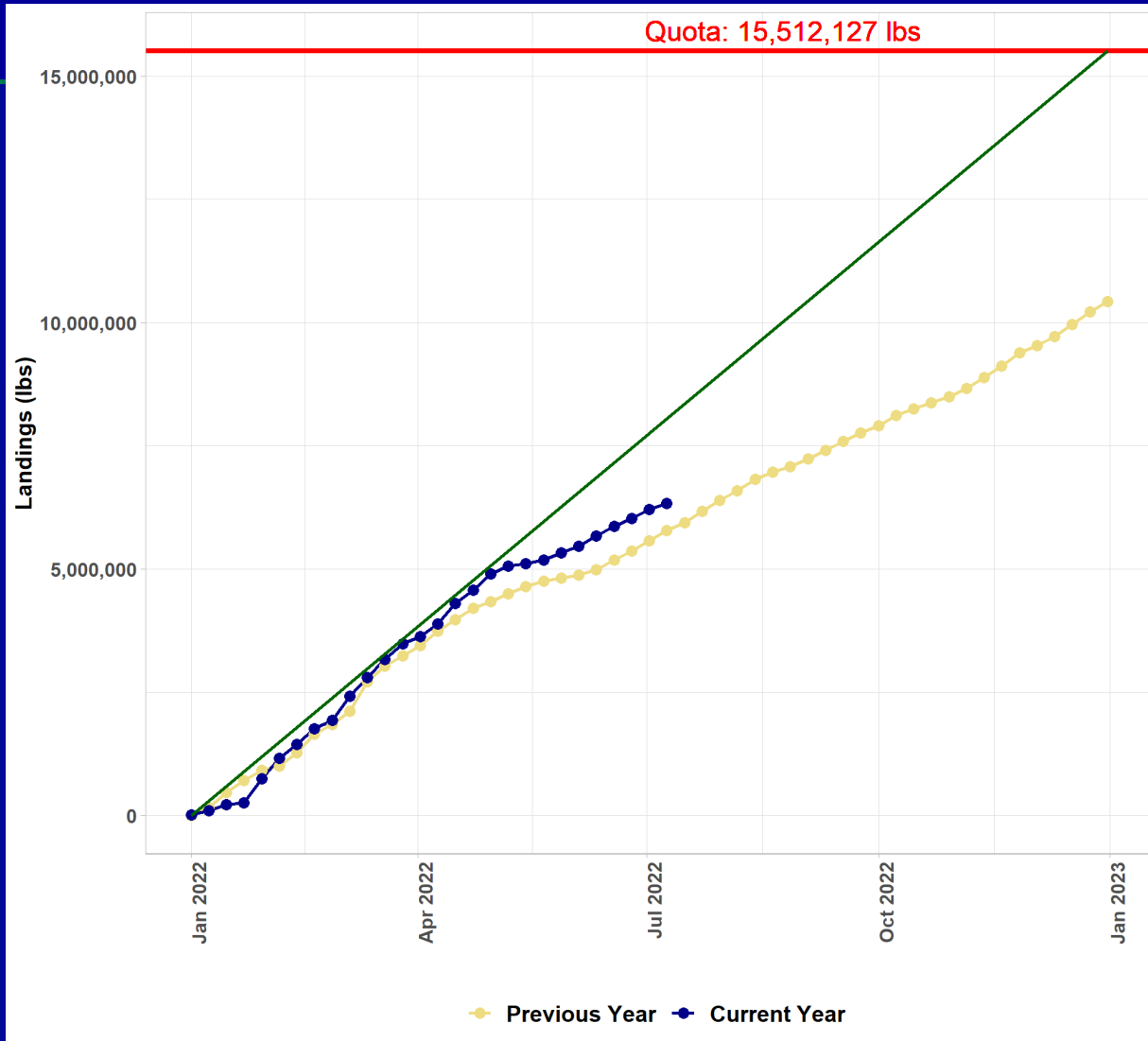
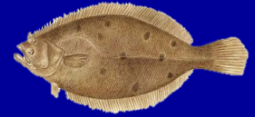
Year	Rec. land. old MRIP	Rec. land. new MRIP	RHL	RHL overage/ underage	Rec. dead catch old MRIP	Rec. dead catch new MRIP	ACL	ACL overage/ underage
2016	6.18	13.24	5.42	14%	7.66	16.51	6.84	12%
2017	3.19	10.09	3.77	-15%	4.13	13.39	4.72	-13%
2018	3.35	7.60	4.42	-24%	4.32	9.81	5.53	-22%
2019	NA	7.80	7.69	1%	NA	10.84	11.51	-6%
2020	NA	10.06	7.69	31%	NA	TBD	11.51	TBD
2021	NA	6.82	8.32	-18%	NA	TBD	12.48	TBD

# Commercial Fishery Performance



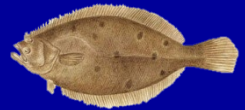
Year	Com. landings	Com. quota	Quota overage/ underage	Com. dead catch	ACL	ACL overage/ underage
2016	7.80	8.12	-4%	9.50	9.43	1%
2017	5.83	5.66	3%	7.83	6.57	19%
2018	6.14	6.63	-7%	8.34	7.70	8%
2019	9.05	10.98	-18%	10.79	13.53	-20%
2020	9.11	11.53	-21%	TBD	13.53	TBD
2021	10.36	12.49	-17%	TBD	18.48	TBD

# 2022 Commercial Landings



Commercial landings through July 20, 2022

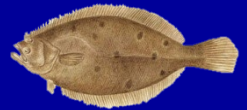
# AP Fishery Performance Report



## *Market and Economic Issues*

- January through April 2022, commercial fishermen reported unusually low prices (since recovered)
  - Possibly driven by lack of hotel/restaurant demand in NY
  - NY prices have now increased for the first time in years (\$5-6 range)
- Reiterated concerns about high fuel prices
  - Significantly eating into profits; not sustainable
  - Impacting willingness to steam to fish permits held in other states
  - May lead to lower landings in VA and NC and continued quota underages

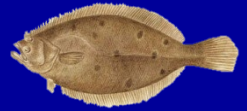
# AP Fishery Performance Report



## *Environmental and General Fishing Trends*

- Current assessment shows increasing biomass 2017-2019 but recreational harvest did not show same increasing trend.
  - Interested in next update and if landings will track estimated biomass
- 3 advisors suggested summer flounder not inshore/in bays yet (as of June 21), fishing slow, possibly due to water temps

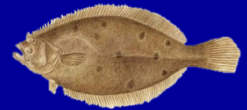
# AP Fishery Performance Report



## *General Management Issues*

- Decline in recruitment 2010-2019 due to regulations driving increased harvest of larger female fish
  - Need to recognize importance of BOFFFF

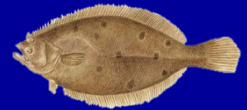
# AP Fishery Performance Report



## *Recreational Management Issues*

- 2022 recreational regulations in NJ include split slot limit (2 fish at 17-17.99 and 1 above 18")
  - One advisor supportive: hopes for positive impacts to female biomass and wider slot next year
  - Another hesitant: believes many more fish have been harvested this year already. People still want large fish; could negatively impact rec. fishery in long run

# AP Fishery Performance Report

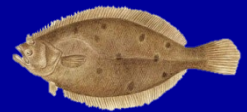


## *Research Recommendations*

- Low recruitment caused not by number of eggs produced, but predation on larvae in first year of life. Determine what is eating them and associated impacts to stock
- Extensive wind farms possible: need to know impact to summer flounder migrations and optimal habitat (cables and magnetic fields)



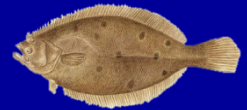
# AP Fishery Performance Report



## *Research Recommendations*

- Need to know more about migration patterns of summer flounder beyond general East-West
  - Interplay with stock distribution shift; may be more complicated than oceanic factors
- Recruitment sampling locations should be adjusted to better account for distribution changes
- Find better, less destructive survey methods vs. bottom trawls

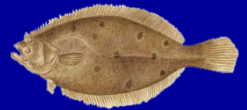
# AP Fishery Performance Report



## *Email Comments (Summer Flounder)*

- Flounder fishing is decent in Delaware; got off to a late start due to cold water sticking around into late spring
  - Size limit change in DE from 16.5 to 16 inches didn't make big difference; lack of shorts may indicate problems for future
- Concerned about impacts of climate change on habitat and migrations
- Recommend more research on breeding habits/location and potential harvest restrictions during spawning season

# AP Fishery Performance Report

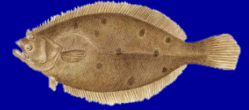


## *Email Comments (Summer Flounder)*

- Commercial net size incorrect; should be 5" for all 3 species
- Consider recreational total length limit with no discarding and cell phone reporting; would benefit low income shore fishermen

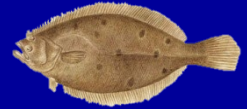
# Prior SSC Recommendations

## July 2021



- Recommended 2022-2023 constant & varying ABCs based on 2021 MTA projections
  - SSC-modified OFL probability distribution; OFL CV = 60%
  - Recruitment sampled from 9-yr below avg. recruitment (2011-2019)

# Prior SSC Recommendations & Staff Recommendation for 2023



- Council/Board adopted constant ABCs for 2022-2023
- Staff recommend no changes; no new information to suggest substantial change in status

Variable ABCs			
Year	OFL	ABC	P*
2022	36.28 mil lb 16,458 mt	33.96 mil lb 15,403 mt	0.452
2023	34.74 mil lb 15,759 mt	32.27 mil lb 14,639 mt	0.447
Constant ABCs*			
Year	OFL	ABC	P*
2022	36.28 mil lb 16,458 mt	<b>33.12 mil lb</b> <b>15,021 mt</b>	0.435
2023	34.98 mil lb 15,865 mt		0.461