



Striped Mullet Fishery Management Plan: Amendment 2

DEPARTMENT OF ENVIRONMENTAL QUALITY
Marine Fisheries

MFC February Business Meeting | Willow Patten, Jeffrey Dobbs | February 22, 2024



Presentation Outline

- Goal and Objectives
- Stock Assessment
- Overview of Issue/Info Papers
- AC Input and Public Comment
- DMF Recommendations
- Striped Mullet Amendment 2 Timeline
- Questions
- MFC Vote on Preferred Management Options

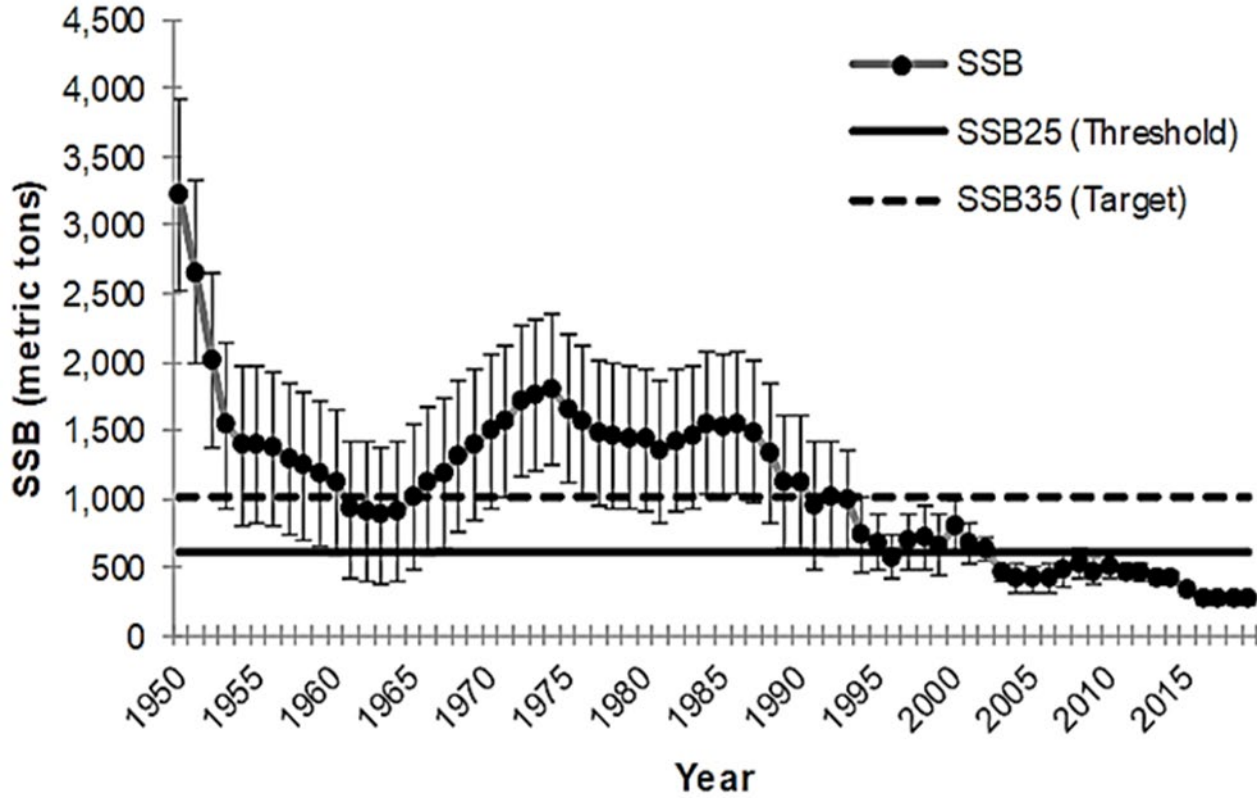
Goal and Objectives

The goal of Amendment 2 is to manage the striped mullet fishery to achieve a self-sustaining population that provides sustainable harvest using science-based decision-making processes. The following objectives will be used to achieve this goal.

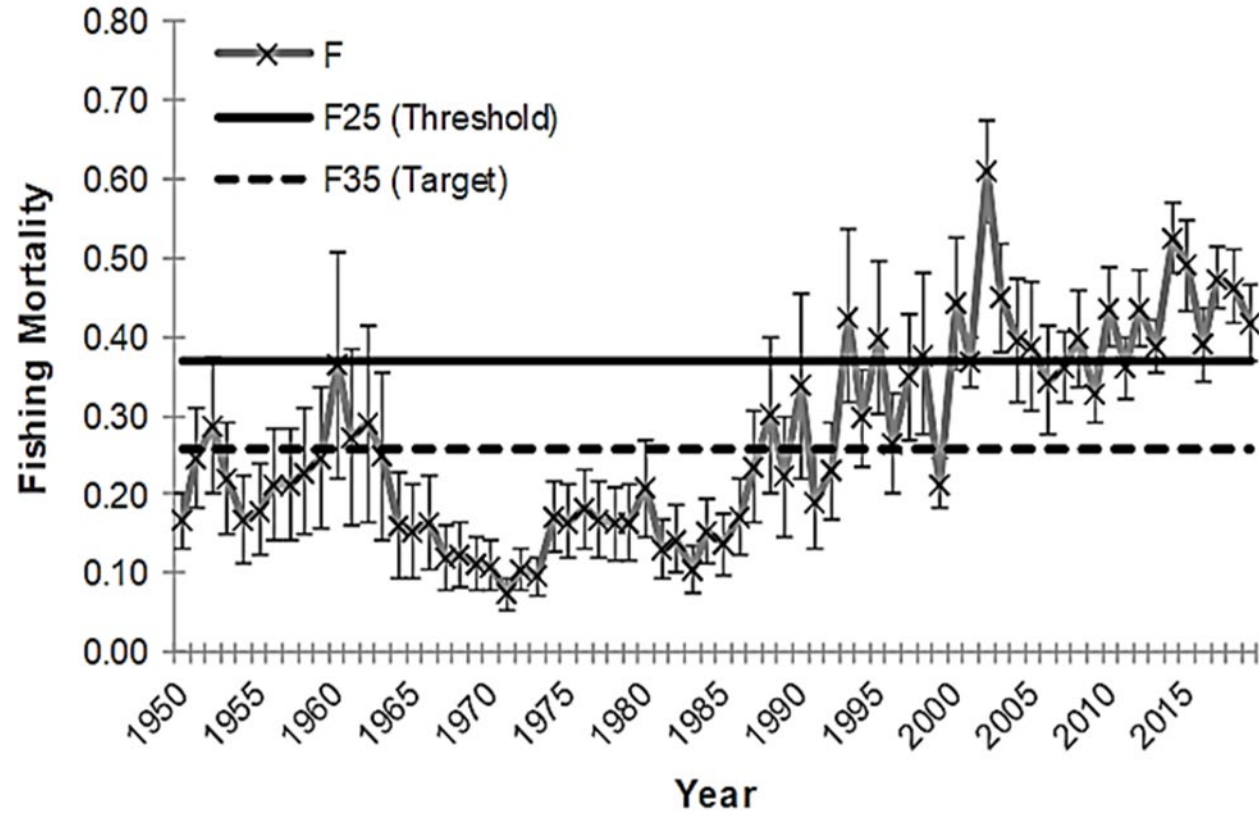
Objectives:

- Implement management strategies within North Carolina that sustain and/or restore the striped mullet spawning stock with adequate age structure abundance to maintain recruitment potential and prevent overfishing.
- Promote the restoration, enhancement, and protection of critical habitat and environmental quality in a manner consistent with the Coastal Habitat Protection Plan, to maintain or increase growth, survival, and reproduction of the striped mullet stock.
- Use biological, social, economic, fishery, habitat, and environmental data to effectively monitor and manage the fishery and its ecosystem impacts.
- Advance stewardship of the North Carolina striped mullet stock by promoting practices that minimize bycatch and discard mortality.

Stock Assessment



Spawning stock biomass (SSB) for the North Carolina striped mullet stock by year, including the target and threshold values used in the 2022 stock assessment.



Fishing Mortality (F) for the North Carolina striped mullet stock by year, including the target and threshold values used in the 2022 stock assessment.

Overview of Issue and Information Papers

Information Paper



Appendix 1:
Small Mesh Gill Net
Characterization in the North
Carolina Striped Mullet
Fishery

Issue Papers



Appendix 2:
Achieving Sustainable Harvest in
the North Carolina Striped Mullet
Fishery



Appendix 3:
Characterization and
Management of the North
Carolina Recreational Striped
Mullet Fishery

Appendix 2: Achieving Sustainable Harvest in the North Carolina Striped Mullet Fishery

Reduction	Recruitment Assumption	n Years from 2024	
		Reach Target	Reach Threshold
21.3%	Low	Never (0%)	7 (68%)
	Average	8 (78%)	2 (100%)
35.4%	Low	Never (0%)	3 (99%)
	Average	4 (100%)	2 (100%)

21.3% - 35.4% reduction is projected to bring spawning stock biomass to threshold, even with low recruitment

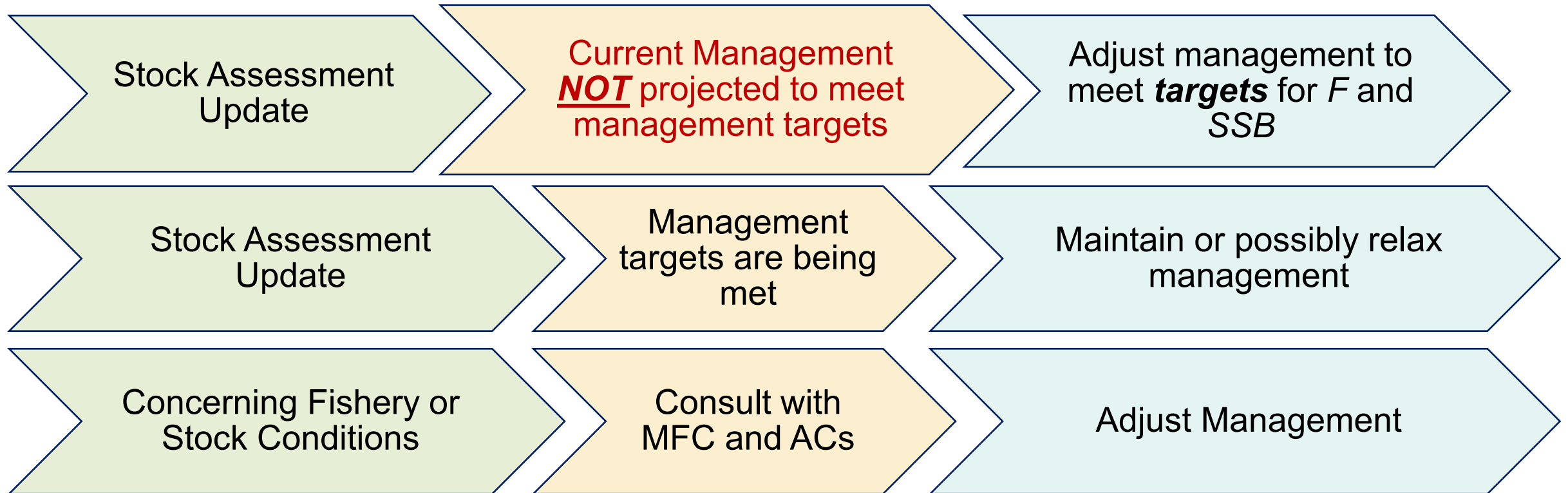
Appendix 2: Achieving Sustainable Harvest in the North Carolina Striped Mullet Fishery

Topics:

- Size Limits
- Season Closures
- Trip Limits
- Day of Week Closures
- Combinations of Measures
- Stop Net Fishery
- Seasonal Catch Limits
(Quotas)
- Area Closures
- Limited Entry
- Adaptive Management



Appendix 2: Adaptive Management Framework



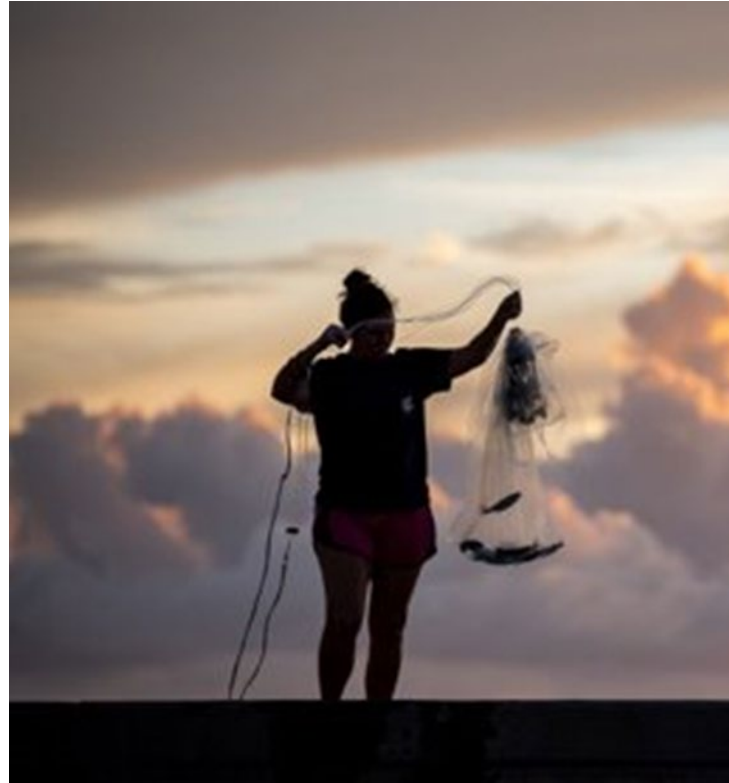
Adjustable Measures:

- Season Closures
- Day or Week Closures
- Trip Limits
- Gill Net Restrictions

Appendix 3: Characterization and Management of the North Carolina Recreational Mullet Fishery

Options maintain traditional uses of the fishery while supporting sustainability objectives

- Individual Bag Limits
- Size-based Bag Limits
- Seasonal Bag Limits
- Vessel Limits
- For-Hire Fishing Bag and Vessel Limits
- Adaptive Management



Current Recreational Bag Limit: 200 Fish

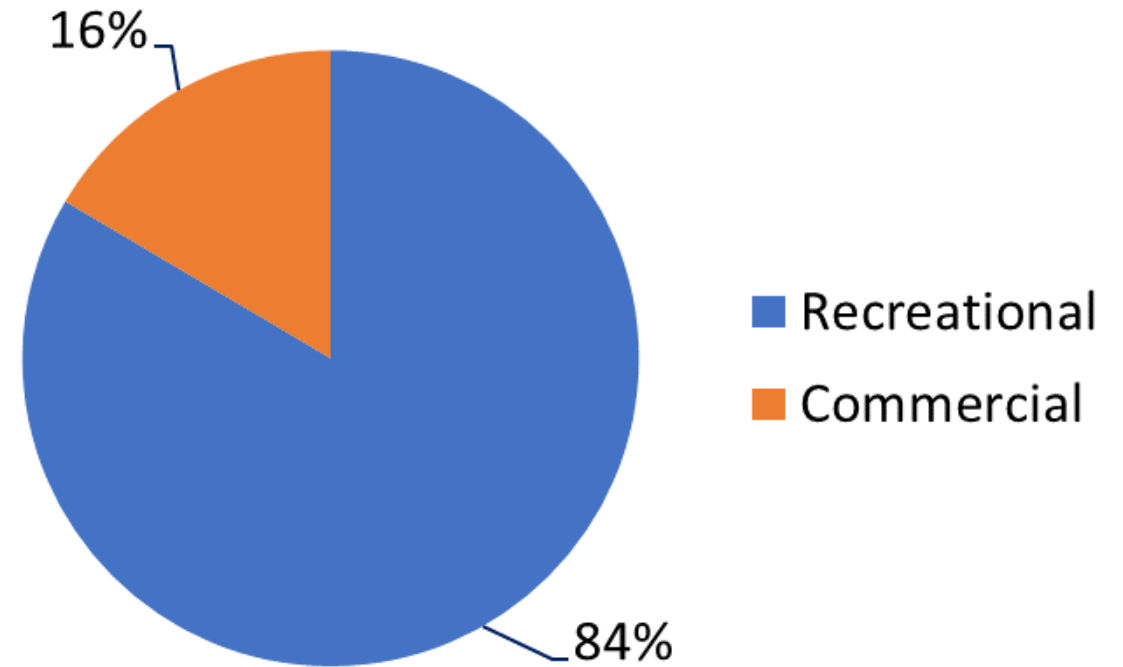
Online Public Comment

Respondents

- 97 responses
- 84% Recreational
- 16% Commercial

Overview of Responses

- Overfishing concern
- Enforcement
- Economic Impact
- Environmental Factors
- Regional Impacts



AC Recommendations and Public Comment

Northern AC:

- 5.a - Saturday-Sunday Closure
- 6.a - No Stop Net Fishery Catch Cap

Southern AC:

- 5.n – Jan 1-31 and Nov 16-Dec 31 50 lb Trip Limit, Sat-Sun 50 lb, Feb 1-Oct 15 500 lb
- 6.b – 30,000 lb Stop Net Fishery Catch Cap
- 1.b – 50 Fish Recreational Bag Limit
- 2.b – Exception for For Hire Vessel Operations to Possess Bag Limit for Number of Anglers they are Licensed to Carry, Including in Advance of a Trip
- 10 – Adaptive Management

Finfish AC:

- 5.a – Saturday-Sunday Closure with No Stop net Fishery Catch Cap
- 1.a – Status Quo for Recreational Fishery
- 10 – Adaptive Management

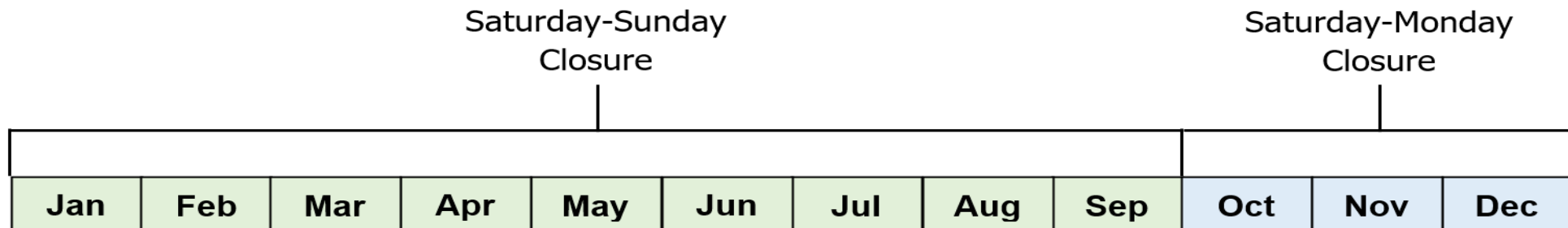
Amendment 2: DMF Commercial Fishery Recommendations

Commercial Fishery:

- 34.9% reduction
- Saturday-Sunday Closure (Jan. 1-Sept. 30) (Table 2.18, 5.n)
- Saturday-Monday Closure (Oct. 1-Dec. 31) (Table 2.18, 5.n)

- Manage stop net fishery with same management measures as rest of fishery (6.a)

- Adaptive Management Framework (10)



Amendment 2: DMF Recreational Fishery Recommendations

Recreational Fishery

- Recreational individual bag limit of 100 fish (Table 3.7, 1.c)
- Recreational vessel limit of 400 fish (Table 3.7, 1.c)
- Exception for For Hire Vessel Operations to possess a bag limit for the number of anglers fishing up to the 400-fish maximum (including in advance of a trip) (Table 3.7, 2.c)

Amendment 2 Timeline

• Division holds public scoping period

• Marine Fisheries Commission approve goal and objectives of FMP

• Division drafting FMP

• Division holds workshop to further develop draft FMP with plan advisory committee

• Division updating draft plan

• Marine Fisheries Commission vote to send draft FMP for public and advisory committee review

• Commission advisory committees meet to review draft FMP and receive public comment

Current Step

• **Marine Fisheries Commission select preferred management options**

Next Step

• Department of Environmental Quality Secretary and legislative review draft FMP

• Marine Fisheries Commission vote on final adoption of FMP

• Division and Marine Fisheries Commission implement management strategies

MFC Action Item

***Vote on preferred management options for
Amendment 2 to the Striped Mullet Fishery
Management Plan***

Questions?

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MFC Action Item

***Vote on preferred management measures for
Amendment 2 to the Striped Mullet Fishery
Management Plan***

DMF Recommendations

- **5.n:** Saturday-Sunday Closure (Jan. 1-Sept. 30), Saturday-Monday Closure (Oct. 1-Dec. 31)
- **6.a:** Manage stop net fishery with same management measures as rest of fishery
- **10:** Adaptive Management Framework
- **1.c:** Recreational individual bag limit of 100 fish and vessel limit of 400 fish
- **2.c:** Exception for For Hire Vessel Operations to possess a bag limit for the number of anglers fishing up to the 400-fish maximum (including in advance of a trip)

Table 2.11. Percent of harvest by day of week or combination of days, 2019 and 2017-2021.

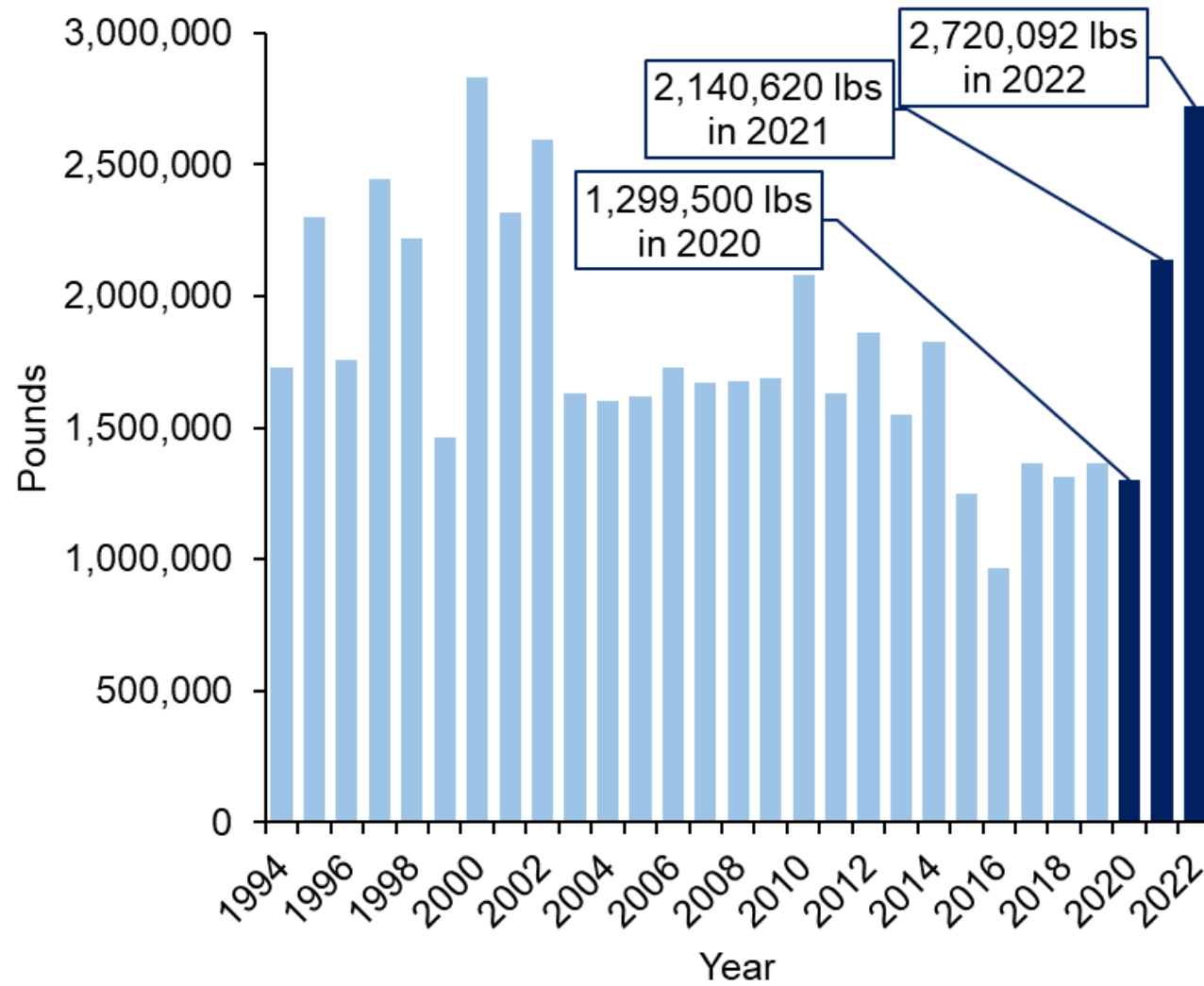
Day(s) of Week	2019 Landings	Landings (%)	2017-2021 Landings	Landings (%)
Sunday	162,709	11.9	780,061	10.4
Monday	209,707	15.4	1,201,290	16.1
Tuesday	247,756	18.2	1,273,991	17.0
Wednesday	190,343	14.0	1,148,997	15.4
Thursday	191,313	14.0	1,038,243	13.9
Friday	173,090	12.7	1,048,743	14.0
Saturday	187,294	13.7	984,763	13.2
Saturday-Sunday	350,003	25.7	1,764,823	23.6
Friday-Sunday	523,093	38.4	2,813,566	37.6
Saturday-Monday	559,710	41.1	2,966,113	39.7
Friday-Monday	732,800	53.8	4,014,856	53.7

DMF Recommendation

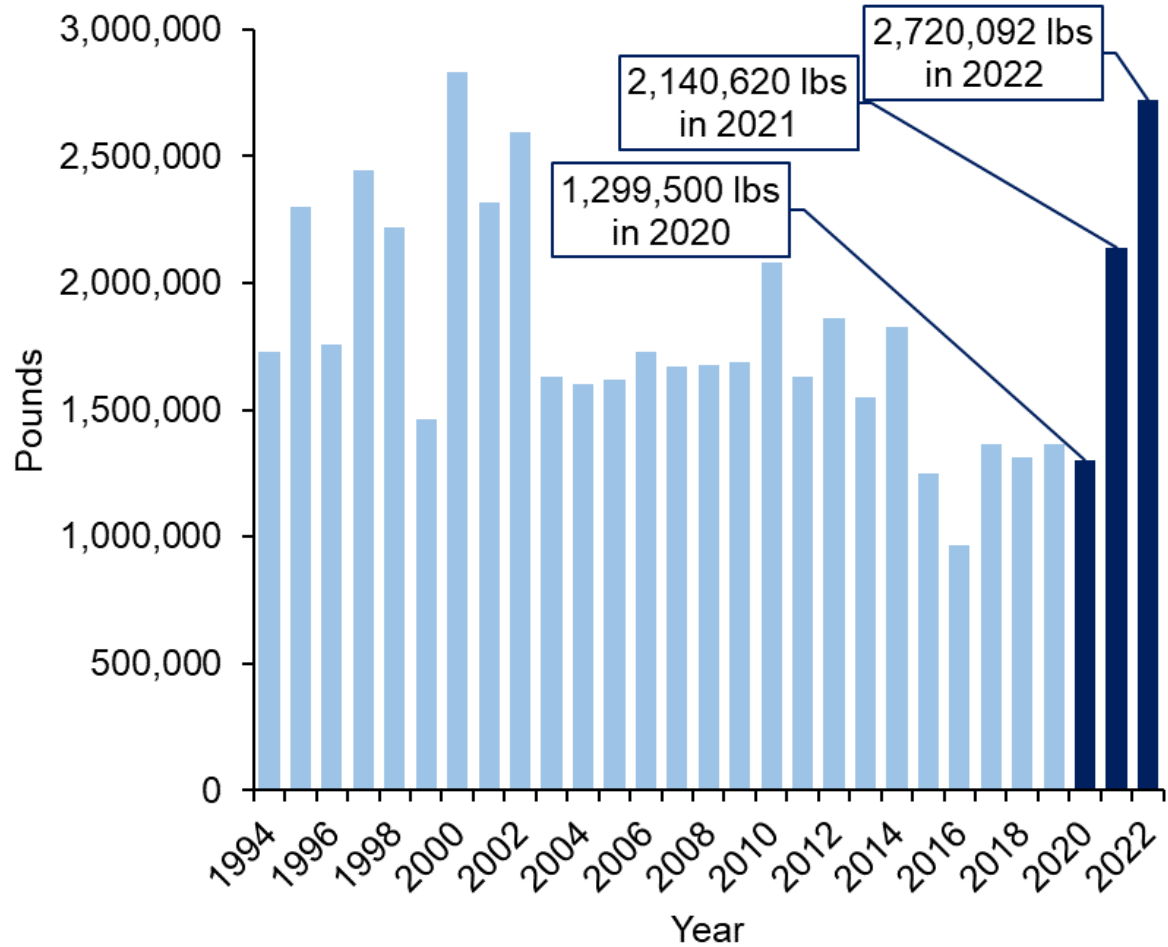
Option	Season Closure	Daily Trip Limit (lb.)	Day of Week Closure	% Reduction	% Reduction with 30k Stop Net Cap
5.a*	.	.	Sat-Sun	25.7	24.0
5.b	Dec 1-Dec 31	Jan-Sep 1,000; Sat-Sun 50 lb	.	28.1	26.4
5.c*	.	Jan-Sep 1,000	Sat-Sun	28.5	26.9
5.d	Dec 1-Dec 31	Jan-Oct 15 1,000; Sat-Sun 50 lb	.	28.9	27.3
5.e	Nov 12-Dec 31	1,000	.	29.1	27.5
5.f*	.	Jan-Oct 15 1,000 lb	Sat-Sun	29.3	27.7
5.g			Jan-Oct Sat-Sun; Nov-Dec Sat-Mon	30.0	28.5
5.h		Jan-Oct 15 and Dec 500; Sat-Sun 50 lb		31.3	29.8
5.i	Dec 1-Dec 31	Jan-Sep 1,000	Sat-Sun	31.8	30.2
5.j		Jan and Dec 100 lb; Feb-Sep 500 lb; Sat-Sun 50 lb		32.4	30.9
5.k	Dec 1-Dec 31	Jan-Oct 15 1,000	Sat-Sun	32.6	31.1
5.l	Nov 8-Dec 31	1,000	.	34.6	33.1
5.m		Jan and Dec 50 lb; Sat-Sun 50 lb; Feb-Oct 15 500 lb		34.6	33.2
5.n ⁺			Jan-Sept Sat-Sun; Oct-Dec Sat-Mon	34.9	33.4
5.o		Jan-Oct 15 and Dec 500	Sat-Sun	35.4	33.9
5.p		Jan1-31 and Nov16-Dec31 50 lb., Sat-Sun 50 lb, Feb1-Oct15 500lb		36.9	35.5
5.q		Jan and Dec 100 lb; Feb-Sep 500 lb	Sat-Sun	36.5	36.0
5.r	Nov 12-Dec 31	1,000	Sat	38.6	37.2

*Endorsed by Striped Mullet FMP AC

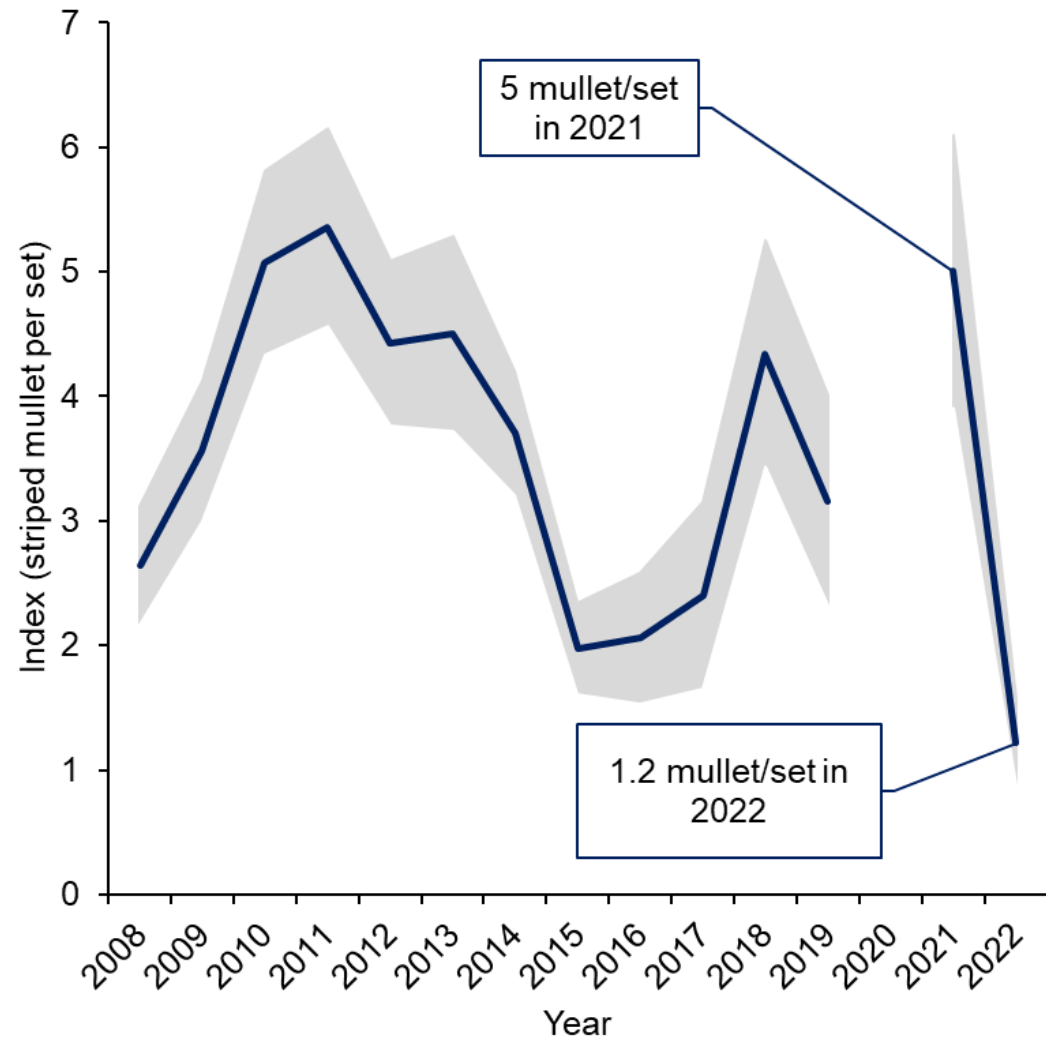
⁺DMF Recommendation



Commercial landings of mullet in NC for 1994 - 2022

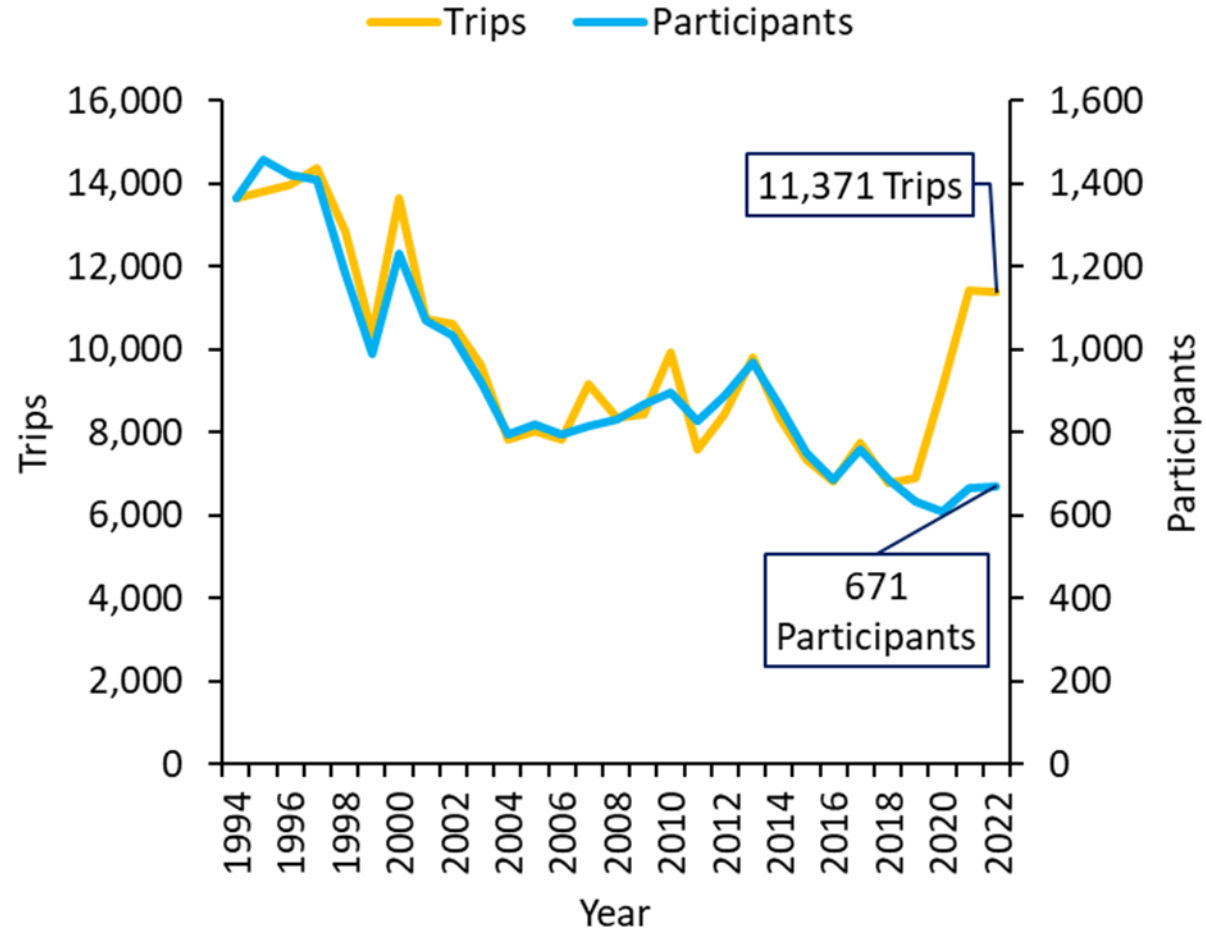


Commercial landings of mullet in NC for 1994 - 2022



Relative abundance index (fish per set) of striped mullet collected from Program 915 in the Pamlico Sound, Pamlico, Pungo, Neuse, and New Rivers from August-December 2008-2022. Gray shading shows ± 1 standard error. Sampling was not conducted in 2020.

Overview of the Commercial Fisheries



Number of trips and participants by year for the striped mullet commercial fishery in NC from 1994 to 2021