



New England Fishery Management Council

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DATE: November 7, 2014
TO: Council
FROM: Skate Plan Development Team
SUBJECT: **Northeast Skate Complex 2014 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 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 2014 (Memo from William Karp to John Bullard, August 22, 2014). It concludes that "Based on new survey data collected through autumn 2013/spring 2014, the status of all skates remains the same as reported in the previous status update. Thorny skate remains overfished, and overfishing is still occurring on winter and thorny skate."

Rebuilding Stocks

For thorny skate, the 3-year average (2011-2013) survey biomass (0.12 kg/tow) was the lowest in the survey time series, and only 3% 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 10 years into the rebuilding period, the stock continues to decline. 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. Thorny skate remains a Species of Concern and was previously petitioned for listing under the Endangered Species Act. NOAA Fisheries determined that a status review was not warranted at this time (76 FR 78891). The Council should consider management measures, beyond the continuing possession prohibition, that will halt the declining biomass of thorny skate and lead to rebuilding. The Council should also prioritize research into the population dynamics of this species.

For barndoor skate, the 3-year average (2011-2013) survey biomass (1.21 kg/tow) was 55% above the overfished threshold (0.78 kg/tow), and 77% of the B_{MSY} target (1.57 kg/tow). The stock is not overfished, but no significant rebuilding has occurred since 2006. The rebuilding deadline is not clearly defined in the Skate FMP, due to uncertainties in basic life history parameters. In 2011, the Skate PDT recommended that it would be premature to remove the possession prohibition on barndoor skate. It remains unknown whether a possession limit would convert dead discards into landings. This recommendation could be reconsidered following the analysis of a recent EFP. Members of the Cape Cod Commercial Fishermen's Alliance received an EFP to sample and harvest prohibited barndoor skates in June 2014 (79 FR 26414) for a project entitled, "Research into life history characteristics, catch composition, and fishing mortality of barndoor skate (*Dipturus laevis*) in existing non-directed gillnet fisheries and initial analysis and development of market for barndoor skate seafood products." The goals of the study include assessing at-vessel mortality rates and condition, describing catch composition, biological sampling, and determining the potential for a premium market for barndoor skate wings, should the prohibition be removed in the future. NOAA Fisheries approved a total amount of 168,000 lb of barndoor skate wings for the study (a portion of estimated annual barndoor skate dead discards in sink gillnet gear), and a 500 lb trip limit. The project is ongoing.

For smooth skate, the 3-year average (2011-2013) survey biomass (0.22 kg/tow) was 64% above the overfished threshold (0.134 kg/tow), and 81% of the B_{MSY} target (0.27 kg/tow). The rebuilding deadline for this species is 2020 (10 years from the implementation of Amendment 3), and it appears that it could be rebuilt before the deadline if the current biomass trend continues. Smooth skate (along with thorny, winter, and barndoor skate) was petitioned for listing under the Endangered Species Act in 2011, but NOAA Fisheries determined that a status review was not warranted at this time (76 FR 78898).

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

Management specifications as well as landings and discards for fishing year 2013 are shown in Table 1 below. The ABC/ACL specifications for the 2013 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 25% to account for scientific and management uncertainty. The TALs were calculated by reducing the ACT by the estimated discard rate in 2008-2010, and allocating the remainder to allowable landings which were split 66.5/33.5% between the skate wing and bait fisheries, respectively. A small amount (3%) was set aside for skate landings by vessels fishing in state waters without a federal skate permit. Table 2 provides estimates of FY2013 skate complex revenue and landings for the wing and bait fishery.

Based on observer data, the Northeast Fisheries Science Center has estimated dead skate discards to have been 13,180 mt for calendar year 2013 (Attachment 2). Dead discard estimates for fishing year 2013 were estimated to be 13,063 mt by Greater Atlantic Regional Fisheries Office. This estimate, combined with the estimate for skate landings by vessels fishing in state waters without a federal skate permit is lower than the assumed discards and state landings of 16,265 mt. Using fishing year discards and landings, estimated total skate catch for fishing year 2013 was 27,922 mt (74% of the ACT, 55% of the ACL). Therefore, it appears that the ACL was not exceeded. Total fishing year 2013 skate wing landings were 7,981 mt (56% of the Wing TAL), and bait landings were 5,596 mt (77% of the Bait TAL). Therefore, the fishery-level TAL was not exceeded and no in-season accountability measures (AMs) were triggered (i.e., automatic

possession limit reductions) during fishing year 2013. As a result, no reactive AMs should be triggered as a result of catch levels for this fishing year.

Table 1 - FY 2013 Catch and Landings of Skates Compared to Management Specifications

Management Specification	Specification Amount	Catch/Landings (mt)	Percent Landed or Caught
ABC/ACL	50,435	27,922	55%
ACT (75% of ABC)	37,826	27,992	74%
Assumed Discards + State Landings	16,265	13,253	NA
TAL (Bait + Wing)	21,561	13,577	63%
TAL Bait	7,223	5,596	77%
(TAL) Wings	14,338	7,981	56%

Table 2 - FY2013 Skate complex price and landings by disposition

Disposition	Live weight (pounds)	Revenue	Average price per lb
Wing	19,232,756	\$ 5,955,972	\$ 0.31
Bait	11,245,043	\$ 1,206,310	\$ 0.11
Unknown	415,613	\$287,998	\$ 0.69
No market	27		

3. Analysis of changes to other FMPs (e.g., Northeast Multispecies, Monkfish, Atlantic Scallops, etc.) 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 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.

Framework 51 modified rebuilding programs for GOM cod and American plaice, set specifications for FY2014-2016 and modified management measures in order to ensure that overfishing does not occur including, additional management measures related to U.S./Canada shared stocks and yellowtail flounder in the groundfish and scallop fisheries. The Cumulative Effects Analysis in Framework 50 did not specifically address impacts on skates; however, it stated, “The measures are not likely to impact non-groundfish stocks, protected species, or habitat to any great extent when compared to the No Action alternative, since these proposed specifications differ only slightly from the No Action alternative.”

FW52, which is expected to be implemented in the fall of 2014, was intended to revise the accountability measures for the groundfish fishery for the northern and southern windowpane flounder stocks. Revisions to the AMs would be applied retroactively for FY 2014 or any overages that occurred prior to FY 2014 (i.e., AM would be revised in-season during FY 2014). The Cumulative Effects Analysis in Framework 50 did not specifically address impacts on skates; however, it stated, “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 Framework 52 is expected to continue this trend. The primary mechanism is through the reduced ABCs/ACLs (reduced from recent years). The modifications in management measures are not expected to

affect non-target species. 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.”

FW53 is currently in development and would set specifications for GOM winter flounder, GB winter flounder, GB yellowtail flounder, GB cod, GB haddock and pollock. It would also establish SNE/MA windowpane flounder sub-ACLs for sectors and the scallop fishery, modify GOM cod spawning area closures, prohibit possession of GOM cod, allow rollover of groundfish specifications and modify sector ACE carryover. Any impacts of these proposed actions on the skate complex will be described in FW53.

Scallop FMP

Scallop Framework 25 set specifications for 2014 that allocated full-time limited access vessels 31 open area DAS and 12 for part-time vessels. Default specifications for 2015 result in 17 DAS for full-time limited access vessels and 7 DAS for part-time limited access vessels. Access areas available to the fishery in 2014 included: Nantucket Lightship, Closed Area II, and Delmarva. The cumulative impacts assessment concludes that “The cumulative impacts of past, present and reasonably foreseeable future actions should yield positive impacts for non-target species in the long-term.”

FW26 is currently in development and would primarily set specifications for FY2015 and (default) FY2016 but also considers allowing fishing in state waters after the federal NGOM TAC is reached, measures to make turtle regulations consistent, modifies and establishes AMs for groundfish stocks, and measures to allow a limited access vessel to declare out of the fishery on return to homeport. Any impacts of these proposed actions on the skate complex will be described in FW26.

The Virginia Institute of Marine Science (Rudders et al.) was awarded funds through the 2012-2013 Scallop RSA program to investigate the discard mortality rates of skates discarded by scallop dredge gear (currently assumed to be 50% for all species). Preliminary results from the study indicate that the mean discard mortality rates are 48% for little skate, 29% for winter skate, and 74% for barndoor skate. Once the project is complete and peer-reviewed, this information can be incorporated into the skate assessment and management process.

Monkfish FMP

Monkfish Framework 8 revised existing monkfish DAS allocations and landing limits to more fully harvest monkfish catch levels specified in each area. Monkfish DAS allocations increased from 40 to 46 DAS with the limit of monkfish DAS that may be used in the SMA increased to 32 DAS. For vessels fishing under a Northeast (NE) multispecies DAS in the NMA, monkfish landing limits would be increased to 600 lb tail weight/DAS for limited access monkfish Category C permits, and 500 lb tail weight/DAS for monkfish Category D permits. In the SMA, monkfish landing limits would be increased to 610 lb tail weight/DAS and 500 lb tail weight/DAS for Category A/C and B/D/H monkfish permits, respectively, when fishing under a monkfish DAS. This action would also allow vessels issued a limited access monkfish Category H permit to fish throughout the SMA, and enable vessels to use allocated monkfish-only DAS at any time throughout the fishing year. The cumulative effects states “While the increased opportunity to target monkfish will 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 developing a monkfish action which could tighten or loosen the monkfish regulations, including adoption of a catch shares management program which could eliminate the need for Monkfish

DAS. At the present, it is unclear how these alternatives would affect the skate resource or the effectiveness of the Skate FMP, although, they are not likely to affect the skate catches or the Skate FMP in 2013.

PDT Notes

The PDT discussed the increase in dead discards in FY2013. This increase can be attributed to increased discards in trawl fisheries in the Mid Atlantic, Southern New England and Georges Bank (Table 3 - Table 5). Examined by quarter and region between 2009 and 2013, the increases can be large.

Table 3 - Skate discards by quarter for the Mid-Atlantic region between 2009 and 2013

Year	Quarter 1	Quarter 2	Quarter 3	Quarter 4
2009	2345	137	558	2132
2010	688	476	338	1362
2011	665	1191	1004	2472
2012	1554	989	250	3084
2013	802	3033	851	2493

Table 4 - Skate discards by quarter for the Southern New England region between 2009 and 2013

Year	Quarter 1	Quarter 2	Quarter 3	Quarter 4
2009	699	565	239	855
2010	700	175	93	1038
2011	1992	247	230	2516
2012	1932	405	173	2835
2013	5366	1066	2423	1995

Table 5 - Skate discards by quarter for the Georges Bank region between 2009 and 2013

Year	Quarter 1	Quarter 2	Quarter 3	Quarter 4
2009	4120	2306	3129	7680
2010	3883	3032	3899	4749
2011	3794	3317	3548	4300
2012	2702	1825	1916	5283
2013	1467	2094	4146	4593

Apart from a peak in the 1980s, total skate catch has moderately increased since the 1970s (Figure 1). This is supported by the relationship between landings and the discard rate.

Recreational catch was provided by GARFO, however, this has not been previously included in the end of year accounting for skates. The PDT decided to remain consistent and not include recreational catch but considered it to be a potential recommendation for the upcoming 2016 benchmark assessment.

The PDT also recommends further investigation into the continued overfishing occurring on thorny skate. Ideally a number of environmental and ecosystem considerations would be examined. However, the PDT may need additional support from the NEFSC Ecosystem Assessment Program.

Figure 1 - Historical total skate complex catch, landings and discard rate

