New England Fishery Management Council
50 WATER STREET \| NEWBURYPORT, MASSACHUSETTS 01950 | Phone 9784650492 | FAX 9784653116
John F. Quinn, J.D., Ph.D., Chairman | Thomas A. Nies, Executive Director

## MEETING SUMMARY

## Skate Plan Development Team

The PDT held a conference call on February 19, 2019 and an in-person meeting on April 2, 2019. The PDT discussed the upcoming specifications actions and limited access.

## Specifications for Fishing Years 2020 and 2021

1. Skate specifications are based on the Northeast Fisheries Science Center (NEFSC) trawl survey. The fall survey is used to calculate survey indices for all skate species except for little skate (which uses the spring survey).
2. The fall 2017 trawl survey did not sample strata in southern New England (SNE) or MidAtlantic (MDA), resulting in no survey indices for rosette or clearnose skate for that year. The incomplete sampling also affected indices for barndoor, thorny, smooth, and winter skate, because fewer strata were available to calculate the 2017 indices from.
3. The fall 2018 survey missed 3 strata completely $(34,35,30)$ and completed only 1 tow in strata 36, which affected survey indices for barndoor, thorny, smooth, and winter skate.
4. The PDT tried to determine how much these issues would affect our ability to set specifications based on the survey. For the missing survey indices, 3 options were considered using: a 2-year average (instead of the methodology using the 3-year average established in Amendment 3 for all skate species), a Loess smoother, or the Kalman filter. A comparison of survey indices resulting from these options showed similar results for both clearnose and rosette skates (Table 1). Thus, rather than adopt an entirely different approach, the PDT decided to use the 2-year average to develop specifications for clearnose and rosette skates.
5. To address the limited sampling in fall 2017 issue for barndoor, smooth, and thorny skate, the PDT looked at adjusting the survey index by the average ratio of the sum of 1963-2016 without SNE to with SNE or by an average ratio using a recent time period. Since the sampling of strata for these species was incomplete as opposed to missing, a different approach was used. The PDT proposed using the species-specific time series average, which would be consistent with what was done for little skate in 2014.
6. More work is needed to address the fall 2018 survey issue.
7. The PDT will present the recommended adjustments and other options for setting specs to the SSC.

## Limited Access

1. The number of active skate permits has fluctuated over time; the last 5 years include the lowest in the time series (FY2018 data are preliminary) (Table 2). The number of active permits does not appear to restrict the ability to land the TAL. The majority of permits are used to land skate wings. Vessels could be categorized into various levels of dependence based on the number of trips landing skate (Table 3 - Table 5) or economic dependence (Appendix I). The number of vessels entering or leaving the fishery vary by year, but overall a net decline in active permits is occurring (Table 6 and Table 7).
2. Given the smaller size of the bait fishery (in terms of number of permits and trips), preliminary work focused on this fishery. The control date for the bait fishery is July 30, 2009. The PDT examined 3 time periods: FYs 2004-2008, FYs 2009 - 2013, and FYs 2014 - 2016. How the Council uses the control date will affect the number of qualifying vessels. A new control date can't be selected for a certain date in the past. If a new control date is required, it would be the date the FR notice publishes, i.e. in 2019. For the bait fishery, the highest number of qualifying vessels would likely be from using only the time period before the control date, i.e. if you had a skate permit and landed at least 1 lb of skate bait your vessel would qualify (see Table 1 in document 3 b ). The number of qualifying vessels would generally decrease if a later time-period is used, however, FY2014 - 2016 is a shorter block of time and number of qualifying vessels might increase slightly if expanded to FY2018. The most restrictive qualification criteria, resulting in fewest qualifying vessels, is using the time period before the control date and requiring vessels to currently be active. The PDT noted the potential for latent effort in the bait fishery if all vessels holding a permit between FY 2004-2008 qualified but not many are currently fishing.
3. The PDT agreed to use the CFDERS database for determining qualification. Identifying issues with databases was important to the PDT as different codes can result in different numbers of vessels qualifying. These initial analyses were run by Council staff and the numbers should be considered preliminary until NMFS officially pulls the data.
4. The PDT considered the Letter of Authorization (LOA) as a qualification criterion for the bait fishery. The data on which vessels used a LOA may be questionable for the first couple of years of skate management as it was a relatively informal process then.
5. The PDT has not examined DAS as a qualification criterion, but concluded that landings would be a more appropriate criterion given that DAS are tied to other FMPs and their usage could depend on other targeted species, e.g. monkfish, any groundfish species.
6. The PDT discussed the need for an incidental open access permit for skates if a limited access permit program is implemented. Skates are caught in several gear types and the PDT did not want to create a program that resulted in increased discards. The PDT looked at landing frequencies from FY2016 for the bait (Figure 1) and wing (Figure 2) fisheries. No clear trend was apparent for the bait fishery that would have suggested an appropriate incidental limit. Trends were apparent in wing fishery landings that could be used to identify an appropriate incidental permit possession limit. Additional PDT analysis (expanded to include more fishing years) and guidance from the AP and Committee would be needed to recommend an appropriate incidental limit for this permit category.
7. The PDT discussed the draft purpose and need statement and objective for the amendment. The AP and Committee need to further refine their objectives for the
amendment to help the PDT finalize the purpose and need. The PDT is working on making the purpose and need NEPA compliant. The PDT has not drafted alternatives to date, looking first for guidance on qualification criteria and the structure of the permit program. To help with that, the PDT compiled a list of potential approaches for structuring permits and the qualification criteria.

## Questions for the AP and Committee

LA permit program
a. Create a single LA skate permit (have 1 permit type)
b. Create separate Bait and Wing LA permits (have 2 permit types)
c. Create separate Bait, Wing, and Bait/Wing combo permits (3 permit types)
d. Any of the above plus an open access incidental permit

Qualification Criteria
e. Held a permit prior to the control date (July 30, 2009)
i. Plus actively fishing now (need to qualifying fishing years)
ii. Landings of X amount prior to control date
f. Actively fishing now
i. Landings of X amount
g. Held LOA during X time period (bait only)
h. Does control date need to change for either fishery?

Table 1 - Preliminary estimates of survey indices from PDT analyses to replace missing fall 2017 clearnose and rosette skate indices

| Option | Clearnose | Rosette |
| :--- | :--- | :--- |
| 2-year average | 0.610 | 0.0473 |
| Kalman filter | 0.469 | 0.0486 |
| Loess 10\% | 0.836 | 0.0497 |
| Loess 20\% | 0.690 | 0.0510 |
| Loess 30\% | 0.620 | 0.0480 |

Table 2 - Number of permits landing skate species, and value of those landings (no bait landings available in databases in 2003)

| FISH. <br> YEAR | TOTAL PERMIT | $\begin{aligned} & \hline \text { TOTAL } \\ & \quad \text { LBS } \\ & \hline \end{aligned}$ | TOTAL <br> VALUE | WING PERMIT | $\begin{aligned} & \hline \text { WING } \\ & \quad \text { LBS } \\ & \hline \end{aligned}$ | WING <br> VALUE | BAIT <br> PERMIT | $\begin{aligned} & \text { BAIT } \\ & \text { LBS } \end{aligned}$ | BAIT <br> VALUE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2003 | 421 | 16,279,061 | \$2,005,322 | 421 | 16,279,061 | \$2,005,322 |  |  |  |
| 2004 | 506 | 29,139,849 | \$4,576,634 | 502 | 23,786,712 | \$4,173,148 | 22 | 5,353,137 | \$403,486 |
| 2005 | 511 | 28,212,377 | \$5,087,087 | 499 | 23,025,782 | \$4,698,225 | 24 | 5,186,595 | \$388,862 |
| 2006 | 520 | 29,667,534 | \$6,512,338 | 518 | 24,715,918 | \$6,107,426 | 25 | 4,951,616 | \$404,912 |
| 2007 | 522 | 39,395,973 | \$7,644,577 | 516 | 31,857,982 | \$7,000,062 | 25 | 7,537,991 | \$644,515 |
| 2008 | 499 | 36,110,966 | \$6,231,808 | 490 | 28,267,845 | \$5,512,798 | 40 | 7,842,894 | \$719,010 |
| 2009 | 504 | 36,321,700 | \$6,602,301 | 502 | 29,530,574 | \$5,932,049 | 24 | 6,780,811 | \$670,252 |
| 2010 | 490 | 27,816,447 | \$5,172,654 | 475 | 19,364,051 | \$4,191,337 | 54 | 8,452,396 | \$981,317 |
| 2011 | 494 | 34,721,970 | \$7,891,917 | 486 | 25,523,899 | \$6,333,371 | 36 | 9,197,957 | \$1,558,546 |
| 2012 | 464 | 29,242,265 | \$6,163,103 | 455 | 18,776,874 | \$4,799,915 | 30 | $\begin{array}{r} \hline 10,465,34 \\ 6 \\ \hline \end{array}$ | \$1,363,188 |
| 2013 | 401 | 27,164,154 | \$6,461,369 | 390 | 16,783,291 | \$5,319,301 | 41 | $10,332,18$ 8 | \$1,121,969 |
| 2014 | 401 | 31,001,944 | \$8,242,850 | 385 | 22,467,773 | \$7,166,253 | 38 | 8,501,192 | \$1,074,170 |
| 2015 | 384 | 28,780,962 | \$5,175,509 | 372 | 19,249,880 | \$4,182,850 | 33 | 9,524,140 | \$992,348 |
| 2016 | 372 | 26,651,231 | \$4,756,200 | 358 | 18,161,598 | \$3,805,030 | 38 | 8,485,768 | \$951,083 |
| 2017 | 374 | 26,206,306 | \$5,296,697 | 365 | 18,222,225 | \$4,261,973 | 56 | 7,980,131 | \$1,034,388 |
| 2018 | 264 | 12,309,469 | \$2,873,347 | 254 | 9,242,931 | \$2,489,316 | 28 | 3,056,238 | \$369,919 |
| Note: 2018 data are preliminary. |  |  |  |  |  |  |  |  |  |

Table 3 - Number of active skate vessels by number of trips landing skates

| FISHING_YEAR | TOTAL_VESSELS |
| ---: | ---: | ---: | ---: | :--- | ---: | ---: | 5 or fewer trips | $l\|l\| l\|l\|$ |
| :--- |
| 2003 |

Table 4 - Number of vessels by number of trips landing wings

| FISHING_YEAR | TOTAL_VESSELS | 5 or fewer trips | $\begin{aligned} & 6-10 \\ & \text { trips } \end{aligned}$ | 11-25 <br> trips | $\begin{aligned} & 26-50 \\ & \text { trips } \end{aligned}$ | >50 trips |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2003 | 421 | 209 | 101 | 80 | 27 | 4 |
| 2004 | 502 | 175 | 71 | 157 | 80 | 19 |
| 2005 | 499 | 137 | 80 | 166 | 79 | 37 |
| 2006 | 518 | 141 | 88 | 172 | 79 | 38 |
| 2007 | 516 | 130 | 82 | 156 | 87 | 61 |
| 2008 | 490 | 135 | 71 | 163 | 81 | 40 |
| 2009 | 502 | 131 | 95 | 139 | 93 | 44 |
| 2010 | 475 | 118 | 56 | 145 | 91 | 65 |
| 2011 | 486 | 101 | 46 | 144 | 109 | 86 |
| 2012 | 455 | 102 | 41 | 136 | 112 | 64 |
| 2013 | 390 | 90 | 44 | 104 | 93 | 59 |
| 2014 | 385 | 78 | 54 | 107 | 89 | 57 |
| 2015 | 372 | 85 | 50 | 107 | 68 | 62 |
| 2016 | 358 | 79 | 58 | 93 | 82 | 46 |
| 2017 | 365 | 77 | 52 | 96 | 84 | 56 |
| 2018 | 254 | 92 | 48 | 62 | 39 | 13 |

Table 5 - Number of vessels by number of trips landing bait ("--" represents confidential data; blank cells are zeroes/no data)

| FISHING_YEAR | TOTAL_VESSELS | 5 or fewer trips | $\begin{aligned} & 6-10 \\ & \text { trips } \end{aligned}$ | $\begin{aligned} & 11-25 \\ & \text { trips } \end{aligned}$ | $\begin{aligned} & 26-50 \\ & \text { trips } \end{aligned}$ | >50 trips |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2003 |  |  |  |  |  |  |
| 2004 | 22 | 14 | -- | -- |  | 5 |
| 2005 | 24 | 8 | -- | 6 | -- | 5 |
| 2006 | 25 | 14 | -- | 4 | -- | 3 |
| 2007 | 25 | 9 | -- | 6 | -- | 5 |
| 2008 | 40 | 14 | 4 | 9 | 5 | 8 |
| 2009 | 24 | 10 | 4 | -- | -- | 6 |
| 2010 | 54 | 24 | 4 | 12 | 6 | 8 |
| 2011 | 36 | 10 | 4 | 6 | 6 | 10 |
| 2012 | 30 | 6 | -- | -- | 7 | 10 |
| 2013 | 41 | 16 | -- | 9 | -- | 11 |
| 2014 | 38 | 12 | 5 | 7 | 5 | 9 |
| 2015 | 33 | 6 | 4 | 7 | 8 | 8 |
| 2016 | 38 | -- | -- | 13 | 8 | 8 |
| 2017 | 56 | 20 | 8 | 12 | 8 | 8 |
| 2018 | 28 | 6 | -- | 4 | 10 | -- |

Table 6 - Number of vessels entering the skate fishery, and wing and bait fisheries, by year defined as vessels landing skate wings/bait for the first time in year X (Vessels are only counted once, even if they drop out and re-enter).

| FISHING <br> YEAR | All <br> Vessels | Wing <br> Vessels | Bait Vessels |
| ---: | ---: | :--- | ---: |
| 2004 | 155 | 153 | 22 |
| 2005 | 90 | 84 | 11 |
| 2006 | 70 | 71 | 14 |
| 2007 | 58 | 56 | 15 |
| 2008 | 36 | 37 | 18 |
| 2009 | 37 | 38 | 10 |
| 2010 | 49 | 48 | 21 |
| 2011 | 34 | 35 | 4 |
| 2012 | 33 | 32 | 5 |
| 2013 | 11 | 10 | 13 |
| 2014 | 25 | 24 | 7 |
| 2015 | 25 | 25 | 5 |
| 2016 | 17 | 17 | 7 |
| 2017 | 26 | 25 | 18 |
| 2018 | 6 | 6 | 5 |

Table 7 - Number of vessels which landed skates in the previous fishing year and did not land skates in the current year, including wing and bait vessels

| FISHING_YEAR | Total Vessels Dropped Out | "Wing" Vessels Dropped Out | "Bait" Vessels Dropped Out |
| ---: | ---: | ---: | ---: |
| 2004 | 70 | 72 | 0 |
| 2005 | 103 | 107 | 9 |
| 2006 | 106 | 103 | 13 |
| 2007 | 94 | 94 | 16 |
| 2008 | 98 | 98 | 7 |
| 2009 | 72 | 72 | 29 |
| 2010 | 100 | 111 | 8 |
| 2011 | 71 | 70 | 26 |
| 2012 | 84 | 85 | 11 |
| 2013 | 96 | 98 | 5 |
| 2014 | 66 | 69 | 12 |
| 2015 | 71 | 69 | 70 |
| 2016 | 67 | 63 | 61 |

Figure 1 - Trip frequency for bait fishery for FY2016.


Figure 2 - Trip frequency for wing fishery for FY2016.


