

Framework Adjustment 51

To the

Northeast Multispecies FMP

Appendix V

**Background Information: Small-Mesh Fishery AM for
Georges Bank yellowtail flounder**



New England Fishery Management Council

50 WATER STREET | NEWBURYPORT, MASSACHUSETTS 01950 | PHONE 978 465 0492 | FAX 978 465 3116
Ernest F. Stockwell, *Acting Chairman* | Thomas A. Nies, *Executive Director*

MEMORANDUM

DATE: September 3, 2013
TO: Whiting and squid advisors
FROM: Andrew Applegate
SUBJECT: **Background information about Georges Bank yellowtail flounder accountability measures**

In NE Multispecies Framework Adjustment 48 (submitted and approved in 2013), the Council adopted a sub-ACL (annual catch limit) allocation of Georges Bank yellowtail flounder of two percent and required itself to develop an accountability measure that would be triggered if the small-mesh fishery catch exceeds the sub-ACL in 2013 and future years. The development of an accountability measure is being taken up in Framework Adjustment 51, which the Council will approve at the November meeting.

This Advisory Panel meeting is an opportunity for the industry to develop recommendations on how an accountability measure should be applied, if one is needed in 2013 and 2014. Early indications however are that the 2013 yellowtail flounder catches will be below the sub-ACL, partly because lower amounts of fishing occurred in the Cultivator Shoals Area and partly because it will be difficult to estimate yellowtail flounder catches before the end of the fishing year. Subsequently, the whiting (and possibly squid) fishery may revised the accountability measure specifications in a future specifications package or framework adjustment, planned for development in 2014.

To help the APs develop recommendation, I compiled the information below and calculated comparative statistics for observed trips using small mesh, targeting either red hake, silver hake, or loligo squid, or a combination of any of these. These data were restricted to observed tows inside of the Georges Bank yellowtail flounder stock area (see Map 2), statistical areas 522, 525, 561, and 562. The Cultivator Shoals Area is entirely within SA 522. The mixed whiting and squid trips occur on the southern edge of Georges Bank in SA 525 and 562.

The following information is included below:

1. The final alternative that allocates a Georges Bank yellowtail flounder sub-ACL for the small-mesh fisheries, including historic catch estimates for 2004-2011.
2. Background explanation of small-mesh fishery Georges Bank yellowtail flounder allocation and monitoring (catch estimation).
3. Georges Bank yellowtail flounder ACLs
 - a. Sub-allocations of regulated multispecies by fishery
 - b. Maximum 2014 Georges Bank yellowtail flounder allocation.
4. Georges Bank yellowtail flounder catch estimates for the small mesh fishery during 2012 (final) and 2013 (in-season). **This information will be provided by the AP meeting.**
5. Summary of observed yellowtail flounder catch to kept all (yellowtail flounder per pound landed of all species) ratios during 2010-2013 by statistical area, year, month, and gear type.
6. Catch distribution maps
 - a. Maps showing the 2009 and 2011 distribution and yellowtail flounder catch rates per pound landed of observed tows for trips using a raised footrope trawl.
 - b. Maps showing the 2009-2013 geographical distribution of yellowtail flounder catch rates (per pound landed). Size of circles represent the yellowtail flounder catch rate, while colors represent months (dark green = Jan; yellows = late spring and summer; oranges = fall; red = Dec).
 - c. Same as b) but with the spring, fall, and winter survey kg/tow distribution for recent years.
7. Statistical test of significance that yellowtail flounder catch per pound landed of all species is less than standard trawls. Due to low sample size of observed hauls using the raised footrope trawl, the differences are not significant despite a 75% or more apparent reduction.
8. 2013 quota monitoring reports for loligo, northern and southern red hake, and northern and southern silver hake.

Item 1:

NE Multispecies Framework Adjustment 48 measure to allocate Georges Bank yellowtail flounder Sub-ACLs and require accountability measures in the small-mesh fisheries.

4.1.4.2 Option 2: Small-Mesh Fisheries Sub-ACL for GB Yellowtail Flounder (*Preferred Alternative*)

If this option is adopted, there would be a specific sub-ACL for GB yellowtail flounder for small-mesh bottom trawl fisheries. Catches of this stock by vessels using this gear would be no longer counted as part of the “other sub-components” category. AMs would be expected to be developed by the relevant FMPs within one year of the implementation of this sub-ACL. The sub-ACL would be based on the median small-mesh fisheries catches of GB yellowtail flounder from 2004 through 2011, or two percent (these fisheries are not permitted to land yellowtail flounder, so the percentage is based on discard estimates shown below).

For the purposes of this sub-ACL, small-mesh bottom trawl fisheries are defined as those vessels that use a bottom otter trawl with a cod-end mesh size of less than 5 inches. Typical target species for vessels using this gear on GB are whiting and squid.

The sub-ACL would be based on a percentage of the U.S. ABC for this stock. This percentage would be applied to the ABC to get a sub-ABC, and then the sub-ABC would be adjusted to account for management uncertainty in order to get the sub-ACL. The percentage will be based on recent catch history, shown below in Table 7. Because of limited observer coverage prior to 2004, the period 2004-2011 will be used as the basis for the catch history.

Table 7 – Recent small-mesh fisheries catches of GB yellowtail flounder (TRAC 2012)

Year	U.S. Landings	U.S. Discards	U.S. Catch	Small-Mesh Discards	Small-Mesh Discards as Percent of U.S. Catch
2004	5837	460	6297	55	0.01
2005	3161	414	3575	52	0.01
2006	1196	384	1580	26	0.02
2007	1058	493	1551	110	0.07
2008	937	409	1346	26	0.02
2009	959	759	1718	24	0.01
2010	654	289	943	30	0.03
2011	904	192	1096	33	0.03
				mean	0.03
				median	0.02
				90th ptile	0.04

Rationale: While small-mesh fishery catches of GB yellowtail flounder have generally been less than 100 mt in recent years, with declining ABCs for this stock they are an increasing percentage of the total U.S. catch. Adoption of a sub-ACL will enable control of those catches through the use of an AM. AMs will be developed by the relevant FMP.

Item 2:

Small-Mesh Fisheries ACL allocation and monitoring Georges Bank (GB) Yellowtail Flounder

Background

- Catches of GB yellowtail flounder by the small-mesh fisheries have generally been less than 100 mt in recent years (Table 1).
 - A codend mesh size of less than 5 in is defined as small-mesh.
- The GB yellowtail flounder quota has been declining quite dramatically in recent years (Table 2), and as a result, small-mesh discards of the stock are becoming an increasing proportion of the total U.S. catch.
- If the U.S. exceeds its quota for GB yellowtail flounder, the Sharing Agreement with Canada requires that the amount of the overage is deducted from the U.S. quota the following year.
- Due to concerns for the declining quota, and increasing significance of small-mesh discards of GB yellowtail flounder, Framework 48 to the Northeast Multispecies Fishery Management Plan adopted a GB yellowtail flounder sub-annual catch limit (sub-ACL) for the small-mesh fisheries.
 - This measure was intended to control the catch of GB yellowtail flounder by the small-mesh fisheries through an accountability measure that would be triggered if the small-mesh fisheries' allocation is exceeded.
 - Framework 48 specified that AMs would be developed by the respective Fishery Management Plans (FMPs) within 1 year of the implementation of this sub-ACL, or by May 1, 2014.
 - The small-mesh fisheries' allocation is 2 percent of the U.S. GB yellowtail flounder Acceptable Biological Catch (ABC).
 - This allocation is based on the small-mesh median catch of GB yellowtail flounder (as a percent of total U.S. catch) from 2004-2011.
 - The small-mesh fisheries sub-ACL is calculated as the small-mesh portion of the ABC (2 percent) reduced to account for management uncertainty.
 - Because small-mesh fisheries catch of GB yellowtail are discards only, the management uncertainty buffer is 7 percent.

Table 1. GB Yellowtail Flounder Catch by Small-Mesh Otter Trawl (mt) (TRAC 2013)

Calendar Year	U.S. Landings	U.S. Discards	U.S. Catch	Small-Mesh Discards	Small-Mesh Discards as Percent of U.S. Catch
2004	5,837	460	6,297	55	0.01
2005	3,161	414	3,575	52	0.01
2006	1,196	384	1,580	26	0.02
2007	1,058	493	1,551	110	0.07
2008	937	409	1,346	26	0.02
2009	959	759	1,718	24	0.01
2010	654	289	943	30	0.03
2011	904	192	1,096	33	0.03
2012	443	188	631	24	0.04
				Mean	0.03
				Median	0.02
				90th ptile	0.05

Table 2. GB Yellowtail Flounder Quota (mt)

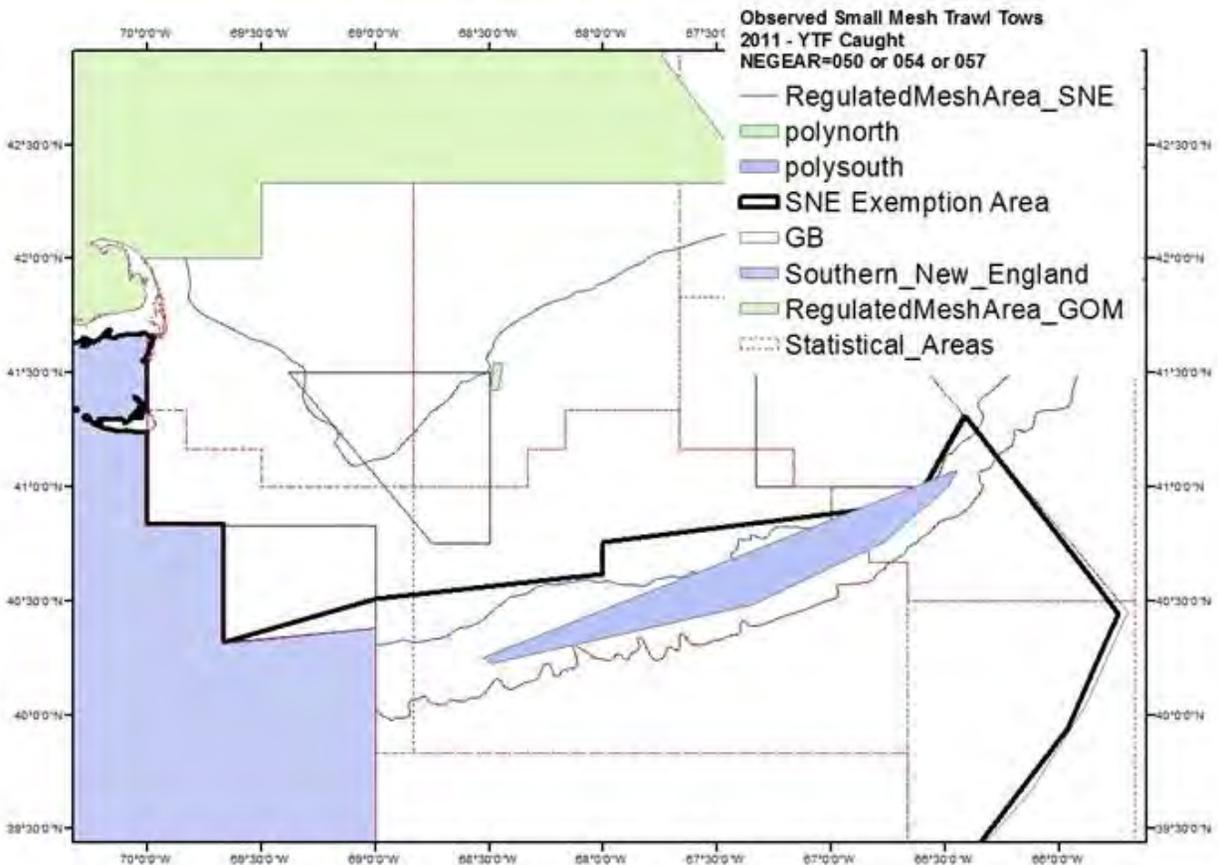
Fishing Year	Total U.S./Canada Quota	U.S.	
		% Share	Quota
2004	7,900	76%	6,000
2005	6,000	71%	4,260
2006	3,000	69%	2,070
2007	1,250	72%	900
2008	2,500	78%	1,950
2009	2,100	77%	1,617
2010	1,500	64%	1,200
2011	2,650	55%	1,458
2012	1,150	49%	564
2013	500	43%	215

Observed Small Mesh Tows that Caught GB Yellowtail Flounder

- In 2011, about 80 percent of the observed small-mesh discards of GB yellowtail flounder came from stat area 525, and in 2010, about 50 percent of the observed discards came from this area.
- Figure 1 shows the 2011 observed small-mesh tows that caught GB yellowtail flounder. The smallest polygons possible were drawn around tows with GB yellowtail flounder catch.

- “Polynorth” is a small area outside of Closed Area I. This area is the Cultivator Shoal whiting fishery.
- “Polysouth” is a larger area on the southern flank of Georges Bank. Trips in this area are a mix of squid and whiting.

Figure 1. 2011 Observed Small-Mesh Tows with GB Yellowtail Flounder Catch



Northeast Regional Office (NERO) Quota Monitoring

- Prior to the adoption of the small-mesh fisheries sub-ACL for GB yellowtail flounder, these catches were attributed to the “other sub-component.” This portion of the annual quota is set aside to account for groundfish catch that occurs in non-groundfish fisheries that do not have an allocation. There is no accountability measure for the other sub-component if the sub-component value is exceeded.
- NERO has developed “binning rules” to attempt to apportion the other sub-component catch to various FMPs/fisheries (Table 3).

- For non-VMS fisheries, NERO relies on permit type, gear type, mesh size, and revenue by species. However, for mixed fisheries, it is difficult to identify a directed trip for one fishery, and revenue by species does not necessarily indicate the intended target species for a trip.

Table 3. FY 2010 and FY 2011 “Other sub-Component” GB Yellowtail Flounder Catch (mt)

Fishing Year	Total	FLUKE	HERRING	SCUP	SQUID	SQUID/ WHITING	WHITING	UNKNOWN
2010	43.2	0.1	1.0	0.2	0.2	40.7	-	1.0
2011	34.4	0.1	0.6	0.0	0.9	30.8	0.1	1.9

- Squid/Whiting Binning Rules
 - Squid Trips
 - SMB-1 or SMB-5; no MUL
 - Otter trawl
 - Mesh size $\geq 1 \frac{7}{8}$ ”
 - Squid (*Illex* or *Loligo*) highest revenue by species
 - *Additional criteria*: If vessel has MUL permit, but no hake landed, trip is assumed to be squid trip if meets all the other above criteria
 - Whiting Trips
 - MUL-A or MUL-C or MUL-D or MUL-E or MUL-F or MUL-K; no SMB
 - Otter trawl
 - Mesh size ≥ 2 but ≤ 3 ”
 - Whiting highest revenue by species
 - *Additional criteria*: If vessel has SMB permit, but no squid landed, trip is assumed to be whiting trip if meets all the other above criteria
 -
 - Squid/Whiting Trips
 - SMB-1 or SMB-5
 - MUL-A or MUL-C or MUL-D or MUL-E or MUL-F or MUL-K
 - Otter trawl
 - Mesh size $\geq 1 \frac{7}{8}$ ”
 - Combined revenue of squid (*Illex* and *Loligo*) and whiting highest by species

APPENDIX I

Overview of Transboundary Management Guidance Committee (TMGC)

Purpose

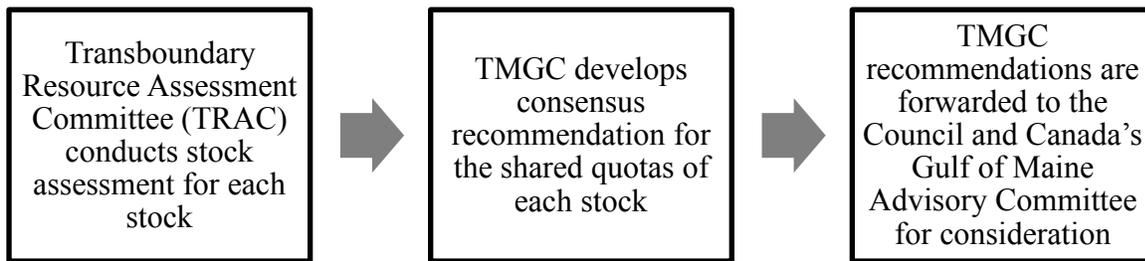
- Develop non-binding annual guidance on catch levels for three transboundary stocks:
 1. Georges Bank (GB) yellowtail flounder;
 2. Eastern GB cod; and
 3. Eastern GB haddock

Membership

- 6 members from each country (2 government and 4 industry)
- US Members:

Industry	Government
Terry Stockwell (co-chair) Terry Alexander Tom Dempsey Mary Beth Tooley	Sarah Heil (NERO) Fred Serchuk (NEFSC)

Annual Process



Note: The U.S./Canada Management Area encompasses the entire stock area for GB yellowtail flounder. As a result, the shared U.S./Canada quota is also the total ABC for the stock. Each year, usually prior to the TMGC meeting, the New England Fishery Management Council’s Scientific and Statistical Committee meets to recommend an ABC for GB yellowtail flounder. This recommendation is the upper bound for the U.S. when negotiating the shared quota for GB yellowtail flounder.

Harvest Strategy

- Maintain a low to neutral risk of exceeding the fishing mortality limit
- When stock conditions are poor, fishing mortality rates should be further reduced to promote rebuilding

Sharing the Fish

- Each year the TRAC calculates the percentage of the shared quota that each country will receive
- A pre-determined sharing formula splits the shared quota between the U.S. and Canada
 - Two components to the sharing formula:
 1. Historical catch (fixed value)
 2. Current distribution of stock between U.S. and Canadian waters (DFO and NEFSC surveys)
- Each component is weighted based on its importance

- Distribution of stock has gradually become more important over time
 - 2004: 60/40 weighting (Distribution/Historical Catch)
 - 2010 and beyond: 90/10 weighting (Distribution/Historical Catch)

Item 3:

Georges Bank yellowtail flounder Sub-ACL tables

FY 2013 Total ACLs, sub-ACLs, and ACL sub-components (mt, live weight)

Stock	Total ACL	Groundfish sub-ACL	Preliminary Sector sub-ACL	Common Pool sub-ACL	Recreational Fishery sub-ACL	Midwater Trawl Fishery sub-ACL	Scallop Fishery sub-ACL	Small-Mesh Fisheries sub-ACL	State Waters sub-component	Other sub-component
	A to H	A+B+C	A	B	C	D	E	F	G	H
GB Cod	1,907	1,807	1,777	30					20	80
GOM Cod	1,470	1,316	814	16	486				103	51
GB Haddock	27,936	26,196	26,124	72		273			293	1,173
GOM Haddock	274	261	186	1	74	3			4	6
GB Yellowtail Flounder Emergency Action	208.5	116.8	115.4	1.3			83.4	4.0		4.3
SNE/MA Yellowtail Flounder	665	570	456	114			61		7	28
CC/GOM Yellowtail Flounder	523	479	467	12					33	11
American Plaice	1,482	1,420	1,396	24					31	31
Witch Flounder	751	610	601	9					23	117
GB Winter Flounder	3,641	3,528	3,508	20						113
GOM Winter Flounder	1,040	715	690	24					272	54
SNE/MA Winter Flounder	1,612	1,210	1,068	142					235	168
Redfish	10,462	10,132	10,091	41					110	220
White Hake Emergency Action	3,974	3,849	3,818	31					42	84
White Hake Proposed in Framework 50	3,462	3,352	3,326	27					36	73
Pollock	14,921	12,893	12,810	83					936	1,092
Northern Windowpane Flounder	144	98		98					2	44
Southern Windowpane Flounder	527	102		102			183		55	186
Ocean Pout	220	197		197					2	21
Atlantic Halibut	96	52		52					40	5
Atlantic Wolffish	65	62		62					1	3

Item 4:

Georges Bank yellowtail flounder catch estimates for the small-mesh fisheries

To be distributed at meeting

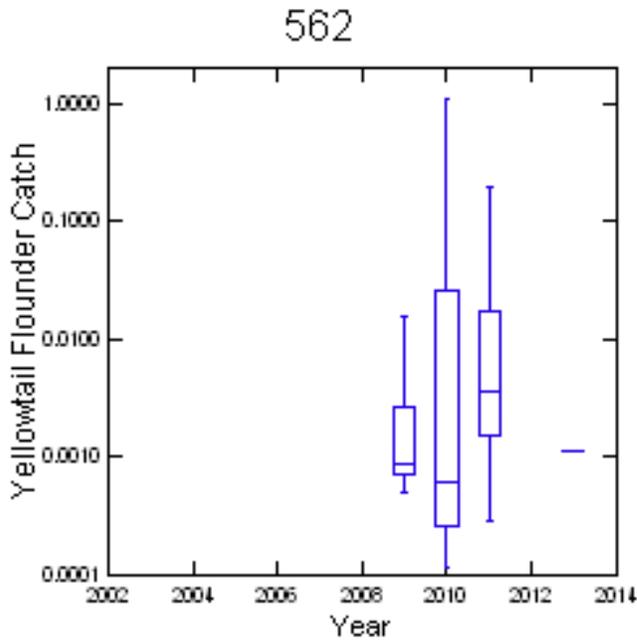
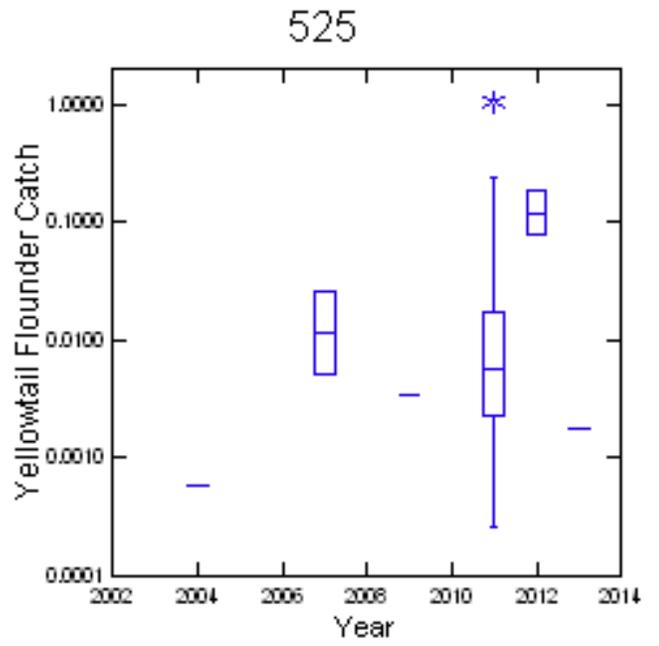
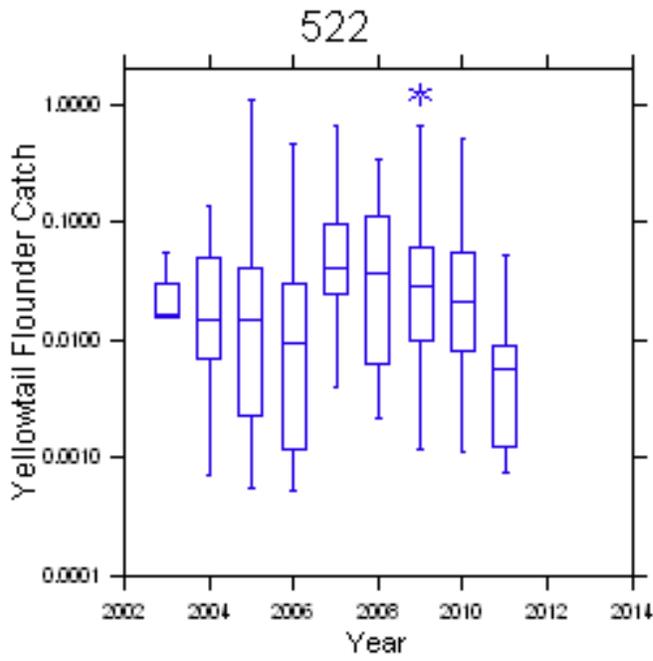
Item 5:

Yellowtail flounder catch ratio statistics

Table 4. Georges Bank yellowtail flounder catch per pound landed of all species by statistical area (see Maps) Catch rates are high in SA 522. N of cases is number of observed hauls. Coefficient of variation is high due to variability in catch rates and outliers

2010-2013	Statistical Area	522	525	562
Statistics				
N of Cases		113	148	140
Mean		0.028	0.012	0.010
95.0% LCL of Mean		0.013	-0.003	-0.006
95.0% UCL of Mean		0.042	0.026	0.026
75th Percentile		0.021	0.000	0.000
80th Percentile		0.034	0.000	0.000
90th percentile		0.065	0.004	0.000
95th Percentile		0.111	0.018	0.004
99th Percentile		0.480	0.259	0.293
Maximum		0.500	1.028	1.119
Median		0.003	0.000	0.000
Minimum		0.000	0.000	0.000
Coefficient of Variation		2.794	7.577	9.484

Log Scale



Normal Scale

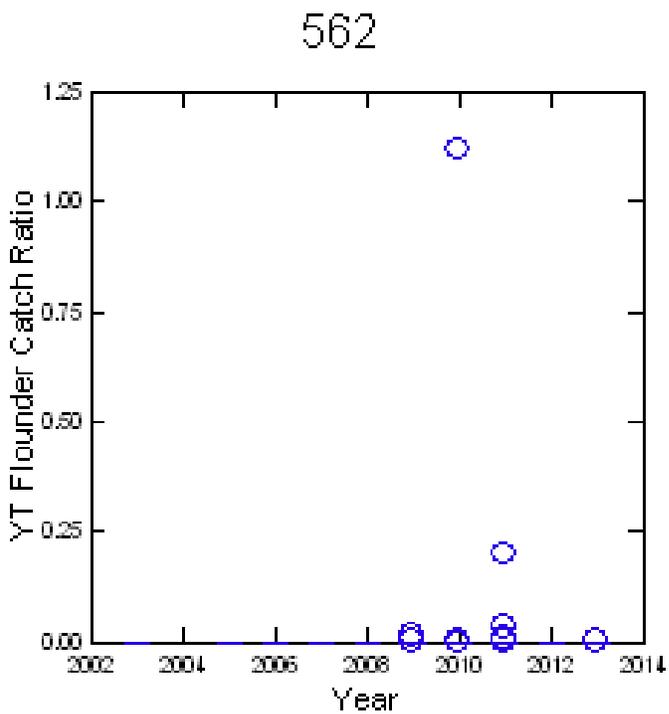
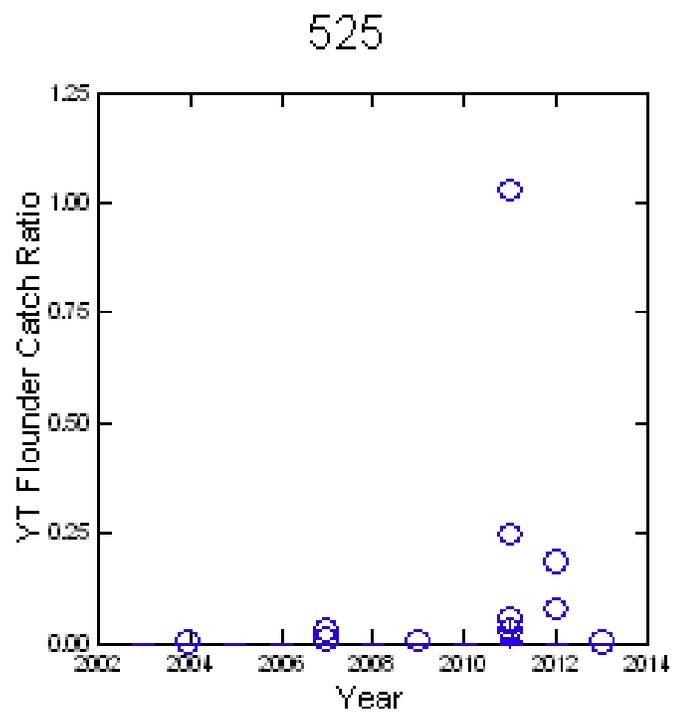
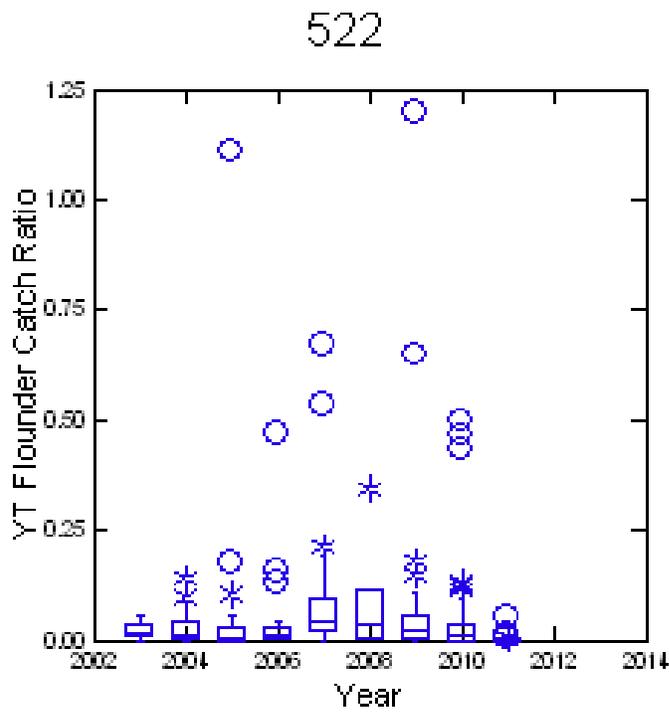


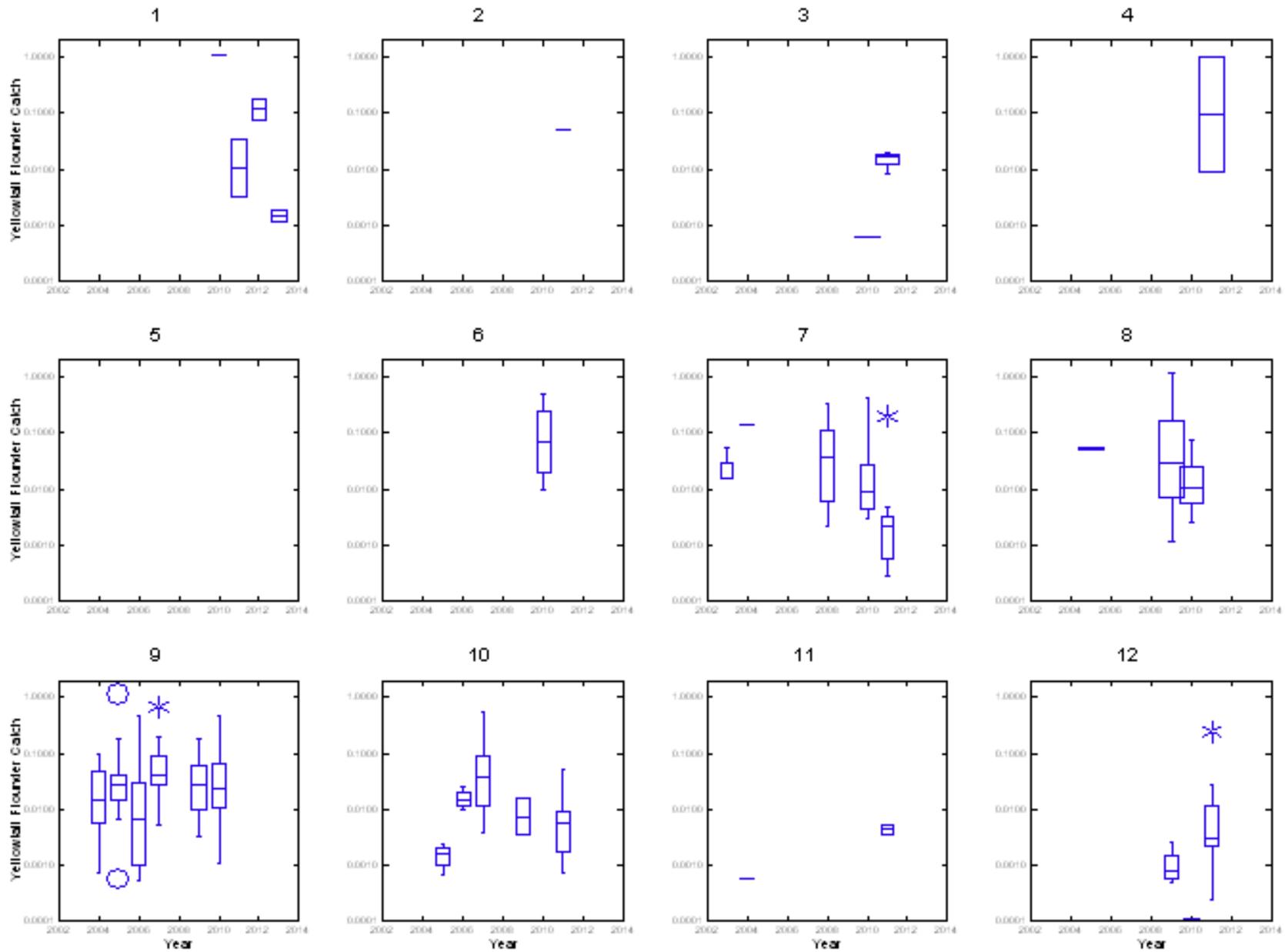
Table 5. Georges Bank yellowtail flounder catch per pound landed of all species by calendar year. Catch rates were lower in 2012 and 2013 due to fewer Cultivator Shoals Area observed trips. N of cases is number of observed hauls. Coefficient of variation is high due to variability in catch rates and outliers.

Areas 522, 525 and 562 from 2010-2013		Year			
Statistics		2010	2011	2012	2013
N of Cases		226	121	28	26
Mean		0.018	0.015	0.009	0.000
95.0% LCL of Mean		0.006	-0.002	-0.005	0.000
95.0% UCL of Mean		0.031	0.033	0.023	0.000
75th Percentile		0.001	0.003	0.000	0.000
80th Percentile		0.004	0.005	0.000	0.000
90th Percentile		0.034	0.013	0.000	0.000
95th Percentile		0.068	0.033	0.087	0.001
99th Percentile		0.475	0.471	0.182	0.002
Maximum		1.119	1.028	0.182	0.002
Median		0.000	0.000	0.000	0.000
Minimum		0.000	0.000	0.000	0.000
Coefficient of Variation		5.048	6.298	3.985	3.636

Table 6. Georges Bank yellowtail flounder catch per pound landed of all species by month. Catch rates were highest in June to August. N of cases is number of observed hauls. Coefficient of variation is high due to variability in catch rates and outliers.

Areas 522, 525 and 562 from 2010-2013		Month											
Statistics		1	2	3	4	5	6	7	8	9	10	11	12
N of Cases		57	23	34	34	45	29	42	13	49	43	14	18
Mean		0.025	0.002	0.001	0.030	0.000	0.023	0.017	0.017	0.033	0.004	0.001	0.017
95.0% LCL of Mean		-0.015	-0.002	0.000	-0.031	0.000	-0.013	-0.005	0.004	0.013	0.001	0.000	-0.011
95.0% UCL of Mean		0.065	0.007	0.003	0.092	0.000	0.060	0.040	0.030	0.054	0.007	0.002	0.046
75th Percentile		0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.023	0.047	0.003	0.000	0.005
80th Percentile		0.000	0.000	0.000	0.000	0.000	0.000	0.004	0.037	0.059	0.006	0.000	0.008
90th Percentile		0.002	0.000	0.001	0.000	0.000	0.027	0.013	0.047	0.080	0.010	0.004	0.024
95th Percentile		0.061	0.018	0.016	0.007	0.000	0.149	0.102	0.070	0.114	0.021	0.005	0.157
99th Percentile		1.054	0.052	0.019	1.028	0.000	0.500	0.434	0.075	0.468	0.053	0.005	0.244
Maximum		1.119	0.052	0.019	1.028	0.000	0.500	0.434	0.075	0.468	0.053	0.005	0.244
Median		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.009	0.011	0.000	0.000	0.001
Minimum		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Coefficient of Variation		6.029	4.796	3.385	5.778	0.000	4.055	4.176	1.293	2.160	2.456	2.590	3.298

Log Scale



Normal Scale

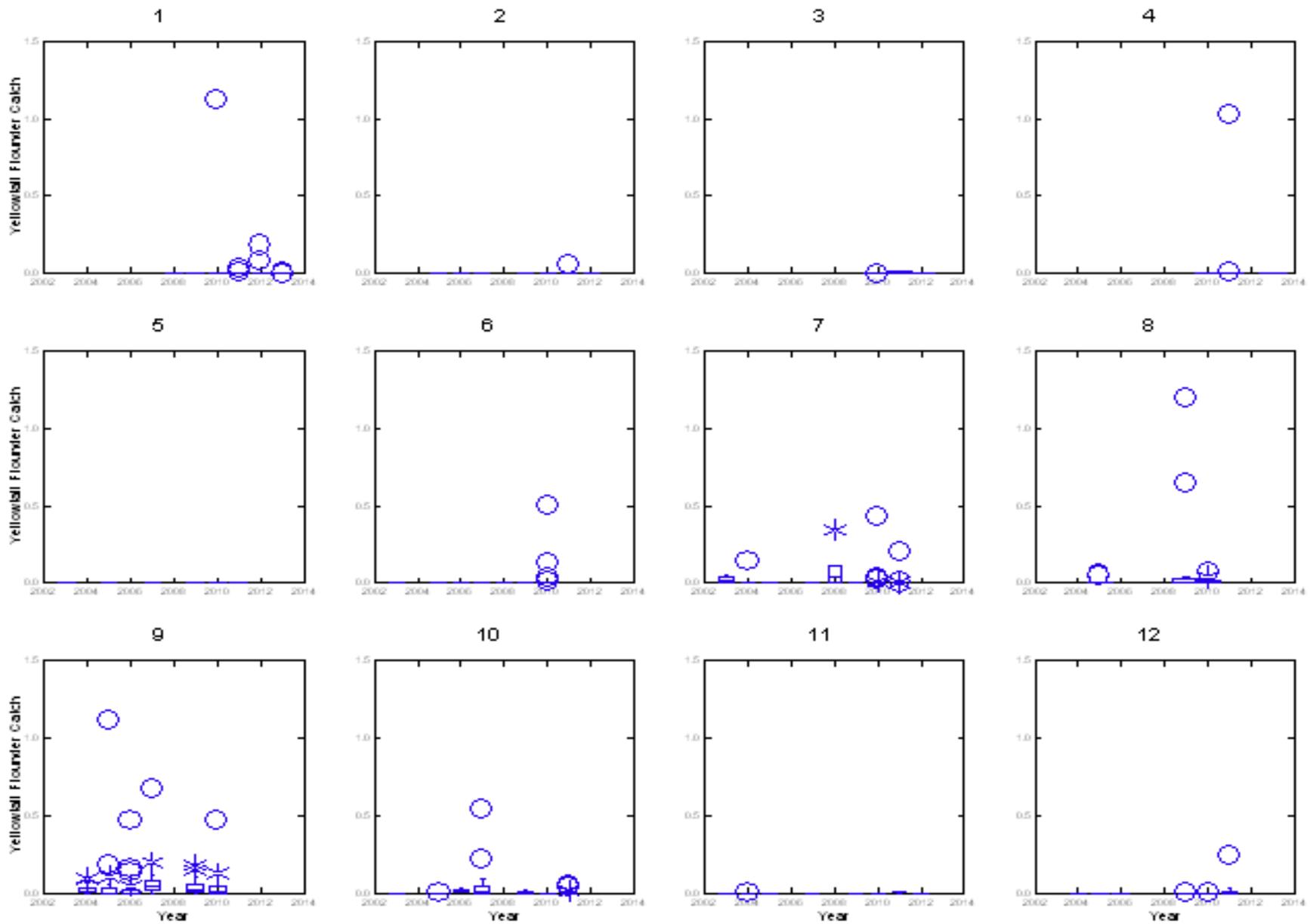
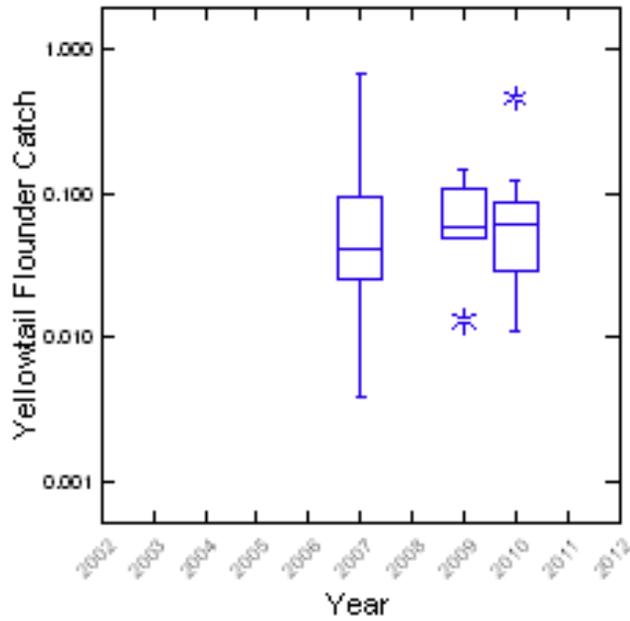


Table 7. Georges Bank yellowtail flounder catch per pound landed of all species by trawl type. Catch rates using a raised footrope trawl (3 observed trips) were one-third of those using a standard small-mesh net, but there is considerable overlap in confidence intervals. N of cases is number of observed hauls. Coefficient of variation is high due to variability in catch rates and outliers.

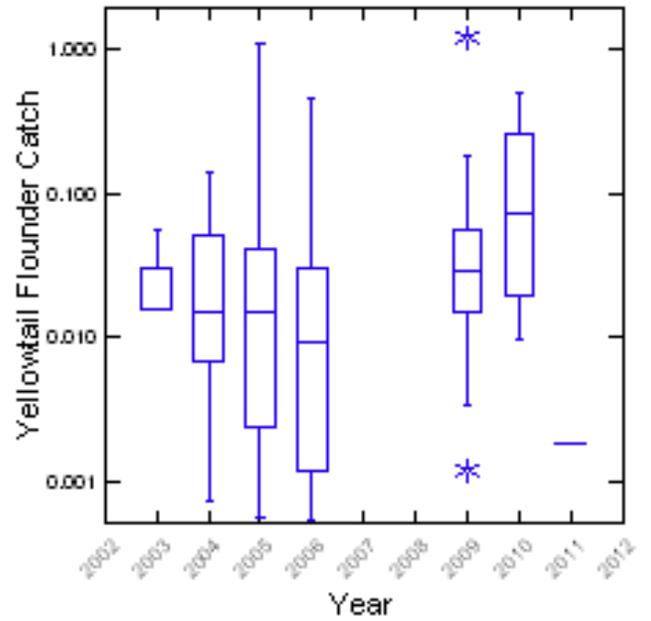
Area 522 from 2010-2013		Net Group			
Statistics	Standard SM	Groundfish/flatfish SM	Raised footrope SM	Other SM	
N of Cases	63	23	18	9	
Arithmetic Mean	0.017	0.056	0.006	0.076	
95.0% LCL of Arithmetic	0.003	0.013	0.000	-0.051	
95.0% UCL of Arithmetic	0.031	0.098	0.012	0.202	
75th Percentile	0.012	0.065	0.008	0.062	
80th Percentile	0.017	0.078	0.009	0.103	
90th Percentile	0.039	0.116	0.013	0.352	
95th Percentile	0.069	0.244	0.037	0.500	
99th Percentile	0.388	0.468	0.053	0.500	
Maximum	0.434	0.468	0.053	0.500	
Median	0.003	0.023	0.001	0.002	
Minimum	0.000	0.000	0.000	0.000	
Coefficient of Variation	3.260	1.763	2.097	2.176	

Log Scale (Area 522 Only)

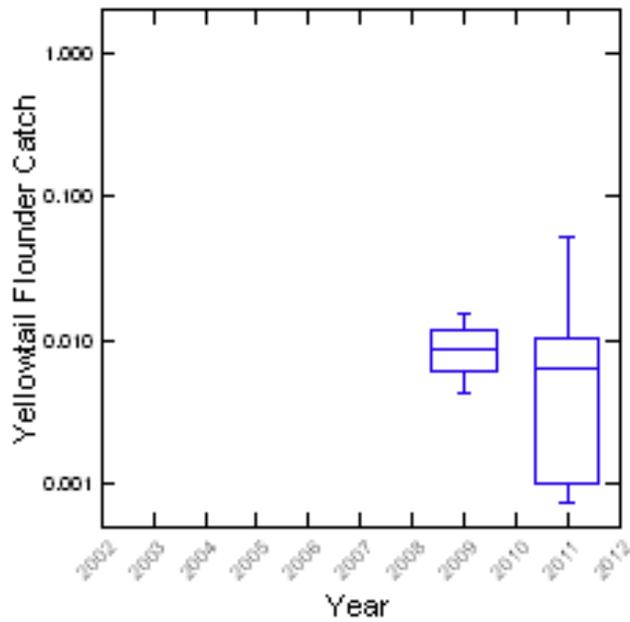
Groundfish/flatfish SM



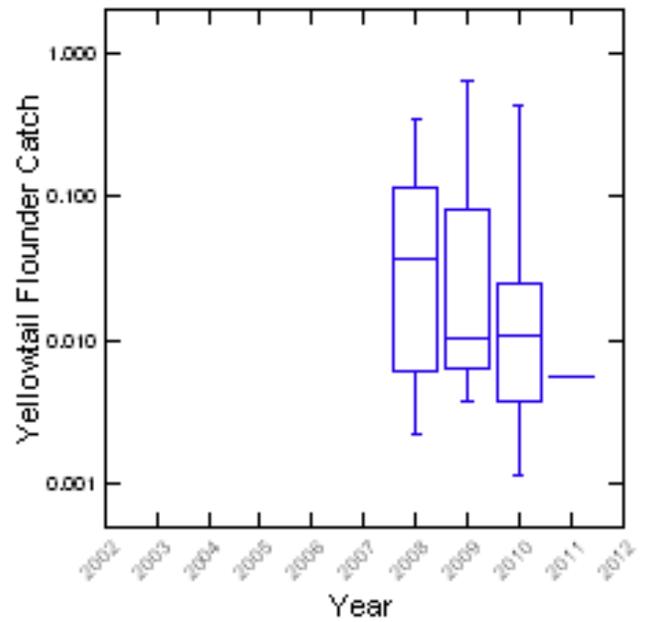
Other SM



Raised footrope SM

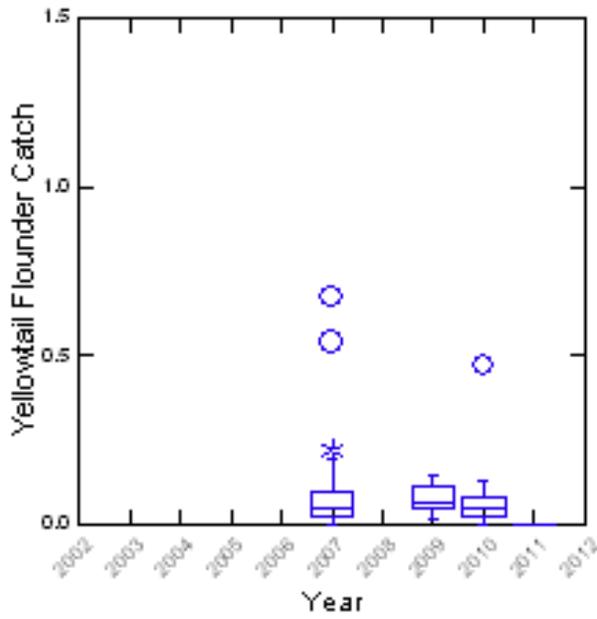


Standard SM

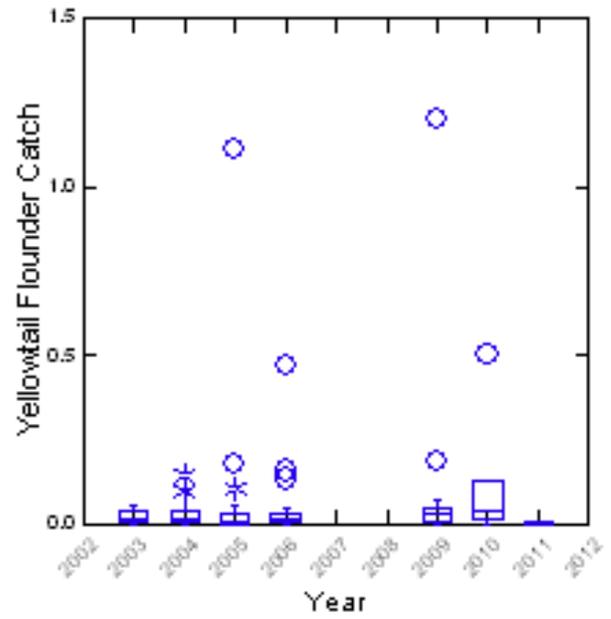


Normal Scale (Area 522 Only)

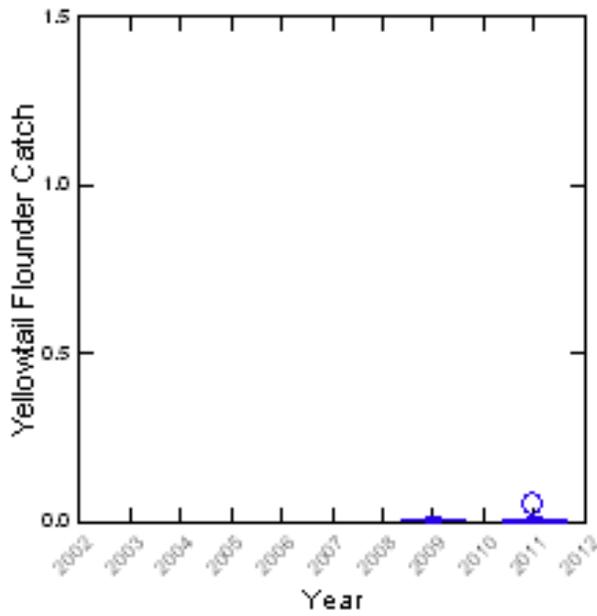
Groundfish/flatfish SM



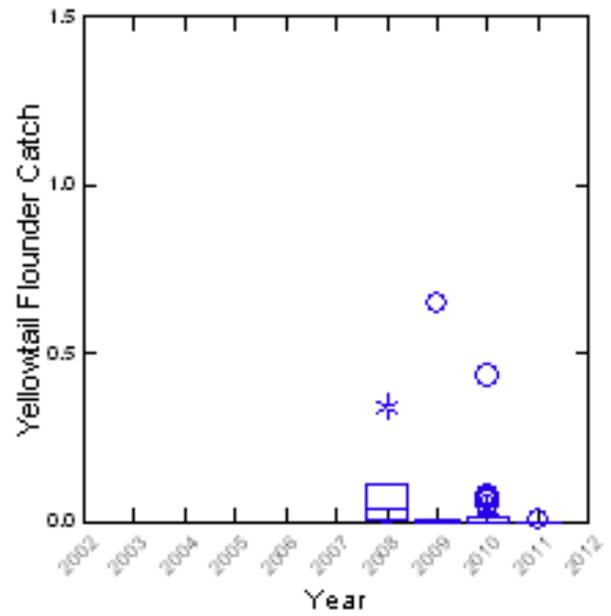
Other SM



Raised footrope SM

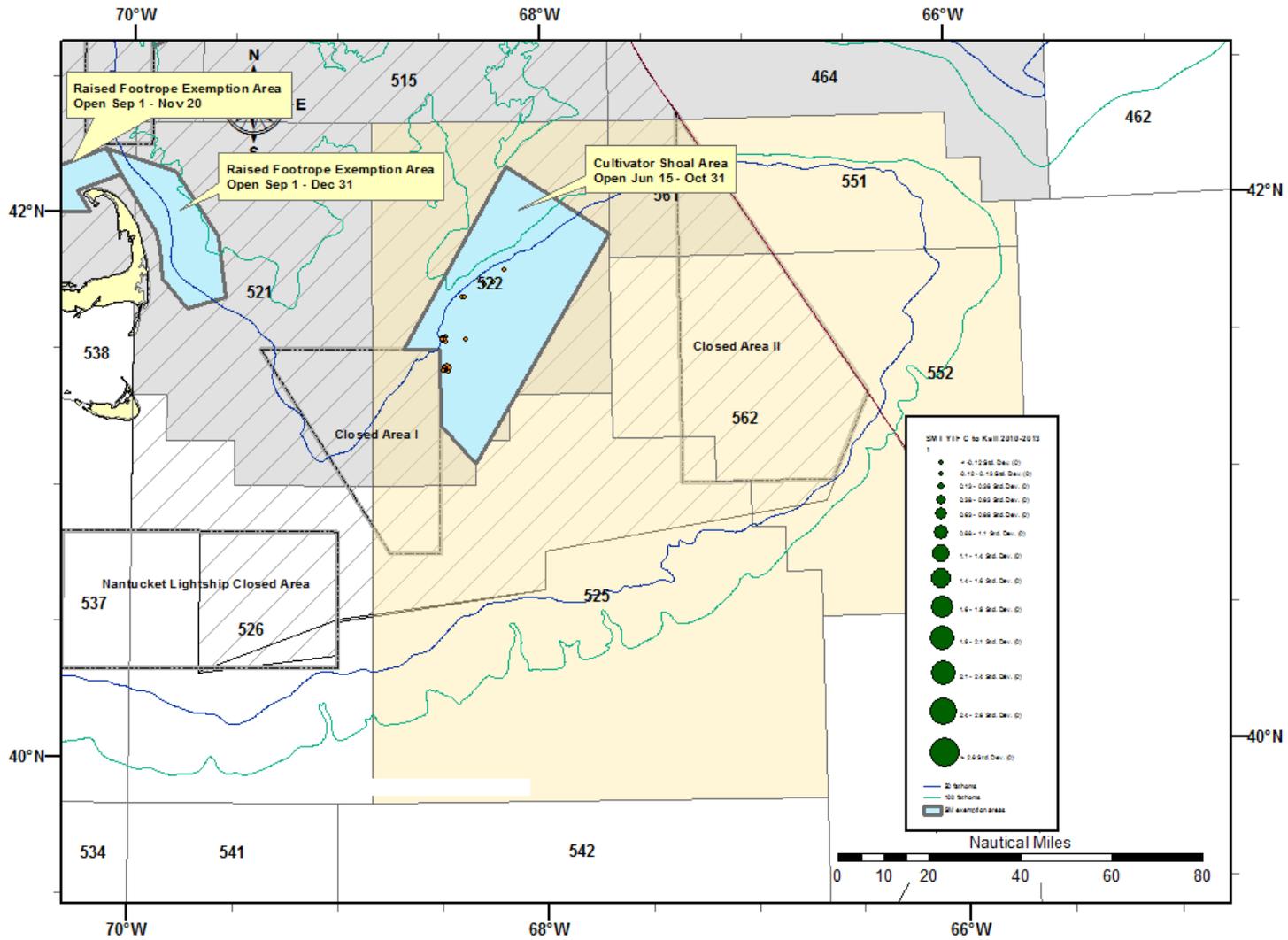


Standard SM



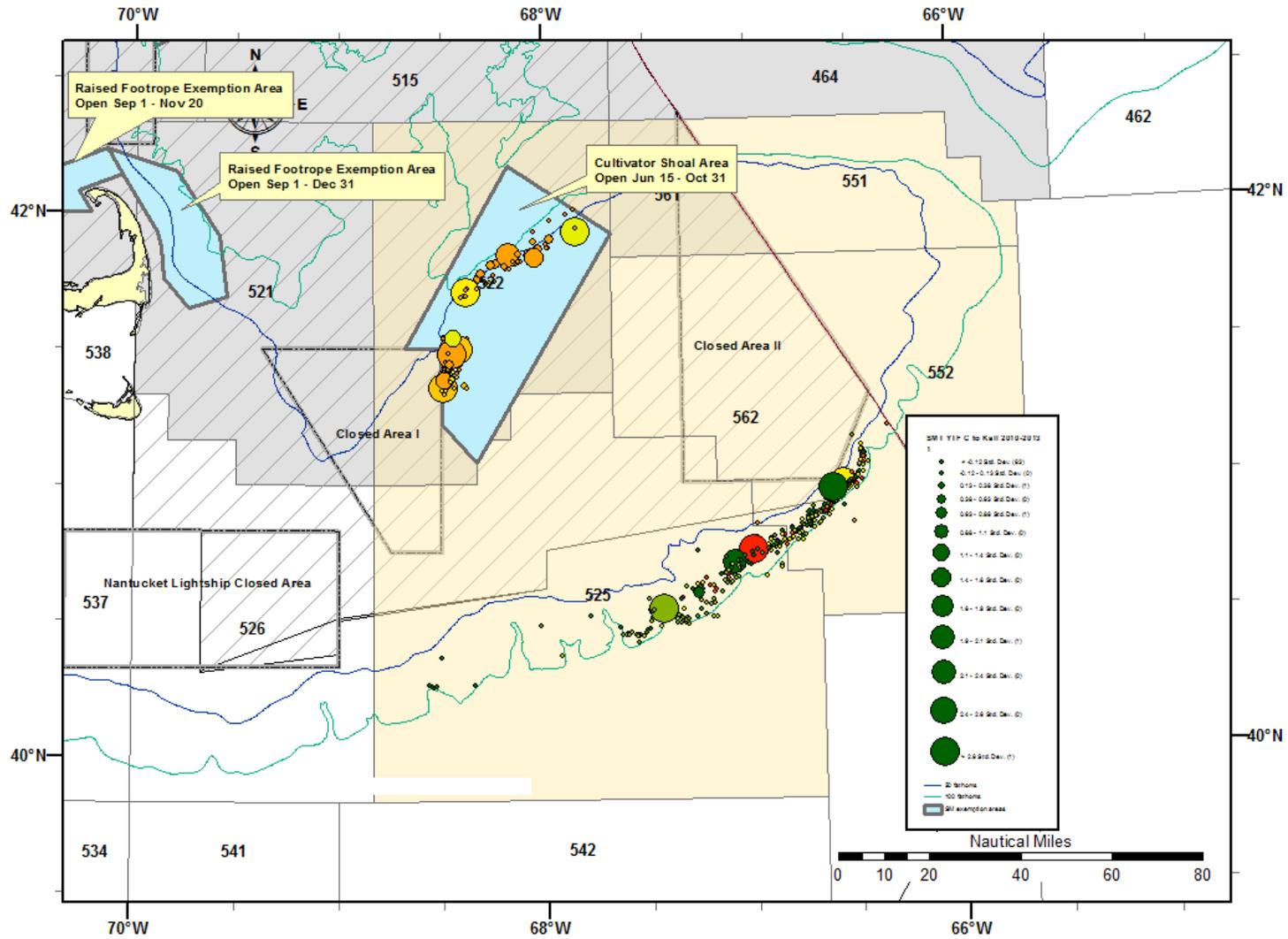
Item 6a:

Map 1. Distribution of observed tows for trips using a raised footrope trawl in 2009 and 2011.



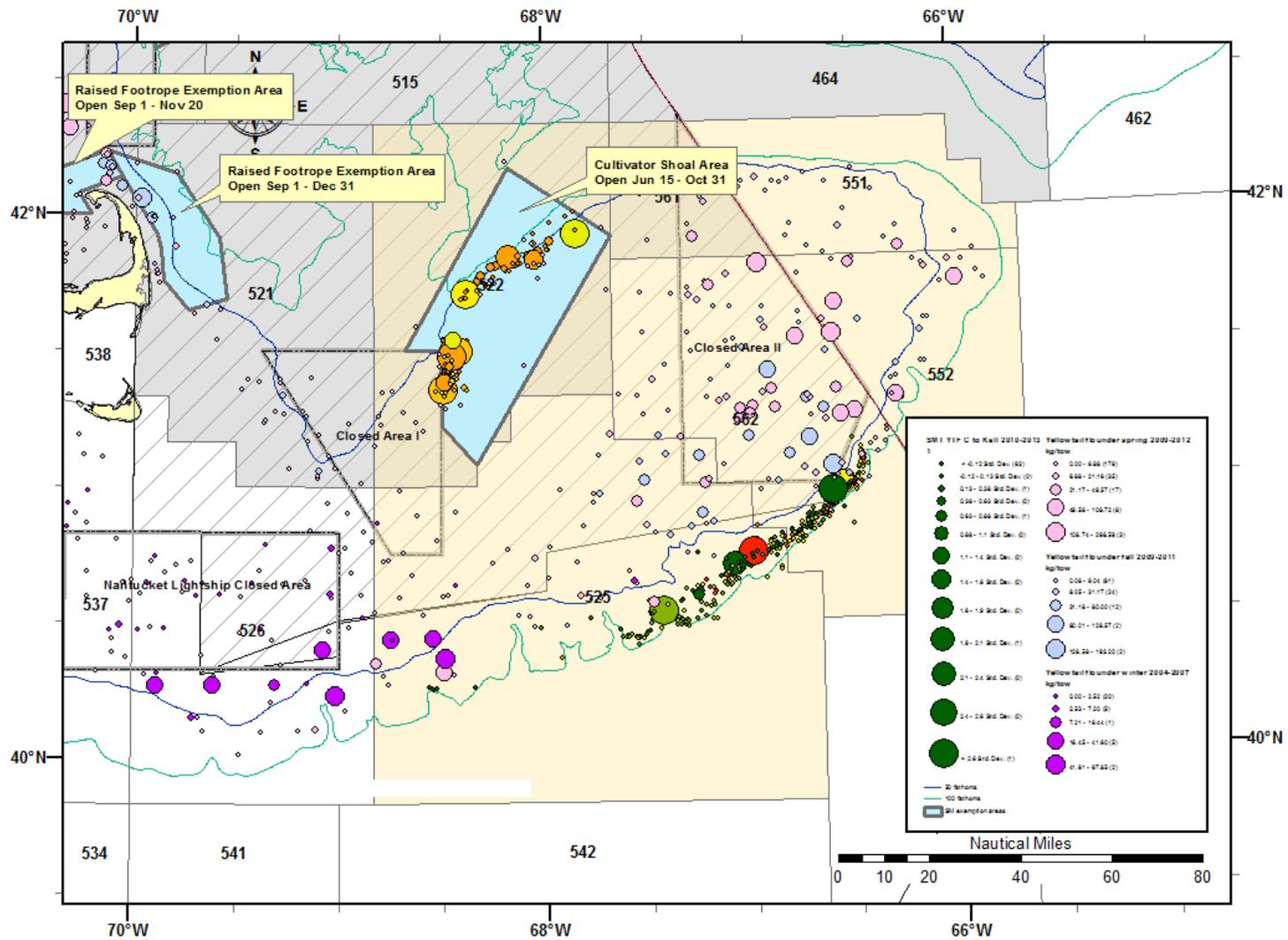
Item 6b:

Map 2. Distribution of yellowtail flounder catch per pound landed of all species. Size of circles represent the yellowtail flounder catch rate, while colors represent months (dark green = Jan; yellows = late spring and summer; oranges = fall; red = Dec).



Item 6c:

Map 3 Same as item 6b but with yellowtail flounder fl catch per tow in the spring, fall, and winter trawl surveys.



Item 7: Test of significant difference of yellowtail flounder catch rates between trawl types.

Note: In 2009, there were 39 total trips. 1 trip w/ 5 tows using the raised footrope trawl.

In 2011, there were 33 total trips. 2 trips w/ 18 tows using the raised footrope trawl.

Data for Year 2009 in Area 522

Results for YEAR_OBS = 2009

Data for the following results were selected according to
SELECT (SAREA = 522) AND (YEAR_OBS >= 2009)

H0: Mean1 = Mean2 vs. H1: Mean1 <> Mean2

Grouping Variable = NETCATEGORY\$

Variable	NETCATEGORY\$	N	Mean	Standard Deviation
YELLOWTAIL_FLOUNDER_CATCH	Other trawl	34.000	0.088	0.226
	Raised footrope trawl	5.000	0.007	0.006

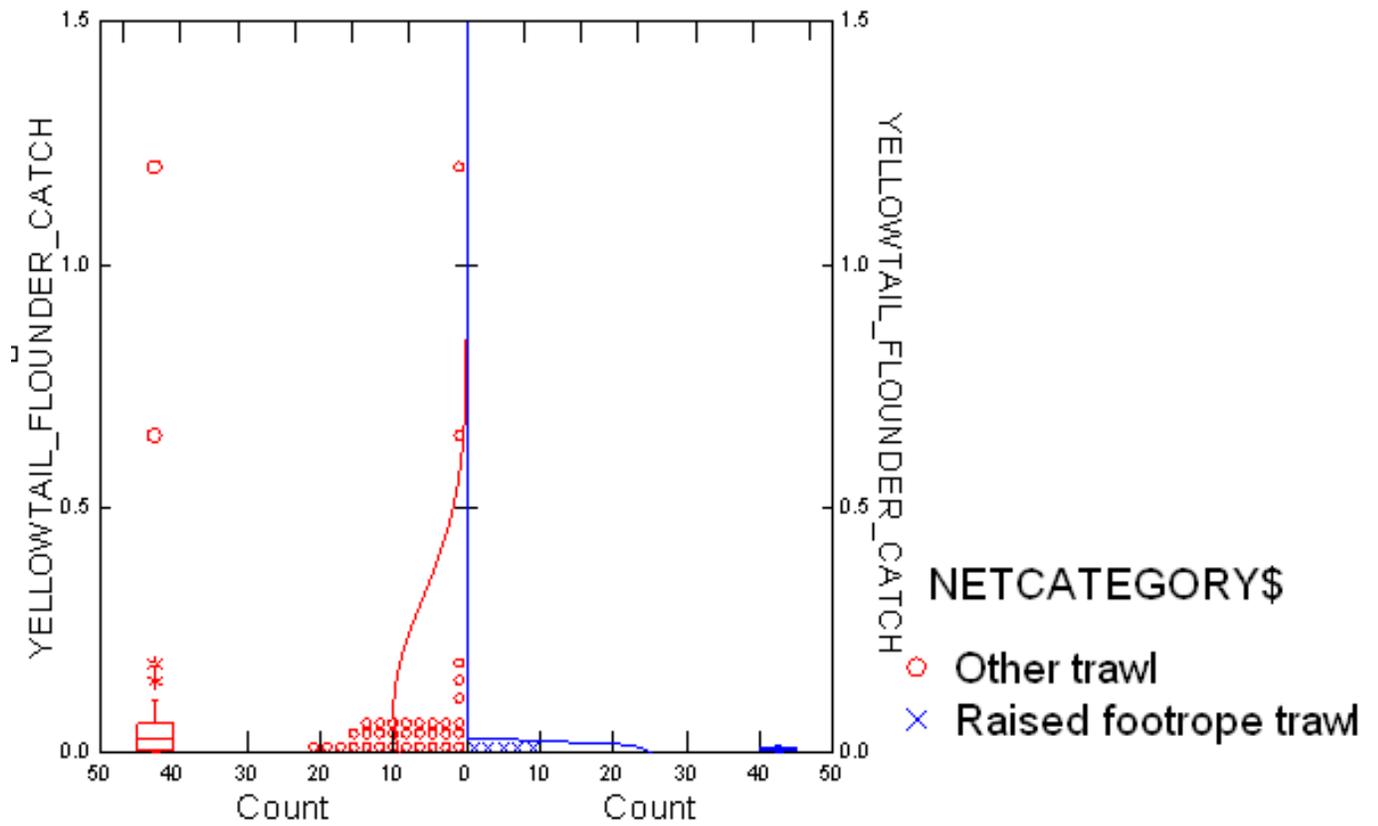
Separate Variance

Variable	NETCATEGORY\$	Mean Difference	95.00% Confidence Interval		t	df	p-Value
			Lower Limit	Upper Limit			
YELLOWTAIL_FLOUNDER_CATCH	Other trawl	0.080	0.001	0.160	2.066	33.274	0.047
	Raised footrope trawl						

Pooled Variance

Variable	NETCATEGORY\$	Mean Difference	95.00% Confidence Interval		t	df	p-Value
			Lower Limit	Upper Limit			
YELLOWTAIL_FLOUNDER_CATCH	Other trawl	0.080	-0.127	0.288	0.785	37.000	0.437
	Raised footrope trawl						

Two-Sample t-Test



Data for Year 2011 in Area 522

Results for YEAR_OBS = 2011

Data for the following results were selected according to
 SELECT (SAREA = 522) AND (YEAR_OBS >= 2009)

H0: Mean1 = Mean2 vs. H1: Mean1 <> Mean2

Grouping Variable = NETCATEGORY\$

Variable	NETCATEGORY\$	N	Mean	Standard Deviation
YELLOWTAIL_FLOUNDER_CATCH	Other trawl	15.000	0.000	0.002
	Raised footrope trawl	18.000	0.006	0.013

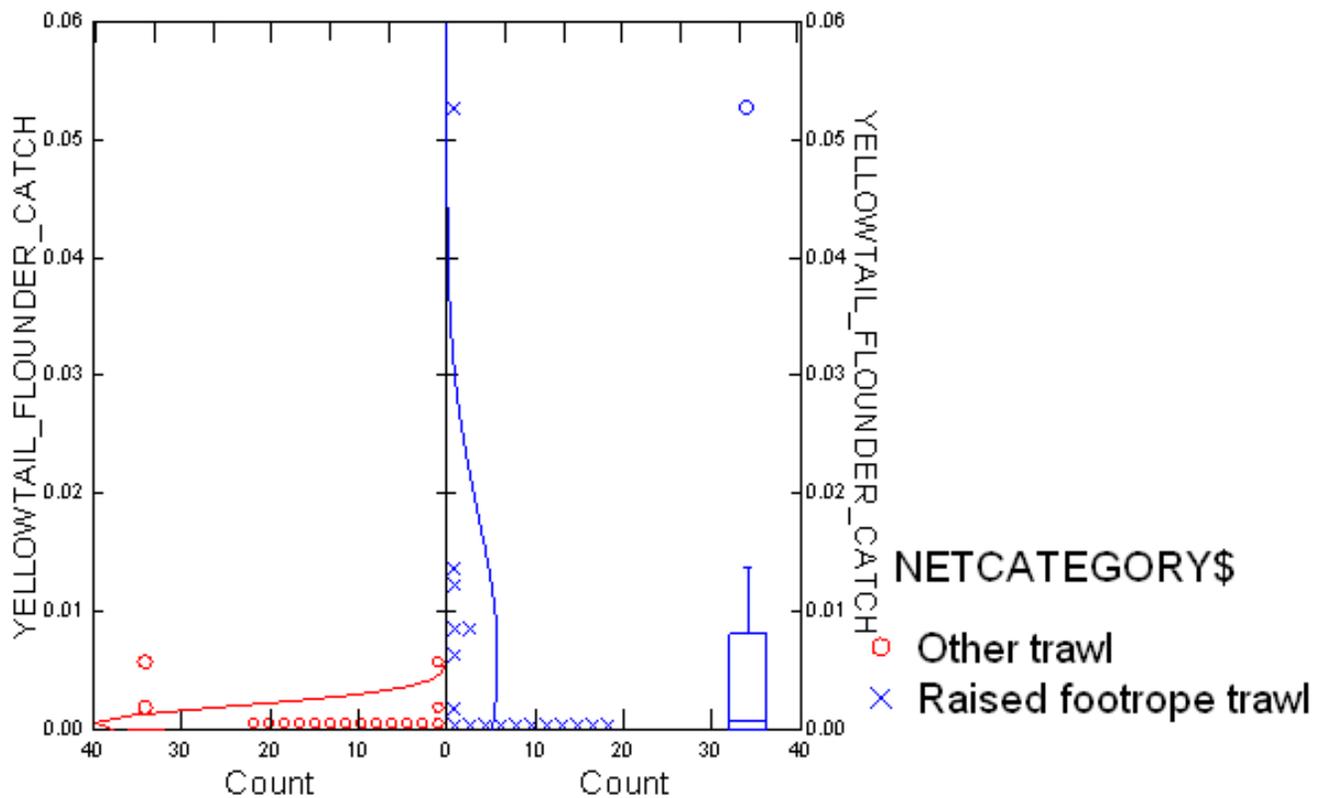
Separate Variance

Variable	NETCATEGORY\$	Mean Difference	95.00% Confidence Interval		t	df	p-Value
			Lower Limit	Upper Limit			
YELLOWTAIL_FLOUNDER_CATCH	Other trawl	-0.005	-0.012	0.001	-1.838	17.588	0.083
	Raised footrope trawl						

Pooled Variance

Variable	NETCATEGORY\$	Mean Difference	95.00% Confidence Interval		t	df	p-Value
			Lower Limit	Upper Limit			
YELLOWTAIL_FLOUNDER_CATCH	Other trawl	-0.005	-0.012	0.001	-1.678	31.000	0.103
	Raised footrope trawl						

Two-Sample t-Test



Pooled data for Years 2009 and 2011 in Area 522

Data for the following results were selected according to
 SELECT (SAREA = 522) AND (YEAR_OBS >= 2009) AND (YEAR_OBS <> 2010) AND (YEAR_OBS <> 2012)

H0: Mean1 = Mean2 vs. H1: Mean1 <> Mean2

Grouping Variable = NETCATEGORY\$

Variable	NETCATEGORY\$	N	Mean	Standard Deviation
YELLOWTAIL_FLOUNDER_CATCH	Other trawl	49.000	0.061	0.192
	Raised footrope trawl	23.000	0.006	0.011

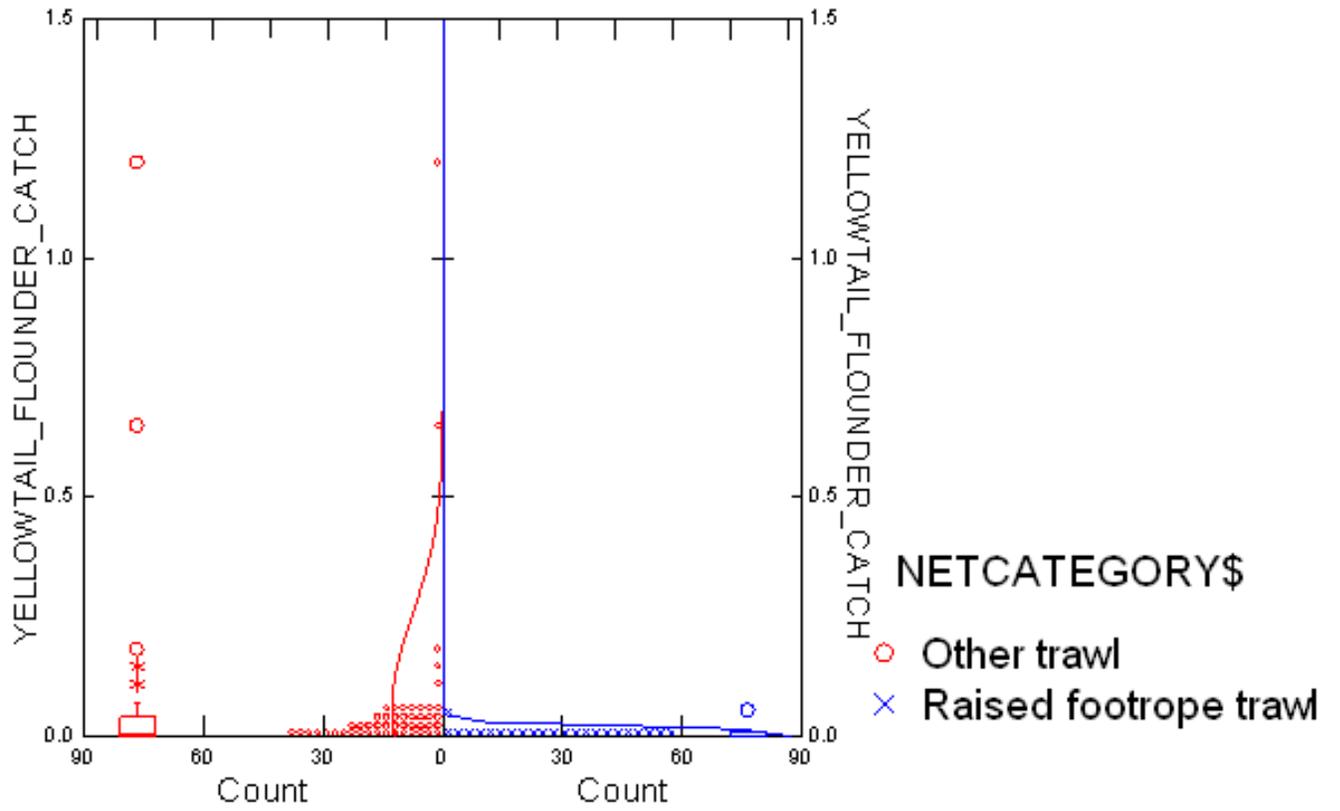
Separate Variance

Variable	NETCATEGORY\$	Mean Difference	95.00% Confidence Interval		t	df	p-Value
			Lower Limit	Upper Limit			
YELLOWTAIL_FLOUNDER_CATCH	Other trawl	0.055	-0.001	0.110	1.988	48.701	0.052
	Raised footrope trawl						

Pooled Variance

Variable	NETCATEGORY\$	Mean Difference	95.00% Confidence Interval		t	df	p-Value
			Lower Limit	Upper Limit			
YELLOWTAIL_FLOUNDER_CATCH	Other trawl	0.055	-0.025	0.135	1.361	70.000	0.178
	Raised footrope trawl						

Two-Sample t-Test



Item 8:

Quota monitoring reports

Longfin squid

Longfin Squid (formerly Loligo) Coastwide Weekly Landings Report	For week ending:	August 24, 2013
	For data reported through:	August 28, 2013
	Quota Period:	Trimester II
	Quota Period Dates:	05/01/13 to 08/31/13

	Commercial						Research
State	Previously Reported Landings (Pounds)	Previous Weeks' Updates (Pounds)	Current Week's Landings (Pounds)	Cumulative Landings (Pounds)	Quota (Pounds)	Percent of Quota (%)	Annual Set-Aside Landings (Pounds)
ME	897	0	0	897			0
NH	209	0	49	258			0
MA	101,909	15	983	102,907			0
RI	2,023,460	14,408	282,755	2,320,623			0
CT	125,881	0	17,909	143,790			0
NY	1,856,161	88,236	147,650	2,092,047			0
NJ	45,059	0	47,799	92,858			0
DE	0	0	0	0			0
MD	103	0	15	118			0
VA	38,851	1,700	0	40,551			0
NC	0	0	0	0			0
Other	0	0	0	0			0

	Commercial						Research
State	Previously Reported Landings (Pounds)	Previous Weeks' Updates (Pounds)	Current Week's Landings (Pounds)	Cumulative Landings (Pounds)	Quota (Pounds)	Percent of Quota (%)	Annual Set-Aside Landings (Pounds)
<i>Total</i>	<i>4,192,530</i>	<i>104,359</i>	<i>497,160</i>	<i>4,794,049</i>	<i>12,394,388</i>	<i>39</i>	<i>0</i>

Regulations

Notice

1. The 2013 specifications for longfin squid are effective as of January 16, 2013.

In Trimester II, the directed longfin squid fishery is closed if:

- Longfin squid landings are projected to reach 5,060 mt (11,154,950 lb) (from May 1 to August 15)

-OR-

- Longfin squid landings are projected to reach 5,341 mt (11,774,669 lb) (from August 15 to August 31)

-OR-

- The butterflyfish mortality cap reaches 2,913 mt (6,422,066 lb) (75% of the annual butterflyfish mortality cap allocation)

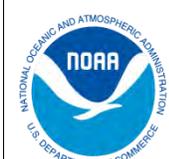
The Trimester II closure threshold will change on August 15 of each year from 90 to 95% to avoid 1-2 week closures at the end of a Trimester.

NOTE:

The longfin squid pre-trip observer notification requirement changed from 72 to 48 hours as of February 15, 2013.

For information on the current status of the butterflyfish mortality cap quota [Click Here.](#)

Negative landings can be the result of updates to the database (e.g. reported Research Set-Aside landings are subtracted from the Commercial Current Week's Landings or Previous Weeks' Updates). As a result, the Commercial Current Week's Landings or Previous Weeks' Updates can be negative.

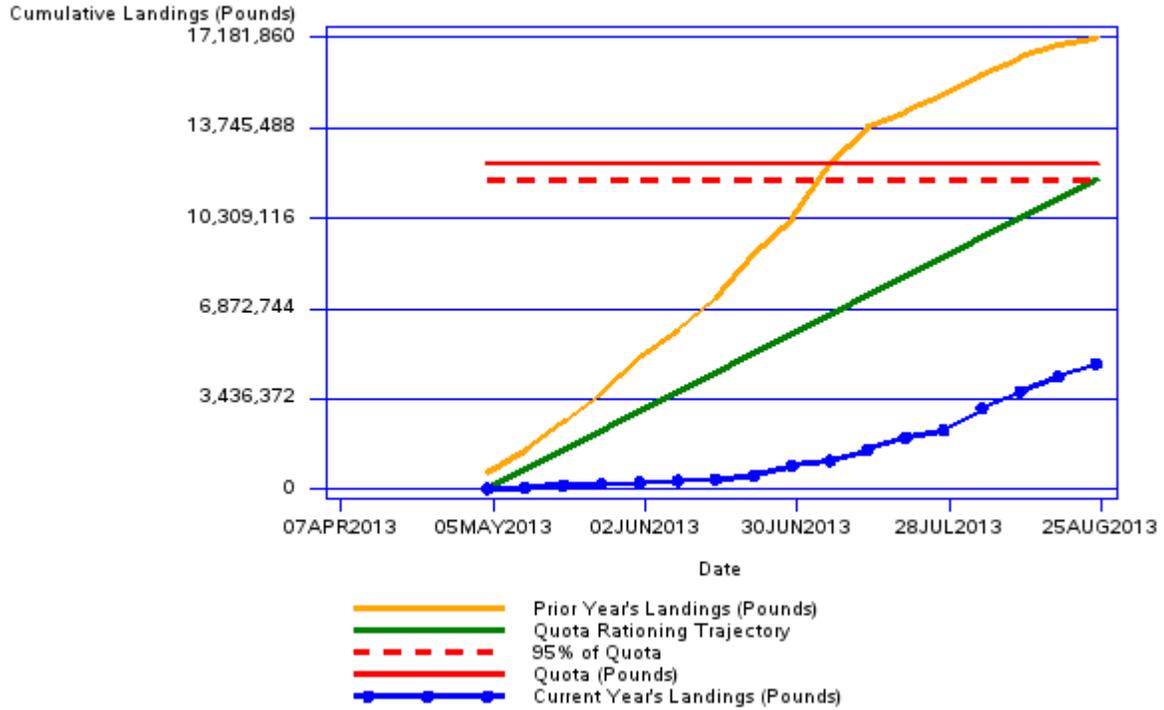


**NOAA
FISHERIES**

2. These data are the best available to NOAA Fisheries Service when this report was compiled. Data are supplied to NOAA Fisheries Service by dealers via Dealer Electronic Reporting the Standard Atlantic Fisheries Information System (SAF).

and/or by state agencies and may be preliminary. Discrepancies with data from previous Weekly Landings Reports are due to corrections made to the database.

Longfin Squid Quota Monitoring Report



**Commercial Summary
Table
(Sector and Common Pool)
Catch Monitoring**

Report run on:
For data reported through:
Quota Period:
Quota Period Dates:

August 29 2013
August 28 2013
2013
May 1, 2013 to April 30, 2014

Stock	Cumulative Kept (mt)	Cumulative Discard (mt)	Cumulative Catch (mt)	Sub-ACL* (mt)	Percent Caught
GB Cod East	7.8	6.8	14.6	92	15.9
GB Cod	340.2	21.0	361.2	1,807	20.0
GOM Cod	175.3	5.2	180.4	830	21.7
GB Haddock East	60.3	19.6	79.9	3,754	2.1
GB Haddock	415.8	77.9	493.7	26,196	1.9
GOM Haddock	55.0	5.3	60.3	187	32.2
GB Yellowtail Flounder	13.9	1.9	15.8	116	13.6
SNE/MA Yellowtail Flounder	37.8	1.0	38.7	570	6.8
CC/GOM Yellowtail Flounder	95.4	6.6	102.0	479	21.3
Plaice	395.0	36.8	431.8	1,420	30.4
Witch Flounder	191.4	7.8	199.2	610	32.7
GB Winter Flounder	1,072.1	3.2	1,075.3	3,528	30.5
GOM Winter Flounder	63.6	3.4	67.0	714	9.4
SNE Winter Flounder	289.3	6.9	296.2	1,210	24.5
Redfish	1,116.4	127.4	1,243.8	10,132	12.3
White Hake	718.3	13.6	731.9	3,849	19.0
Pollock	1,498.7	40.8	1,539.4	12,893	11.9
Northern Windowpane	0.0	173.1	173.1	98	176.7
Southern Windowpane	0.0	36.5	36.6	102	35.9
Ocean Pout	0.0	18.0	18.0	197	9.1
Halibut	6.0	13.6	19.6	52	37.7
Wolffish	0.0	10.9	10.9	62	17.7

* Does not include Sector Carryover

Effective July 3, 2013, NOAA Fisheries reinstated the Eastern U.S./Canada Area quota monitoring methodology where catch is attributed to area fished based on vessel monitoring system (VMS), vessel trip reports (VTRs), and interactive voice recording (IVR) information. This change was retroactively applied to all data since the May 1, 2013, start of the fishing year.

For additional information contact the Sustainable Fisheries Division at (978) 281-9315.

Notice

The 2013 Quota Period began on May 1, 2013, therefore this report does not contain any landings reported prior to May 1, 2013.

Management actions for the Common Pool Program, under the authority of the Regional Administrator (such as closures and possession limits) are based upon Vessel Monitoring System (VMS) reports and other available information.

Small-Mesh Multispecies Weekly Report

For week ending: August 24, 2013
 For data reported through: August 28, 2013
 Quota Period: 2013
 Quota Period Dates: 05/01/13 to 04/30/14

Stock	Year to Date Landings (Pounds)	Quota (Pounds)	Percent of Quota (%)
Northern Red Hake	154,562	199,077	78

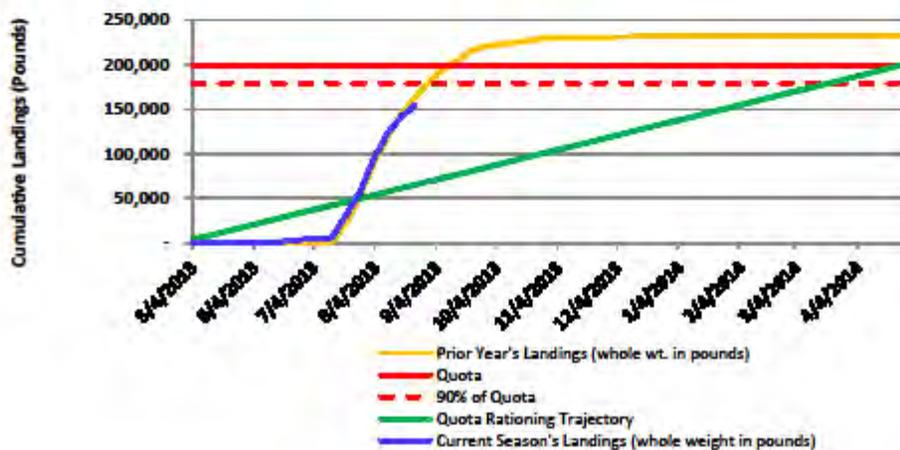
Notice: If 90 percent of the total allowable landings are landed for a small-mesh multispecies stock, the possession limit for that stock will be reduced to the incidental possession limit for the remainder of the fishing year. The incidental possession limit for red hake is 400 lb and silver hake and offshore hake, combined, is 1,000 lb.



National Oceanic and Atmospheric Administration

These data are the best available to NOAA Fisheries Service when this report was compiled. Data are supplied to NOAA Fisheries Service by dealers via Dealer Electronic Reporting to the Standard Atlantic Fisheries Information System (SAFIS) and/or by state agencies and may be preliminary. Discrepancies with data from previous Weekly Landings Reports are due to corrections made to the database.

Northern Red Hake



Small-Mesh Multispecies Weekly Report

For week ending: August 24, 2013
 For data reported through: August 28, 2013
 Quota Period: 2013
 Quota Period Dates: 05/01/13 to 04/30/14

Stock	Year to Date Landings (Pounds)	Quota (Pounds)	Percent of Quota (%)
Southern Red Hake	390,726	2,945,376	13

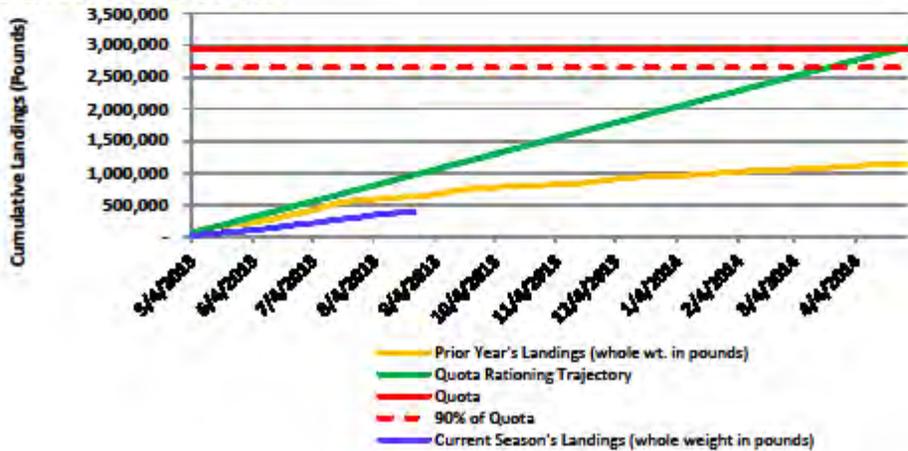
Notice: If 90 percent of the total allowable landings are landed for a small-mesh multispecies stock, the possession limit for that stock will be reduced to the incidental possession limit for the remainder of the fishing year. The incidental possession limit for red hake is 400 lb and silver hake and offshore hake, combined, is 1,000 lb.



National
Oceanic and
Atmospheric
Administration

These data are the best available to NOAA Fisheries Service when this report was compiled. Data are supplied to NOAA Fisheries Service by dealers via Dealer Electronic Reporting to the Standard Atlantic Fisheries Information System (SAFIS) and/or by state agencies and may be preliminary. Discrepancies with data from previous Weekly Landings Reports are due to corrections made to the database.

Southern Red Hake



Small-Mesh Multispecies Weekly Report

For week ending: August 24, 2013
 For data reported through: August 28, 2013
 Quota Period: 2013
 Quota Period Dates: 05/01/13 to 04/30/14

Stock	Year to Date Landings (Pounds)	Quota (Pounds)	Percent of Quota (%)
Northern Silver Hake	962,785	19,809,243	5

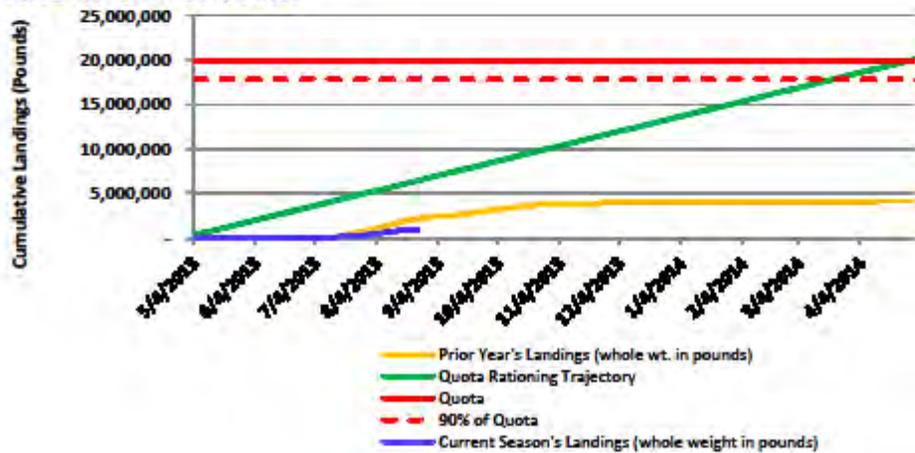
Notice: If 90 percent of the total allowable landings are landed for a small-mesh multispecies stock, the possession limit for that stock will be reduced to the incidental possession limit for the remainder of the fishing year. The incidental possession limit for red hake is 400 lb and silver hake and offshore hake, combined, is 1,000 lb.



National Oceanic and Atmospheric Administration

These data are the best available to NOAA Fisheries Service when this report was compiled. Data are supplied to NOAA Fisheries Service by dealers via Dealer Electronic Reporting to the Standard Atlantic Fisheries Information System (SAFIS) and/or by state agencies and may be preliminary. Discrepancies with data from previous Weekly Landings Reports are due to corrections made to the database.

Northern Silver Hake



Small-Mesh Multispecies Weekly Report

For week ending: August 24, 2013
 For data reported through: August 28, 2013
 Quota Period: 2013
 Quota Period Dates: 05/01/13 to 04/30/14

Stock	Year to Date Landings (Pounds)	Quota (Pounds)	Percent of Quota (%)
Southern Whiting	3,718,700	60,086,990	6

Notice: If 90 percent of the total allowable landings are landed for a small-mesh multispecies stock, the possession limit for that stock will be reduced to the incidental possession limit for the remainder of the fishing year. The incidental possession limit for red hake is 400 lb and silver hake and offshore hake, combined, is 1,000 lb.



National
Oceanic and
Atmospheric
Administration

These data are the best available to NOAA Fisheries Service when this report was compiled. Data are supplied to NOAA Fisheries Service by dealers via Dealer Electronic Reporting to the Standard Atlantic Fisheries Information System (SAFIS) and/or by state agencies and may be preliminary. Discrepancies with data from previous Weekly Landings Reports are due to corrections made to the database.

Southern Whiting

