



New England Fishery Management Council

50 WATER STREET | NEWBURYPORT, MASSACHUSETTS 01950 | PHONE 978 465 0492 | FAX 978 465 3116
John F. Quinn, J.D., Ph.D., *Chairman* | Thomas A. Nies, *Executive Director*

DATE: September 13, 2019 (with correction completed October 23)
TO: Council
FROM: Skate Plan Development Team
SUBJECT: Northeast Skate Complex 2019 (for FY2018) Annual Monitoring Report

Background

The regulations implementing the management measures for the Northeast Skate Complex Fisheries state that the Skate PDT shall meet at least annually to review the status of the species in the skate complex. At a minimum, this review shall include annual updates to survey indices, fishery landings and discards; a re-evaluation of stock status based on the updated survey indices and the FMP's overfishing definitions; and a determination of whether any of the accountability measures (AMs) specified under §648.323 were triggered. The review shall also include an analysis of changes to other FMPs (e.g., Northeast Multispecies, Monkfish, Atlantic Scallops, etc.) that may impact skate stocks, and describe the anticipated impacts of those changes on the skate fishery.

1. Annual updates to survey indices and a re-evaluation of stock status based on the updated survey indices and the FMP's overfishing definitions

The information in Attachment 1 summarizes skate stock status through spring 2019 (Memo from NEFSC Re: 2018 NE Skate Stock Status Update, August 2019). One skate species remains overfished (thorny) and overfishing is not occurring for any of the seven skate species. Stock status for clearnose and rosette skate were updated based on the average of 2016 and 2018 because of missing fall 2017 survey indices. For thorny skate, the 3-year average (2016-2018) survey catch/tow (0.16 kg/tow) was less than the $B_{\text{threshold}}$ (2.06 kg/tow).

Survey Indices

Indices of relative abundance for all seven skate species are derived from the Northeast Fisheries Science Center bottom trawl survey. In recent years, the survey has experienced delays and incomplete coverage of the survey area. The NEFSC memo discusses the potential impacts of these issues on the survey indices. These issues, particularly the missing 2017 clearnose and rosette survey indices, impact the specifications setting process (because specifications are set using a 3-year moving average of the survey indices and catch estimates by species). The Council is taking final action on Framework Adjustment 8, which sets specifications for FYs 2020 & 2021, in September 2019.

Rebuilding Stocks

For **thorny skate**, the 3-year average (2016-2018) survey biomass (0.16 kg/tow) decreased slightly from the previous 3-year average and is only 8.4% of the B_{MSY} target (4.13 kg/tow). The rebuilding deadline for this stock is 2028 (25 years from implementation of the Skate FMP), yet 16 years into the rebuilding period, the survey biomass has continued to decline with no significant signs of rebuilding.

Thorny skate is a Species of Concern and was previously petitioned for listing under the Endangered Species Act (ESA) in 2011. NOAA Fisheries determined that a status review was not warranted at that time (76 FR 78891). However, a new ESA petition was submitted by Defenders of Wildlife and Animal Welfare Institute in May 2015. An extinction risk workshop was held in May 2016 and the final report is available (see https://www.greateratlantic.fisheries.noaa.gov/protected/pcp/soc/thorny_skate_status_review_feb_2017_final.pdf). The extinction risk workshop participants determined there were no distinct population segments of thorny skate. The workshop concluded that thorny skate was not currently in danger of extinction throughout all, or a significant portion, of its range. Despite this conclusion, thorny skate biomass remains low throughout the U.S. management area, according to the survey.

The skate regulations at §648.320(a)(3) require the Council to take management action when an overfished species declines in biomass to ensure that it will achieve target levels. The Council should consider management measures, beyond the continuing possession prohibition, that will foster rebuilding. The Council should include the population dynamics of this species on its list of research priorities, which may provide insights into the cause of its ongoing biomass declines.

2. Fishery landings and discards and determination of whether any of the accountability measures specified under §648.323 were triggered

Based upon the information detailed below, it appears that no ACL or TAL overages occurred in fishing year 2018, therefore, no reactive AMs were triggered. Management specifications as well as landings and discards for fishing year 2018 are shown in Table 1 below. The ABC/ACL specifications for the 2018 fishing year were set using the specification process established by Amendment 3 to the Skate FMP, which became effective in July 2010. To set the ACT, the ABC/ACL was reduced by 10% to account for scientific and management uncertainty. The TALs were calculated by reducing the ACT by the estimated discard rate in 2014-2016 and by the state landings estimate of 4.4% and allocating the remainder to allowable landings which were split 66.5/33.5% between the skate wing and bait fisheries, respectively. Table 2 provides estimates of FY2018 skate complex revenue and landings for the wing and bait fisheries. The 'personal use/no market/packing, only' is the sum of the 3 individual disposition codes for which some of the landings didn't have reported revenue so the average price per pound was not included in the table.

Based on observer data, the Northeast Fisheries Science Center has estimated total skate discards throughout the region to have been 22,999 mt for calendar year 2018. This estimate represents a decrease in total discards of 9.3% from the 2017 estimate of 25,365 mt. Dead discard estimates for fishing year 2018 were estimated to be 7,879 mt by the Greater Atlantic Regional Fisheries Office. Using fishing year discards and landings, estimated total skate catch for fishing year 2018 was 24,128 mt (85.6% of the ACT, 77% of the ACL). Therefore, it appears that the ACL was not exceeded. Total fishing year 2018 skate wing landings were 7,837 mt (74.6% of the Wing TAL), and bait landings were 3,356 mt (63.5% of the Bait TAL). Therefore, the fishery-level TAL was not exceeded. AMs are only triggered when the individual TALs are exceeded by more than 5%. As a result, no reactive AMs should be triggered as a result of catch levels for this fishing year.

Table 1 - FY 2018 Catch and Landings of Skates Compared to Management Specifications

Management Specification	Specification Amount	Catch/Landings (mt)	Percent Landed or Caught
ABC/ACL	31,327	24,128	77.0%
ACT (75% of ABC)	28,194	24,128	85.6%
Assumed Discards + State Landings	12,406	8,455	NA
TAL Bait	5,289	3,356	63.5%
TAL Wings	10,499	7,837	74.6%

Table 2 - FY2018 Skate complex price and landings by disposition

Disposition	Live weight (pounds)	Revenue	Average price per lb
Wing	21,159,383	\$5,903,092	\$ 0.28
Bait	10,625,319	\$1,543,287	\$ 0.15
Unknown	180,693	\$102,370	\$ 0.57
Personal Use/No market/packing, only	5,644	\$937	-

3. Analysis of changes to other FMPs (i.e., Northeast Multispecies, Monkfish, Atlantic Scallops, Habitat) that may impact skate stocks, and description of the anticipated impacts of those changes on the skate fishery

Northeast Multispecies FMP

Amendment 16 to the NE multispecies FMP, which took effect on May 1, 2010, greatly expanded the sector management program and set groundfish specifications for the 2010 and 2011 fishing years. It is important to note that overall effort in the NE multispecies fishery has decreased in recent years (<https://www.greateratlantic.fisheries.noaa.gov/aps/monitoring/nemultispecies.html>). This is evident by the decrease in number of active vessels and the number of groundfish trips that have decreased between FY2011 and FY2015.

FW57 became effective May 1, 2018. FW57 set fishing year 2018 shared U.S./Canada quotas for Georges Bank (GB) yellowtail flounder and eastern GB cod and haddock, set 2018-2020 catch limits for 20 groundfish stocks, revised the common pool trimester total allowable catch (TAC) allocations for several stocks, revised AMs for Atlantic halibut for vessels issued any Federal permit, revised the AMs for southern windowpane flounder for non-groundfish trawl vessels, revised the trigger for the scallop fishery’s AM for southern New England/Mid-Atlantic yellowtail flounder, and granted the Regional Administrator the authority to adjust recreational measures for GB cod. The cumulative impacts assessment concludes that “...the combined impacts of past federal fishery management actions have decreased fishing effort and improved habitat protection for non-target species. Current management measures, including those implemented through Amendment 16 to the FMP, are expected to continue to control effort, and decrease bycatch and discards. The action proposed by FW57 is expected to continue this trend. The primary mechanism is through the reduced ABCs/ACLs (reduced from recent years). Many of the ABCs/ACLs will increase (GB cod, GOM cod, GOM haddock, GB yellowtail flounder, CC/GOM yellowtail flounder, American plaice, witch flounder, GB winter flounder, redfish, pollock, Atlantic halibut (Section 7.1.1.1.2), and Atlantic wolfish) which may increase impacts on non-target species if these result in an increase in groundfish fishing effort. However, any increase in fishing effort may be partially countered by the fact that

several stocks are predicted to be constraining stocks (GOM cod, CC/GOM yellowtail flounder, SNE/MA yellowtail flounder, SNE/MA winter flounder, and American plaice). The modifications in management measures are expected to affect non-target species depending on fishing behavior. The past and present impacts, combined with the Preferred Alternative and future actions which are expected to continue rebuilding and strive to maintain sustainable stocks, should yield positive non-significant impacts to non-target species.”

FW58 became effective July 18, 2019. FW58 set fishing year 2019 shared U.S./Canada quotas for GB yellowtail flounder and eastern GB cod and haddock, set 2019-2020 catch limits for 4 of the 20 multispecies stocks, implemented new or revised rebuilding plans for 5 stocks, revised the trigger for the scallop fishery’s accountability measures for GB yellowtail flounder, and implemented an exemption for vessels fishing exclusively in the Northwest Atlantic Fisheries Organization (NAFO) Regulatory Area from the U.S. minimum fish size for groundfish species. The cumulative impacts assessment concludes that “...the combined impacts of past federal fishery management actions have decreased fishing effort and improved habitat protection for non-target species. Current management measures, including those implemented through Amendment 16 to the FMP, are expected to continue to control effort, and decrease bycatch and discards. The action proposed by FW58 is expected to continue this trend. The primary mechanism is through the reduced ABCs/ACLs (reduced from recent years). ABCs/ACLs will increase for two allocated stocks (GB cod and GB haddock), which may increase impacts on non-target species if these result in an increase in groundfish fishing effort. ABCs/ACLs will decrease for GB yellowtail flounder, however, any increase in fishing effort may be partially countered by the fact that several stocks are predicted to be constraining stocks (GOM cod, SNE/MA winter flounder, white hake, and American plaice). The modifications in management measures are expected to affect non-target species depending on fishing behavior. The past and present impacts, combined with the Preferred Alternative and future actions which are expected to continue rebuilding and strive to maintain sustainable stocks, should yield positive non-significant impacts to non-target species.”

FW59 would set 2020 TACs for US/Canada management units of Eastern GB cod, Eastern GB haddock, and GB yellowtail flounder stock, set 2020-2022 specifications for 15 other groundfish stocks, address commercial/recreational allocation issues if needed, and revise the GB cod incidental catch TAC.

Amendment 23, which is currently under development since February 2017, intends to implement measures to improve reliability and accountability of catch reporting and to ensure a precise and accurate representation of catch (landings and discards).

Scallop FMP

FW29 was partially implemented on April 1, 2018 and fully implemented on April 19, 2018. FW29 set specifications, including DAS allocations, for the scallop fishery for fishing year 2018; set new management measures in the Northern Gulf of Maine (NGOM) scallop management area for the 2018 and 2019 fishing years including prohibiting the limited access fleet from accessing the NGOM while participating in the DAS program; the annual NGOM total allowable catch was divided between the limited access fleet while on research set-aside trips and limited access general category fleets for the 2018 and 2019 (default) fishing year; revised the limited access allocations and trip possession limits for scallop access areas; modified limited access vessels’ one-for-one area access allocation exchanges; and adjusted flatfish accountability measures. The cumulative impacts assessment concludes that “Actions taken by the Council in the Scallop FMP in the past and present are mostly positive on non-target species. Specific gear and area restrictions have reduced bycatch of various nontarget species. Effort controls and increased efficiency of the fleet have also likely reduced impacts on non-target species. However, some non-target species are still overfished (see Table 74). Future actions are anticipated to continue rebuilding and maintaining sustainable stocks. There are several stocks that have been allocated a sub-ACL as bycatch in the scallop fishery (GB YT, SNE/MA YT, GOM/GB windowpane flounder, and SNE/MA windowpane

flounder). Having a sub-ACL and AMs likely reduces overall bycatch of these stocks in the scallop fishery. Therefore, the cumulative impacts of past, present and reasonably foreseeable future actions should yield low-positive impacts for non-target species in the long-term.”

FW30, implemented on April 1, 2019, set specifications for fishing year 2019 and default measures for 2020, and also set landing limits for the LA and LAGC components in the Northern Gulf of Maine management area based on exploitable biomass, and standardized the approach to setting default measures for open-area DAS and LAGC IFQ allocations. The cumulative impacts assessment concludes that “combined impacts of past and present federal fishery management actions have decreased effort and improved habitat protection, which benefits non-target species. In addition, current regulations continue to manage for sustainable stocks, thus controlling effort on direct and discard/bycatch species. The action proposed by Framework 29 are expected to continue this trend; for example, the Council developed AMs for northern windowpane flounder in this action, and modified existing AMs for GB and SNE yellowtail flounder using recent fishery data. Finally, future actions are anticipated to continue rebuilding and thus limit the take of discards/bycatch in the scallop fishery, particularly through ACL management with AMs. The other measures proposed in this action are expected to have primarily neutral impacts on non-target species. Overall, continued management of directed stocks will also control catch of non-target species. In addition, the effects of non-fishing activities on bycatch are potentially negative. Overall, the cumulative effects should yield non-significant neutral impacts on non-target species.”

FW32 will establish scallop specifications for fishing years 2020 and 2021 and consider measures to mitigate scallop fishery impacts to Georges Bank yellowtail flounder.

Monkfish FMP

FW10 established specifications for fishing years 2017 – 2019; modified trip limits in both management areas; and increased DAS allocations in the SFMA. The cumulative effects states “Effort control measures implemented under the Monkfish FMP over the past decade have reduced overall fishing effort with its associated incidental catch of non-target species, particularly skates and dogfish. This trend is likely to continue under the preferred alternatives, notwithstanding the potential for the preferred alternatives to increase monkfish landings. While the increased opportunity to target monkfish would allow for effort to shift from other fisheries, particularly the groundfish fishery, as intended, there may be increased incidental catch of some species, particularly skates and dogfish. However, such an increase would likely be negligible and controlled by management measures in those fisheries that are designed to prevent overfishing and rebuild overfished stocks consistent with the requirements of the Magnuson-Stevens Act. Thus, the cumulative effect of this action would likely result in negligible changes to the sustainable management of those fisheries, with no anticipated significant impacts.”

The Council is currently developing Monkfish Framework 12, which sets specifications for FYs 2020-2022, and is expected to be implemented in May 2020.

Herring FMP

The lobster fishery uses a variety of bait including herring. It is not possible to predict how a limited supply of herring bait might affect the skate bait fishery. The 2016-2018 herring specifications reduced the ABC slightly to 111,000 mt and effective from August 22, 2018 through December 31, 2018, an in-season adjustment reduced the 2018 ACL from 104,800 mt to 49,900 mt to reduce overfishing risk. The 2019 specifications were revised, effective February 8, 2019, to 21,266 mt based on the results of SAW/SARC 65. Herring are often used as lobster bait in the Gulf of Maine and the Area 1A TAC increased to 30,300 mt. If the supply of herring bait for the lobster fishery declines, it could result in increased demand for skate bait.

Habitat Management Plan

The Omnibus Habitat Amendment 2 (OHA2) was implemented on April 9, 2018. It reviewed and updated EFH designations, identified Habitat Areas of Particular Concern (HAPCs), as well as updated the status of current knowledge of gear impacts. It also implemented new management measures for minimizing the adverse impact of fishing on EFH that affect all species managed by the NEFMC. Specifically, it established the Eastern Maine habitat management area (HMA) that is closed to mobile bottom-tending gear, it maintained the Cashes Ledge closure area and its existing restrictions and exemptions, modified the Cashes Ledge habitat closure area that is closed to mobile-bottom tending gear, modified the Jeffreys Ledge habitat closure area that is closed to mobile bottom tending gear, established the Fippennies Ledge HMA that is closed to mobile bottom-tending gear, maintained the western Gulf of Maine habitat closure area that is closed to mobile bottom-tending gear and aligned it with the western Gulf of Maine habitat closure area, exempted shrimp trawling from the designated portion of the northwest corner of the western Gulf of Maine closure area, added the Gulf of Maine roller gear restriction as a habitat protection measure, removed the Closed area I habitat and groundfish closure area designations, removed the Nantucket Lightship habitat and groundfish closure area designations, and established the Great South Channel HMA that is closed to mobile bottom-tending gear throughout and clam dredge gear in the defined northeast section. OHA2 also implemented two DHRA designations: Stellwagen Bank and Georges Bank. It implemented groundfish spawning protection measures within the Gulf of Maine and Georges Bank. The cumulative effects states “Fisheries management actions are typically focused on improving the conditions of managed resources. While these actions are not uniformly successful in this regard, the overall trend amongst the managed resources evaluated in this amendment is towards improved status. Given guiding requirements in the Magnuson Stevens Act to improve stock conditions when resources are depleted, it is assumed that fishery management actions will keep most or all managed resources on a positive trajectory over the next ten years. Fishery management measures beyond those contemplated in this action will likely have the largest influence on fishery resource conditions over the next ten years. These measures set annual and trip-based catch limits and allocate resources amongst fishery participants and across management sub-areas.”

The final submission of the Clam Dredge Framework Adjustment to the habitat plan occurred on July 23, 2019. This action would allow surfclam and mussel dredging under restrictive conditions in the Great South Channel Habitat Management Area (GSC HMA). The preferred alternative proposed 3 exemption areas for both surfclam and mussel dredges (McBlair, Old South, and Fishing Rip. Old South) that would be closed for 6 months (Nov 1 – Apr 30) to reduce overlaps between clam dredging and cod spawning activities. Vessels would need to comply with revised monitoring requirements outlined in the framework document. The document states “the impacts on other fisheries (i.e., groundfish, skate, scallop, herring, lobster) of Alternative 5 are likely low positive. The GSC HMA provides habitat protection for other managed species, so their respective fisheries are expected to fare better with reduced fishing activity for surfclams and mussels in the GSC HMA.”

The Council also recently developed a deep-sea coral amendment to protect deep-sea coral habitats throughout the New England region from the negative impacts of fishing gears. The proposed rule published on August 26, 2019. If approved, the amendment would designate a broad coral zone between the US/Canada EEZ boundary, the boundary between the NEFMC and MAFMC regions, and the seaward boundary of the US EEZ, with the landward boundary at the 600 m contour. The preferred approach is to designate the zone as a closure to all bottom-tending gears, with an exemption for the red crab pot fishery. The deep-sea coral zones are not expected to have direct impacts on any of the managed resources.