

## **Monitoring of Yellowtail Flounder Annual Catch Limits in the Scallop Fishery September 2011**

The following is the methodology for monitoring the scallop fishery's yellowtail flounder (YTF) annual catch limits (sub-ACLs), which were implemented through Amendment 15 to the Atlantic Sea Scallop Fishery Management Plan (FMP) and became effective on July 21, 2011. This methodology was developed by a working group composed of staff from the Northeast Regional Office, the Northeast Fisheries Science Center, and the New England Fishery Management Council and was further peer-reviewed by the Council's Scallop Plan Development Team.

### **Background**

#### ***What are the scallop fishery's YTF sub-ACLs?***

The scallop fishery is limited in the total amount of YTF that can be taken in the Georges Bank (GB) and Southern New England/Mid-Atlantic (SNE/MA) stock areas (See Attachment 1 for stock area coordinates). These YTF allocations (i.e., sub-ACLs) are established through biennial framework adjustments in the Northeast Multispecies FMP. These sub-ACLs are based on the annual amount of YTF projected to be harvested by the scallop fishery in a given fishing year (FY), and represent a portion of the GB and SNE/MA total ACLs available to the multispecies fishery. The FY 2011 sub-ACLs for GB and SNE/MA were set through Framework Adjustment 45 to the NE Multispecies FMP and are as follows:

<b>YTF Stock</b>	<b>Total YTF ACL(lb)</b>	<b>Scallop YTF sub-ACL (lb)</b>
<b>GB</b>	3,121,746	442,688
<b>SNE/MA</b>	1,413,163	180,779

#### ***How do these sub-ACLs relate to the YTF access area allocations?***

The Northeast Multispecies FMP also allocates YTF catch specifically to scallop access areas within GB and SNE. For FY 2011, Closed Areas I and II are allocated 306,000 lb of YTF combined. This quota represents 9.8 percent of the total GB YTF ACL (listed above). If the GB YTF access area allocation is reached, the Closed Areas I and II will close to all vessels fishing for scallops for the remainder of FY 2011.

The scallop fishery's YTF access area catch allocations and YTF sub-ACLs are not additive; YTF catch from Closed Area I and II is applied to both the GB YTF scallop access area allocation and to the GB sub-ACL. For example, for FY 2011, the fishery is limited to 442,688 lb of GB YTF, which includes any of the 306,000 lb of YTF caught in the CAI and CAII access areas. Both access areas will close if 306,000 lb of YTF is caught from Closed Area I and/or Closed Area II and some vessels will be given a days-at-sea credit for unused trips in those areas to be used in open areas.

If it is determined in mid-January that the scallop fishery exceeded its GB or SNE/MA sub-ACL, the stock areas are not closed within that same FY. Instead, an area closure will take effect in the

following year for a period of time that is based on the amount of the YTF sub-ACL overage (See Attachment 2 for more information on these area closures).

## **Data**

In order to monitor the YTF sub-ACL, the Northeast Region's Analysis and Program Support Division (APS) relies on a number of sources of data. The data sources used to monitor YTF catch during FY 2011 are summarized below, with particular attention to the timeframe over which the data becomes available for monitoring purposes.

*Northeast Fisheries Observer Program Data.* The Northeast Fishery Observer Program (NEFOP) collects and processes data and biological samples obtained during commercial fishing trips. Unlike access areas, preliminary (partially audited) observer data from open areas is not available to APS for monitoring purposes within 24 hours of the end of the observed fishing trip. Open area data are usually available within 90 days of the end of an observed trip.

*Federal Dealer Data.* Federally permitted dealers are required to submit reports that document, among other things, the weight of each species purchased from vessels during a given reporting week, which ends on Saturday at midnight. Reports are submitted through the Standard Atlantic Fisheries Information System (SAFIS), and are due by midnight on the first Tuesday following the reporting week ending date. These reports are available to APS upon submission.

*Vessel Trip Report (VTR) Data.* Federally permitted vessels are required to submit fishing vessel trip reports (VTRs) detailing the weights of each species kept, as well as the statistical area where caught. VTR data will be used to apportion federal dealer data by statistical area. For scallop trips, VTRs must be submitted within 15 days of the end of the month in which the trip occurred. However, the Northeast Multispecies FMP recently changed reporting frequency such that multispecies permit holders are required to submit VTRs on a weekly basis and the majority of scallop vessels also hold Northeast Multispecies permits.

*Vessel Monitoring System (VMS) Catch Reports.* The daily VMS catch report is required for all scallop trips for limited access (LA) and limited access general category (LAGC) individual fishing quota (IFQ) scallop vessels. Each of these vessels must report YTF caught (kept and discarded) and all other species kept. Each vessel is required to submit VMS catch reports daily by 9:00AM of the day following the day on which fishing occurred, consistent with access area catch reporting (See Attachment 3).

## **Observer coverage**

The Northeast Fisheries Science Center (NEFSC) allocates observer sea days to monitor bycatch in commercial fisheries along the Atlantic coast, from Maine to North Carolina through the Standardized Bycatch Reporting Methodology (SBRM) process. For more information on the targeted FY 2011 observer coverage levels in the scallop fishery, see the permit holder letter dated [February 18, 2011](#).

## YTF catch estimation

Unlike access area YTF catch estimation, a series of preliminary steps are required to apportion open area kept all into the GB and SNE/MA YTF stock areas. For LA vessels, this is done by summing, for each statistical area, the total VTR reported kept all species for trips that land > 2000 lbs of scallops<sup>1</sup>. The kept all for each statistical area is then grouped into GB, SNE/MA and “other” stocks. The ratios of each of these stocks to the total VTR kept all can then be multiplied by the total dealer reported kept all for trips that land > 2000 lbs of scallops. This yields a GB kept all and a SNE/MA kept all for LA vessels which can then be multiplied by the appropriate discard rate (see below).

For LAGC IFQ vessels the preliminary steps required to apportion open area kept scallops into the GB and SNE/MA YTF stock areas are somewhat different. Open area IFQ VMS declarations are matched with VTRs where scallops ≤ 400 lbs (before August 1, 2011), or ≤ 600 lbs (beginning August 1, 2011). Matching by VMS declarations avoids scallop landings from groundfish trips by vessels that also have an IFQ permit. VTR data are used instead of dealer data because some dealers lump multiple IFQ trips into a single dealer report. The kept scallops for each statistical area are then stratified by gear type (dredge vs. trawl) into GB, SNE/MA and “other” stocks. Access area landings are also stratified by gear type and then added to the appropriate stock. This yields a GB kept scallops and a SNE/MA kept scallops for each of the two gear types which can then be multiplied by the appropriate discard rate (see below).

Overall YTF catch will be calculated using the cumulative methodology<sup>2</sup>. The YTF discard rate will be calculated as the ratio of observed YTF discards (lb) to the observed kept catch of all species (lb) on observed scallop trips. A separate rate will be calculated for the LA and LAGC IFQ fleets. Additionally, a separate rate will be calculated for the dredge and trawl components of the LAGC IFQ fleet. Total YTF discards (lb) for the LA fleet will be estimated by multiplying the LA discard rate by the aforementioned apportioned dealer year-to-date total kept of all species (lb), and then adding the apportioned dealer year-to-date YTF kept. Total YTF discards (lb) for each gear type in the LAGC IFQ fleet will be estimated by multiplying the appropriate LAGC discard rate by the aforementioned year-to-date total kept scallop (lb).

The formula for estimating total YTF catch is:

$$\left( \frac{\text{Observed YTF discards}}{\text{Observed kept all}} \times \text{Dealer kept all} \right) + \text{Dealer kept YTF} = \text{Total YTF catch}$$

A transition method will be applied at the beginning of the year when there is less than five observed scallop trips to reliably estimate the YTF discard rate. The transition method starts with historical YTF discard data (called the assumed rate), which will be updated as in-season discard data becomes available. For GB, the annual YTF discard rate for GB in FY 2010 will be used as the assumed discard rate in FY 2011; for SNE/MA, the annual YTF discard rate for SNE/MA in FY 2010 will be used as the assumed discard rate in FY 2011; etc. The transition to the in-season

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<sup>1</sup> This threshold is used because dealers continue to lump landings for more than one LAGC IFQ trip into a single dealer record even though this is against regulations.

<sup>2</sup> For more information on the cumulative methodology go to: <http://nefsc.noaa.gov/groundfish/discard/>

rate occurs as data from observed trips 1 – 4 becomes available. Once data for observed trip number 5 becomes available the transition to the in-season data is complete. From that point forward only in-season data is used to calculate the discard rate.

The formula for the transition rate is:

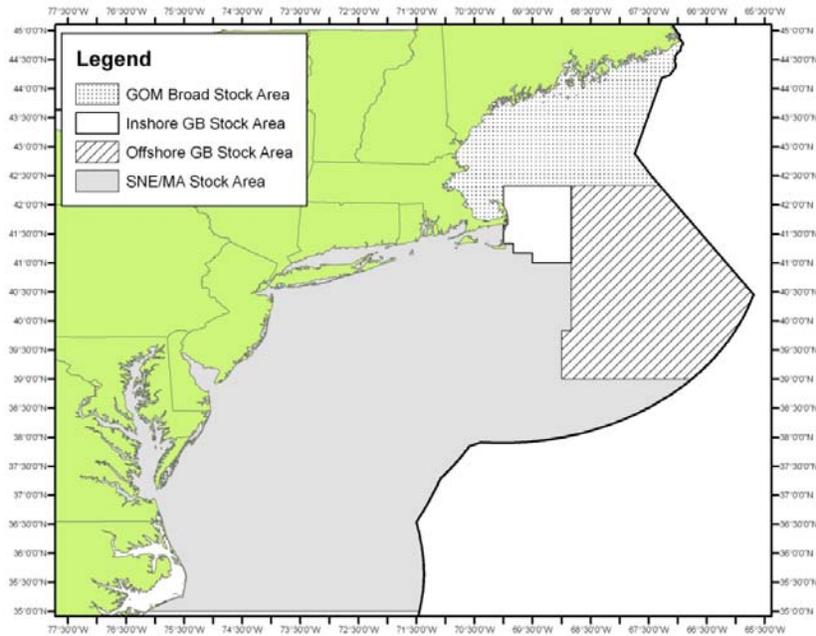
$$\left(\frac{0.7}{\text{Trip count}}\right) \times \text{Assumed rate} + \left(1 - \left(\frac{0.7}{\text{Trip count}}\right)\right) \times \text{In-Season rate}$$

In this formula, trip count is 1 – 4.

For FY 2011 and FY 2012 the YTF discard rate for GB will be calculated by pooling observer data from open area trips + access area trips; and the YTF discard rate for SNE/MA will be calculated by pooling observer data from open area trips + access area trips. This is consistent with the YTF stock assessment methodology used by the NEFSC.

**Attachment 1: Stock Areas for Yellowtail Reporting**

The following chart shows the stock areas applicable to the yellowtail sub-ACLs. For the scallop fishery, the Inshore and Offshore GB yellowtail stocks are combined. There is no sub-ACL for the Gulf of Maine yellowtail stock.



GOM Stock Area		
Point	N. latitude	W. longitude
G1	( <sup>1</sup> )	( <sup>1</sup> )
CI13	( <sup>1</sup> )	67°20'
G6	42°20'	67°20'
G10	42°20'	70°00'
G9	( <sup>2</sup> )	70°00'

Inshore GB Stock Area 2		
Point	N. latitude	W. longitude
G9	( <sup>2</sup> )	70°00'
G10	42°20'	70°00'
IGB1	42°20'	68°50'
IGB2	41°00'	68°50'
IGB3	41°00'	69°30'
IGB4	41°10'	69°30'
IGB5	41°10'	69°50'

**Offshore GB Stock Area 3**

Point	N. latitude	W. longitude
IGB1	42°20'	68°50'
G6	42°20'	67°20'
CII3	( <sup>1</sup> )	67°20'
SNE2	39°00'	( <sup>1</sup> )
SNE3	39°00'	69°00'
SNE4	39°50'	69°00'
SNE5	39°50'	68°50'

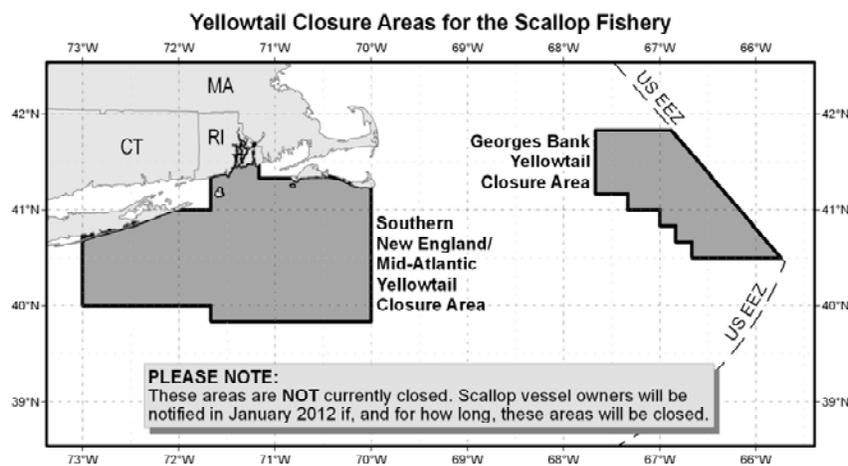
**SNE/MA Stock Area 4**

Point	N. latitude	W. longitude
G12	( <sup>1</sup> )	70°00'
IGB7	41°20'	70°00'
IGB6	41°20'	69°50'
IGB5	41°10'	69°50'
IGB4	41°10'	69°30'
IGB3	41°00'	69°30'
IGB2	41°00'	68°50'
SNE4	39°50'	68°50'

**Attachment 2: Seasonal Closures if YTF sub-ACL is exceeded**

If scallop vessels exceed their yellowtail allocation in either Georges Bank or Southern New England/Mid-Atlantic, there will be an accountability measure that would go into place the following fishing year to account for the overage. Statistical areas that have high catch rates of yellowtail flounder by the scallop fishery within stock areas would close to scallop fishing the following year.

The closure for the Georges Bank yellowtail stock will be in statistical area 562, which extends from just west of Closed Area II, through that closed area, and to the southeast of that closed area. We will also close a small portion of statistical area 525 within the access area. If the Southern New England/Mid-Atlantic allocation is exceeded, statistical areas 537, 539, and 613 will be closed.



We will determine by mid-January each year whether the yellowtail allocation is expected to be exceeded or not. If it is projected to be exceeded, the applicable statistical areas described above will be closed on March 1. The length of the closure depends on how much yellowtail was landed relative to the allocation. The closure will last for at least one month. The tables below show the length of the closures for a given percent overage. These seasonal closures only apply to limited access vessels. LAGC vessels are exempt from these closures if they are fishing in an exempted area authorized under the Northeast multispecies fishery management plan.

**SNE/MA YT Closure Duration for Specified Overage**

Percent Overage of YTF Annual Catch Limit	Length of Closure
1-2	March
3-5	March and April
6-8	March through May
9-12	March through June

13-14	March through July
15	March through August
16	March through September
17	March through October
18	March through November
19	March through January
20 and higher	March through February

**GB YT Closure Duration for Specified Overage (CAII Access Area Open)**

<b>Percent Overage of YTF Annual Catch Limit</b>	<b>Length of Closure</b>
1	March through May
2-24	March through June
25-38	March through July
39-57	March through August
58-63	March through September
64-65	March through October
66-68	March through November
69	March through December
70 and higher	March through February

**GB YT Closure Duration for Specified Overage (CAII Access Area Closed)**

<b>Percent Overage of YTF Annual Catch Limit</b>	<b>Length of Closure</b>
1	March through May
2	March through June
3	March through July
4-5	March through August
6 and higher	March through February

**Attachment 3: VMS Scallop Catch Report**

This is the layout of the new VMS scallop catch report. It may appear differently depending on the manufacturer of your VMS. If the information on your catch report is different than below, you may need to update your VMS software. If so, please call the Northeast VMS Team at (978) 281-9149.

**SCALLOP CATCH REPORT**

This report is required by all limited access scallop and LAGC IFQ vessels on all declared scallop trips ONLY when fishing in the Georges Bank Yellowtail Flounder Stock Area (GB YT) and the Southern New England/Mid-Atlantic Yellowtail Flounder Stock Area (SNE/MA YT). For each day of a declared trip, this report must be submitted by 9 AM the following day. Negative reports (0 lb) must be submitted when no fish were caught.

Note: The VTR serial number must be the same number reported to the seafood dealer receiving the landings at the end of the trip. If you use multiple pages of the VTR on the trip, record the serial number from the first VTR page used.

Vessel Trip Report (VTR) Serial Number: \_\_\_\_\_

Date fish caught: Month (01-12) \_\_\_\_\_

Day (01-31) \_\_\_\_\_

SPECIES	GB YT	SNE/MA YT
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Scallop Meats Kept (lbs)	_____	_____
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Yellowtail Kept (lbs)	_____	_____
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Yellowtail Discarded (lbs)	_____	_____
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All <u>Other</u> * Fish Kept (lbs)	_____	_____
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\* exclude Scallop and Yellowtail