

Northeast Skate Complex Fishery Management Plan 2022 – 2023 Specifications



DRAFT Alternatives for September 2021

Skate Advisory Panel, Skate Committee, and Council meetings

Prepared by the
New England Fishery Management Council
In consultation with the
National Marine Fisheries Service



1.0 ALTERNATIVES UNDER CONSIDERATION

This action sets fishery specifications for Fishing Year (FY) 2022 and 2023 according to the formula (Figure 1) established through Amendment 3 (NEFMC 2009). Additional information is in the Draft Supplemental Information Report.

Acceptable Biological Catch (ABC). The control rule established through Amendment 3 sets the skate ABC at the median ratio of catch/biomass of each of the seven skate species multiplied by its three-year moving average stratified mean biomass (weight/tow) for skates, summed over the seven skate species in the management unit. This method is considered an interim proxy for an ABC until an OFL, and its uncertainty, can be quantified.

Annual Catch Limit (ACL). The skate ACL is equal to the ABC. The ACL is a limit that will trigger accountability measures if catch exceeds this amount.

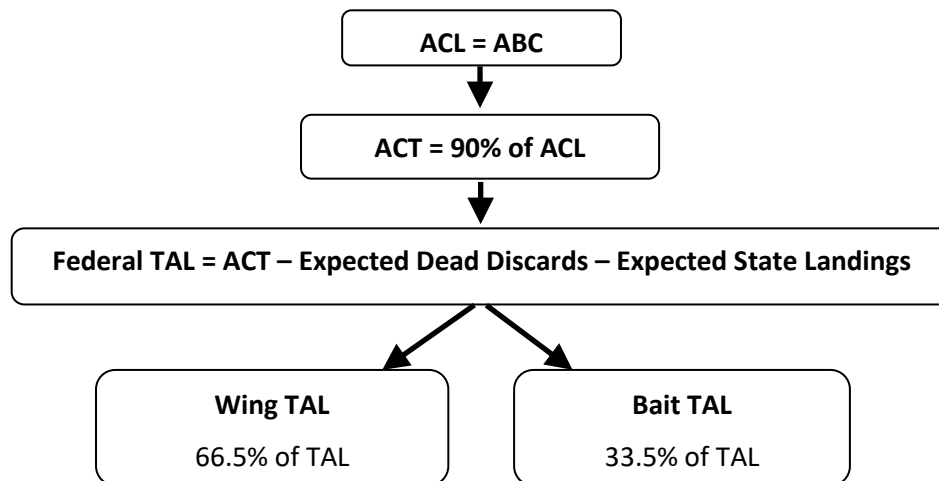
Annual Catch Target (ACT). The skate ACT is 90% of the ACL. There is a 10% uncertainty buffer between the ACL and ACT to account for scientific and management uncertainty (NEFMC 2018). This buffer is further explained in Section 1.2.4 (in Affected Environment document).

Total Allowable Landings (TAL). The skate TALs is set by subtracting expected dead discards and expected state landings from the ACT. These values are calculated as follows:

- Expected dead discards are calculated by applying the weighted discard mortality rate to the average discards from the most recent three years (using observer and ASM data).
- Expected state landings is equal to the average of the most recent three years of landings by vessels that have never had a federal fishing permit (permit # = 0) from data reported to the federal database. The landings from these vessels are the “state-permitted only vessel landings” in the year-end ACL accounting (Table 14 in Affected Environment document).

Wing and Bait TALs. The Wing and Bait TALs are set at 66.5% and 33.5% of the TAL, respectively.

Figure 1. Formula for skate specifications setting used since Amendment 3.



1.1.1 Alternative 1 - No Action

Under Alternative 1 (No Action), the specifications for FY 2022-2023 would be unchanged from the specifications for FY 2020-2021. The ABC/ACL would be set at 32,715 mt (whole weight) and the Federal TAL at 17,864 mt (Table 1). The wing TAL would be 11,879 mt and the bait TAL would be 5,984 mt. The specifications for Alternative 1 were derived from the median catch/biomass exploitation ratio for the NMFS bottom trawl time series up to 2016 and the three-year average stratified mean biomass for skates; using the 2017-2019 spring NEFSC survey data for little skate; the 2016 and 2018 fall survey data for rosette and clearnose skate; and 2016-2018 fall survey data for barndoor, thorny, smooth, and winter skate (modifications due to some missed fall survey stations in 2017 and 2018). Deductions for expected dead discards and state landings were 10,942 and 638 mt, respectively (37% and 2.2% of the ACT).

Table 1. Specification alternatives for FY 2022-2023.

		Alternative 1		Alternative 2	
		(mt)	(lb)	(mt)	(lb)
ABC = ACL	live weight	32,715	72,124,143	37,236	82,091,230
ACT (90% of ACL)	live weight	29,444	64,912,831	33,513	73,883,430
Expected Dead Discards (recent 3-year average)	live weight	10,942	24,122,952	11,856	26,137,975
Expected State Landings (recent 3-year average)	live weight	638	1,406,548	515	1,135,379
Federal TAL (ACT – dead discards – state landings)	live weight	17,864	39,383,332	21,142	46,610,076
Wing TAL (66.5% of TAL)	live weight	11,879	26,188,681	14,059	30,994,753
	wing weight	5,233	11,536,864	6,193	13,654,076
Bait TAL (33.5% of TAL)	live weight	5,984	13,192,446	7,082	15,613,119
<i>Note: All values in whole weight.</i>					

1.1.2 Alternative 2

Under Alternative 2, the specifications for FY 2022-2023 would be increased from the specifications for FY 2020-2021. The ABC/ACL would be set at 37,236 mt and the Federal TAL at 21,142 mt (Table 1). The wing TAL would be 14,059 mt and the bait TAL would be 7,082 mt. The specifications for Alternative 2 were derived from the median catch/biomass exploitation ratio for the NMFS bottom trawl time series up to 2016 and the three-year average stratified mean biomass for skates; using the 2017-2019 spring NEFSC survey data for little skate; the 2018-2019 fall survey data for rosette and clearnose skate; and 2017-2019 fall survey data for barndoor, thorny, smooth, and winter skate (modifications due to some missed fall survey stations in 2017 and 2018). Deductions for expected dead discards and state landings would be 11,856 and 515 mt, respectively (35% and 1.5% of the ACT).

2.0 REFERENCES

- NEFMC. (2009). Final Amendment 3 to the Fishery Management Plan for the Northeast Skate Complex and Final Environmental Impact Statement. Newburyport, MA: New England Fishery Management Council and National Marine Fisheries Service. 459 p.
<https://www.nefmc.org/library/amendment-3-3>.
- NEFMC. (2018). Framework Adjustment 6 to the Northeast Skate Complex Fishery Management Plan. Newburyport, MA: New England Fishery Management Council in cooperation with the National Marine Fisheries Service. 150 p. <https://www.nefmc.org/library/framework-6>.
- Stevenson D, Chiarella L, Stephan D, Reid RN, Wilhelm K, McCarthy J & Pentony M. (2004). Characterization of the Fishing Practices and Marine Benthic Ecosystems of the Northeast U.S. Shelf, and an Evaluation of the Potential Effects of Fishing on Essential Fish Habitat. Woods Hole, MA: U.S. Dept. of Commerce. NEFSC Technical Memo NMFS-NE-181. 179 p.
- Thunberg EM & Correia SJ. From Fishing Capacity to Diversity: Changing Fishery Management Priorities in the New England Groundfish Fishery. Proceedings of the 17th Biennial Conference of the International Institute of Fisheries Economics and Trade; 2014; Brisbane, Australia.