



## New England Fishery Management Council

50 WATER STREET | NEWBURYPORT, MASSACHUSETTS 01950 | PHONE 978 465 0492 | FAX 978 465 3116  
C.M. "Rip" Cunningham, Jr., *Chairman* | Paul J. Howard, *Executive Director*

# 2012 Annual Monitoring Report

## Northeast Skate Complex Fishery Management Plan

### 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 2012 (Memo from William Karp to Daniel Morris, August 21, 2012). It concludes that "After including and examining the most recent survey data, there are no changes in stock status to report. One skate species remains overfished (thorny) and overfishing was not occurring in any of the seven skate species."

### Rebuilding Stocks

For thorny skate, the 3-year average (2009-2011) survey biomass (0.24 kg/tow) was the lowest in the survey time series, and only 6% 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 8 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 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 78891). However, they concluded that, "to meet the stock rebuilding objectives under the Magnuson-Stevens Act, the Council should be encouraged to maintain its efforts to reverse the decline of thorny skates. Additional research on several key aspects of thorny skate population dynamics could further inform management, particularly on the potential impacts of rising ocean temperatures on their distribution." 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 (2009-2011) survey biomass (1.08 kg/tow) was 38% above the overfished threshold (0.78 kg/tow), and 69% 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. The possession prohibition should remain in place until either a benchmark assessment is conducted (to re-evaluate the biological reference points and population dynamics), or the stock is completely rebuilt. Barndoor skate (along with thorny, winter, and smooth 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).

For smooth skate, the 3-year average (2009-2011) survey biomass (0.23 kg/tow) was 77% above the overfished threshold (0.13 kg/tow), and 85% 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 years 2011-2012 are shown Table 1 below. The ABC/ACL specifications for the 2011-2012 fishing years 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 2006-2008 (2009 discard estimates were not yet available), 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.

Based on observer data, the Northeast Fisheries Science Center has estimated dead skate discards to have been 12,500 mt for calendar year 2011 (Attachment 2). Dead discard estimates for fishing year 2011 are not available at this time, but the Northeast Regional Office is expected to make them available in the near future. This estimate, combined with the small percentage of landings set aside for skate landings by vessels fishing in state waters without a federal skate permit is substantially less than the assumed discards and state landings of 16,265 mt. Using calendar year discards and fishing year landings, estimated total skate catch for fishing year 2011 was 32,187 mt (85% of the ACT, 64% of the ACL). Therefore, it appears that the ACL was not exceeded. Total fishing year 2011 skate wing landings were 11,790 mt (82% of the Wing TAL), and bait landings

were 4,132 mt (57% 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 2011. As a result, no reactive AMs should be triggered as a result of catch levels for this fishing year. The Council will be notified if this determination should be changed based upon the release of fishing year 2011 discard information.

**Table 1. FY 2011 Catch and Landings of Skates Compared to Management Specifications**

Management Specification	Specification Amount	Catch/Landings (mt)	Percent Landed or Caught
ABC/ACL	50,435	32,187	64%
ACT (75% of ABC)	37,826	32,187	85%
Assumed Discards + State Landings	16,265	16,265 <sup>1</sup>	NA
TAL (Bait + Wing)	21,561	15,922	74%
TAL Bait	7,223	4,132	57%
(TAL) Wings	14,338	11,790	82%

1/ Estimated dead discards for fishing year 2011-2012 based on observer data were 12,500 mt.

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. In May 2012, Framework 47 revised some rebuilding schedules and adjusted annual catch limits to achieve rebuilding or other management targets for seven stocks. Other management measures included eliminating the cap on catches of yellowtail flounder in the Georges Bank access areas to 10 percent of the ACL; eliminating the restricted gear areas for common pool vessels that were adopted in Amendment 16; eliminating area-based AMs for both windowpane flounder stocks and ocean pout; prohibiting the possession of Atlantic halibut if the ACL is exceeded and prohibiting the possession of Atlantic wolffish. The Cumulative Effects Analysis in Framework 47 did not specifically address impacts on skates; however, it stated, “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 actions proposed by Framework 47 are expected to continue this trend. The adoption of fishery specifications proposed is not expected to have any impacts on non-target species. The specifications implement mortality objectives adopted in Amendment 16 and thus are not expected to have any impacts beyond those described in that action. The modifications in effort controls in this action are not expected to impact non-target species. These changes only affect fishing in discrete geographic areas and by gear types that do not have a significant impact on 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.”

Framework 48, which is expected to be implemented in May 2013, is anticipated to significantly reduce ACLs for important groundfish stocks such as GB and GOM cod, GOM haddock, witch flounder and GB, SNE/MA and CC/GOM stocks of yellowtail flounder as well maintaining low ACLs for windowpane and winter flounder stocks. The low catch levels probably will likely reduce groundfish fishing effort in Southern New England, Georges Bank and the Gulf of Maine. The reductions may be partially offset by access to some areas previously closed to groundfish fishing with the purpose of allowing a higher amount of the ACLs for more abundant stocks like GB haddock to be landed; however, overall levels of fishing effort still are anticipated to drop substantially. It cannot be determined whether groundfish boats will compensate for reduced groundfish catch levels either by increasing their incidental catch of skates while on groundfish trips or increasing their directed catch of skates, but some redirection of fishing effort where possible on non-groundfish species such as skates can be expected. Nevertheless, although changes in fishing patterns might result in a change in the incidental catch or bycatch of skates, they will have little or no effect on the overall catch of skates because that is constrained by the skate ACL, TALs, and possession limits ; however, the effort reductions in the Gulf of Maine and Georges Bank could have positive impacts on the rebuilding thorny, barndoor, and smooth skates.

In June 2012, NOAA Fisheries approved a new exempted skate fishery under the NE Multispecies regulations (77 FR 38738). The exemption allows vessels that hold a Federal skate permit and a Skate Bait Letter of Authorization to fish for bait skates in a portion of southern New England waters from July through October without using a NE Multispecies day-at-sea (DAS). The area is known as the Southern New England Skate Bait Trawl Exemption Area. The exempted fishery will allow the skate bait fishery to harvest bait skates in a season and area where regulated groundfish bycatch is minimal. The exemption should increase the opportunities for skate bait vessels to target abundant little skates without the constraints of DAS. Vessels making directed trips on skates outside of this exemption area are still required to use DAS.

An emergency action, implemented on February 7, 2012, increased the ACL for GOM winter flounder from 231 mt to 524 mt based on new stock assessment information developed in June 2011. The Environmental Assessment for the Emergency Action concluded that, "The revised GOM winter flounder annual catch limits are expected to have little impact on the rate of bycatch, but could increase the net amount of bycatch slightly, if the increased catch limit enables vessels to increase their fishing effort."

### **Scallop FMP**

Many vessels targeting scallops also have a bycatch of skates, an amount that varies by season and area. This bycatch is a major source of skate discards, although there is scant research to quantify the proportion of dredge-caught skates that perish. Some scallop vessels land skates, but this is rare due to the disproportionate value of scallops and skates. There is major research underway to evaluate the condition and discard mortality of skates following capture and handling in the sea scallop dredge fishery. In 2012 a Scallop Research Set-aside project was funded to investigate this issue further to provide more direct information on the effects of scallop fishing on skate bycatch.

These results are not available yet, but will be integrated into the assessment and management process.

Management measures that allocate or redirect more effort and catch to Georges Bank and the Gulf of Maine would have a greater effect on winter skate, rebuilding barndoor skate, and overfished smooth and thorny skate. Under Framework 23, during 2011 and 2012 full-time limited access vessels were allocated 4 access area trips and 32 DAS in 2011 and 34 DAS in 2012. On average that equates to about 70-80 total days of fishing for each full-time vessel for the entire year. For both years two trips were allocated in access areas on GB and two trips in areas in the Mid-Atlantic. Open area effort was more concentrated in the Mid-Atlantic, with some effort in the Channel and GB.

Under Scallop Framework 24 there will be a decline in total scallop fishing and landings in 2013 and 2014. The framework is considering specifications for 2013 and 2014 and open area effort is likely to be about the same, 33 open area DAS in 2013 and 31 DAS in 2014, but access area effort will be reduced to between 1-2 access area trips. Overall catch is expected to be about 30% lower than catch levels in 2011 and 2012. Therefore, there will be fewer impacts on skates in both GB and MA compared to fishing levels in recent years, particularly within access areas.

Projection models used by the Scallop PDT predict more open area effort will shift from the Mid-Atlantic to the Channel, waters southeast of Cape Cod. The model estimates that about 50% of open area effort will be in the Mid-Atlantic (less than recent years), about 20% on Georges Bank (about the same as recent years), and 30% in the Channel (more than recent years). It is uncertain if these estimates will be realized since some vessels will not and never fish in the Channel.

Since overall scallop fishing effort levels will be lower in 2013 and 2014 compared to recent years, there should be beneficial impacts on skates. In particular, effort levels within scallop access areas will be much lower. Skate species found in CA1, CA2 on GB will experience less incidental mortality. Similarly, access areas farther south, such as Nantucket Lightship, Hudson Canyon and Delmarva, will have reduced fishing levels as well. Finally, under Scallop Framework 24 several new areas are proposed to close to protect small scallops. In 2013 Elephant Trunk would close for about 2 years, and in 2014 Hudson Canyon would close for at least two years. Skate species found in these areas will experience lower fishing impacts in the next few years until these areas reopen. Scallop Framework 24 describes the projected bottom area swept for 2013 and beyond.

### **Monkfish FMP**

No changes to monkfish regulations were implemented in 2012. 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.

### **Atlantic Sturgeon Listing under the Endangered Species Act**

In February 2012, NOAA Fisheries listed five distinct population segments of Atlantic sturgeon as threatened or endangered under the Endangered Species Act. NOAA Fisheries has reinitiated

formal consultation on the continued operation of the skate fishery, in addition to several other northeast fisheries that have interactions with endangered sturgeon. A new Biological Opinion is currently being drafted that will assess the extent of the impacts from these fisheries, and determine if new management measures may be necessary to mitigate negative impacts on sturgeon or other endangered species. It is not known at this time if the new Biological Opinion will result in impacts on the skate fishery.