

## LIMITED ENTRY FIXED GEAR SABLEFISH FISHERY DATA

At the June 2016 Council meeting, the Groundfish Advisory Subpanel (GAP) requested preliminary information regarding recent participation in the limited entry fixed gear (LEFG) daily trip limit (DTL) fishery. The information is being used to help the GAP determine if an ad hoc committee is needed to examine the potential action of combining the LEFG DTL fishery (i.e., zero tier fishery) and with the existing LEFG 3-tier fishery. The objective of the potential change is to reduce the in-season actions and provide a more stable fishery throughout the year for those that participate in DTL fishery. If the action moves forward, a new tier would be added to the existing LEFG 3-tier system.

The GAP requested the following information:

1. The number of active and latent permits for the zero tier fishery, both north and south (using 2010-2015 history)
2. The total sablefish catch of active permits, north and south of 36° N. latitude, between 2010 and 2015.
3. Estimates of the quota a zero tier would have received if:
  - a. every permit receives an equal allocation of the 15% allocated to the DTL fishery (based on 2016 allocations)
  - b. permits with northern sablefish history (2011-2015) receive an equal allocation
4. Information on the distribution of northern sablefish history among permits, while preserving confidentiality by grouping permits (2011-2015).

### **Main Conclusions**

If the DTL allocation were distributed among all LEFG sablefish-endorsed permits during 2010-2015 (2,370 pounds per permit in 2015, Table 3), then approximately 54 out of 64 vessels that participated in the 2015 DTL fishery would have experienced a decrease in the available amount of sablefish in 2015. These 54 vessels each landed on average between 2,500 and 15,000 lbs in the DTL fishery in 2015 (See Figure 1a for the distribution of landings by these vessels in 2015).

If the DTL allocation were distributed among LEFG sablefish-endorsed permits associated with vessels that participated in the northern sablefish fishery during 2010-2015 (2,787 pounds per permit in 2015, Table 3), then approximately 39 out of 52 vessels that participated in the 2015 DTL fishery would have experienced a decrease in the available amount of sablefish in 2015. These 39 vessels each landed on average between 3,000 and 15,000 lbs in the DTL fishery in 2015 (See Figure 1b for the distribution of landings by these vessels in 2015).

If the DTL allocation were distributed equally only among the 63 zero tier permits (8,539 lb per permit in 2015, see Table 3), then approximately half of the 12 vessels with zero tier permits that participated in the northern sablefish fishery and recorded DTL landings in 2015 would have experienced a decrease in the available amount of sablefish in 2015. Those six vessels each landed on average more than 10,000 lbs in 2015 (See Figure 1c for the distribution of landings by these vessels in 2015). Also, six of the 37 vessels with zero tier permit DTL landings during 2010-2015 each landed on average more than 10,000 lbs per year during that period.

Although some permit holders may experience a decrease in potential revenue others may experience a steady stream of revenue, an increase in flexibility to fish, and an increase in the cost per pound of fish landed.

## **Answers to the GAP Request**

In this report, Council staff provide answers to the GAPs request.

- 1. The number of active and latent permits for the zero tier fishery, both north and south of 36° N. latitude (using 2010-2015 history).**
  - a. See Table 1 for details;
  - b. There are a total of 164 sablefish-endorsed LEFG permits, including 94 tier 3 permits, 42 tier 2 permits and 28 tier 1 permits.
  - c. There are 63 Zero tier permits (i.e., LEFG permits with no sablefish endorsement).
  - d. These permits have been associated with a total of 116 vessels during 2010-2015 (see Table 1, 100 Active + 16 latent total vessels).
  - e. The number of vessels fishing with Zero tier permits in a given year has ranged from 66 in 2012 and 2015 to 74 in 2011.
  - f. The number of vessels with Zero tier permits and LEFG DTL landings has ranged from 47 in 2013 and 2015 to 71 in 2011.
  - g. A total of 37 vessels with Zero tier permits made LEFG DTL landings North of 36° N. latitude during 2010-2015.
  - h. A total of 76 vessels with Zero tier permits made LEFG DTL landings South of 36° N. latitude during 2010-2015.
  - i. The number of vessels with Zero tier permits and LEFG DTL landings North of 36° N. latitude in a given year has ranged from 10 in 2013 and 2015 to 22 in 2011.
  - j. The number of vessels with Zero tier permits and LEFG DTL landings South of 36° N. latitude in a given year has ranged from 35 in 2015 to 49 in 2011.

**Table 1. The number of active and latent vessels with Zero tier permits North and South of 36° N. latitude.**

Note: The data includes the number of vessels with Zero tier permits with DTL north and south of 36°N. latitude, the total number of vessels with Zero tier permits with and without DTL landings, and the total number of Zero tier permits associated with vessels with and without DTL landings each year 2010-2015 (Zero tier = LEFG permits without a sablefish endorsement).

	<u>2010</u>		<u>2011</u>		<u>2012</u>		<u>2013</u>		<u>2014</u>		<u>2015</u>		<u>2010-2015</u>	
	Active	Latent	Active	Latent	Active	Latent	Active	Latent	Active	Latent	Active	Latent	Active	Latent
<b>Vessels N. of 36</b>	16	-	22	-	20	-	10	-	11	-	12	-	37	-
<b>Vessels S. of 36</b>	36	-	49	-	39	-	37	-	38	-	35	-	76	-
<b>Total Vessels</b>	49	19	64	10	55	11	46	23	48	19	44	22	100	16
<b>Total Number of Zero Tier Permits</b>	48	15	56	7	52	11	40	23	43	20	41	22	59	4

The last two columns are the total numbers of unique vessels and permits participating over the 2010-2015 period. So a vessel or permit that made landings every year is counted only once. For example, the table shows there were 37 unique "Zero tier" vessels that made DTL landings north of 36 during 2010, 2011, 2012, 2013, 2014 or 2015. Likewise there were 76 unique "Zero tier" vessels that made DTL landings south of 36 in those years. There were 13 vessels (76+37-100) that made landings both north and south of 36 during 2010-2015.

**2. The total sablefish catch of active Zero tier permits, north and south of 36° N. latitude, between 2010 and 2015.**

- a. Total landings by vessels with Zero tier permits in the DTL fishery north of 36° N. latitude have ranged from a low of nearly 75,000 lb in 2014 to 322,000 lb in 2010.
- b. Total landings by vessels with Zero tier permits in the DTL fishery south of 36° N. latitude have ranged from 412,000 lb in 2010 to 951,000 lb in 2011.

**Table 2. Total sablefish DTL landings by vessels with Zero tier permits north and south of 36° N. latitude during 2010 - 2015 (roundweight lbs).**

	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2010-2015 total</u>
<b>N of 36</b>	322,291	243,379	166,079	100,499	74,591	97,622	1,004,461
<b>S of 36</b>	411,815	950,687	610,968	636,249	677,101	739,779	4,026,599
<b>Total</b>	734,106	1,194,066	777,047	736,748	751,692	837,401	5,031,060

**3. Assuming 15% of the 2015 LEFG sector’s allocation (244 mt) is used, provide estimates of the quota a zero tier permit owner would receive:**

- a) If all LEFG permits receive an equal allocation: 227 total LEFG permits → 0.441% per permit = 2,370 lbs (1.07 mt) in 2015.
- b) If all LEFG permits with northern sablefish landings history (primary or DTL) during 2010-2015 receive an equal allocation: 193 total permits → 0.518% per permit = 2,787 lbs (1.26 mt) in 2015.
- c) If every LEFG Zero tier permit receives an equal allocation: 63 total Zero tier permits → 1.587% per permit = 8,539 lbs (3.87 mt) in 2015.

**Table 3. Summary of the estimated northern sablefish DTL quota a Zero tier permit would receive under three different hypothetical allocation scenarios (assuming an LEFG DTL allocation of 244 mt).**

	Number of permits	Hypothetical Allocations		Hypothetical pounds per permit per two-month period
		Percent of total LEFG DTL allocation per permit in 2015	Pounds per permit in 2015	
<b>3a - All LEFG permits</b>	227	0.441%	2,370	395
<b>3b - Permits with N. sablefish history</b>	193	0.518%	2,787	464.5
<b>3c - Zero tier permits</b>	64	1.587%	8,539	1423

**4. Information on the distribution of northern sablefish history among permits, while preserving confidentiality by grouping permits (2011-2015).**

Figures 1a through 1c show the average amounts of northern sablefish DTL landed in 2015 and the average amounts landed during 2010-2015 among three different categories of vessels: 1a. All LEFG permits; 1b. Only vessels with Tier permits; 1c. Only Zero tier permits. Vessels are aggregated into groups of at least three to preserve confidentiality and landed weights shown are an average weight for the group.

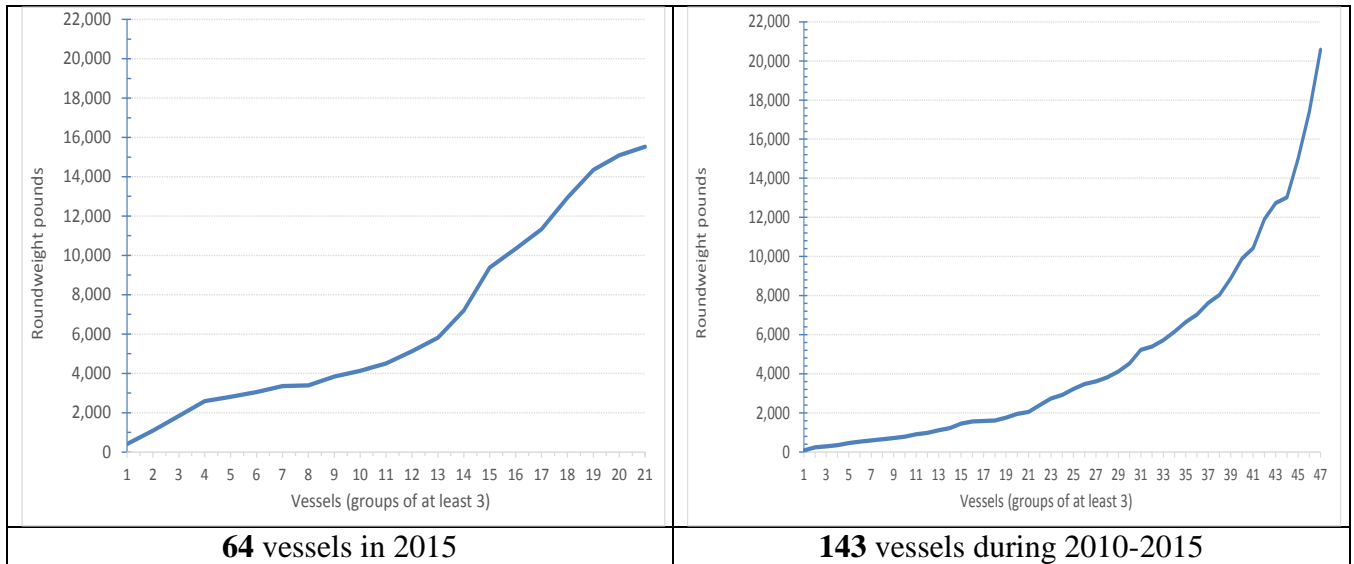


Figure 1a. Average northern sablefish DTL landings by all vessels with *any LEFG permits*, 2015 and 2010-2015.

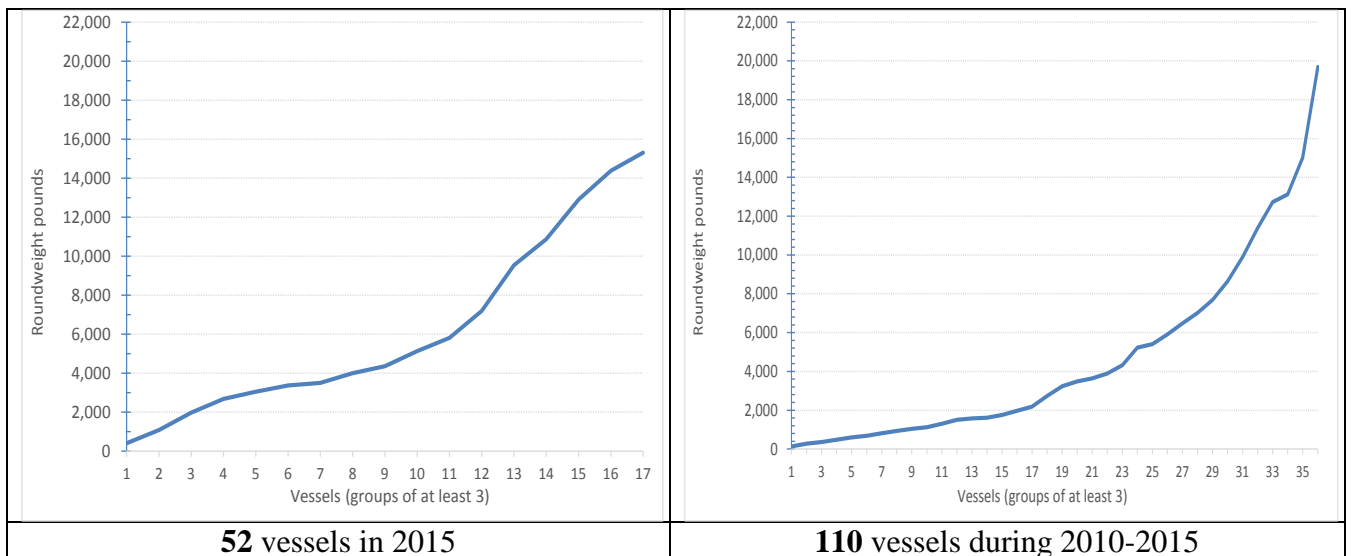


Figure 1b. Average northern sablefish DTL landings by vessels with *sablefish tier permits* (tiers 1 through 3), 2015 and 2010-2015.

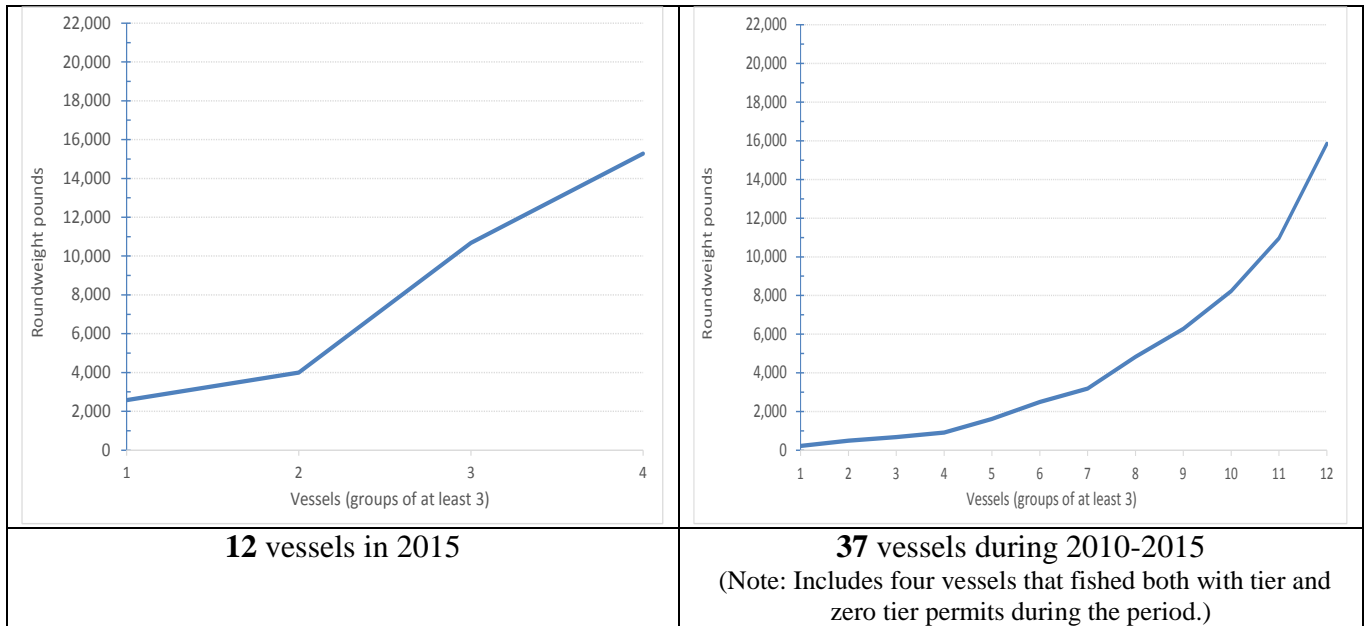
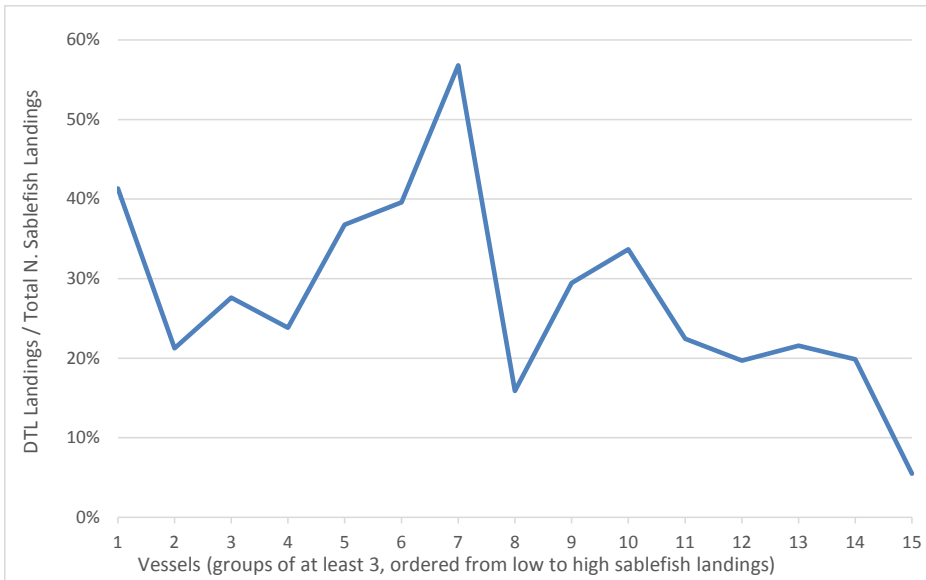


Figure 1c. Average northern sablefish DTL landings by vessels that fished with *only zero tier permits*, 2015 and 2010-2015.

### Additional Information beyond the GAP Request

*Indication of the relative importance of northern DTL landings for vessels with tier permits.*

In 2015, 46 vessels with tier permits made at least two DTL landings and participated in both the northern sablefish primary fishery and the northern sablefish DTL fishery. Figure 2 indicates the relative importance of the DTL fishery to these vessels. The figure shows that, for at least 43 of the 46 active vessels, DTL landings comprised more than 15% of these vessels' total northern sablefish landings in 2015.



**Figure 2. Percent of DTL landings for vessels with tier permits that made at least two DTL landings in 2015.** Note: Vessels are aggregated into groups of at least 3 to preserve confidentiality and arrayed from lowest total northern sablefish landings to highest.

Figure 3 shows the distribution of current northern sablefish tier limits among vessels with tier permits. To construct Figure 3, the following tier limit values for 2015 in Table 4 were used:

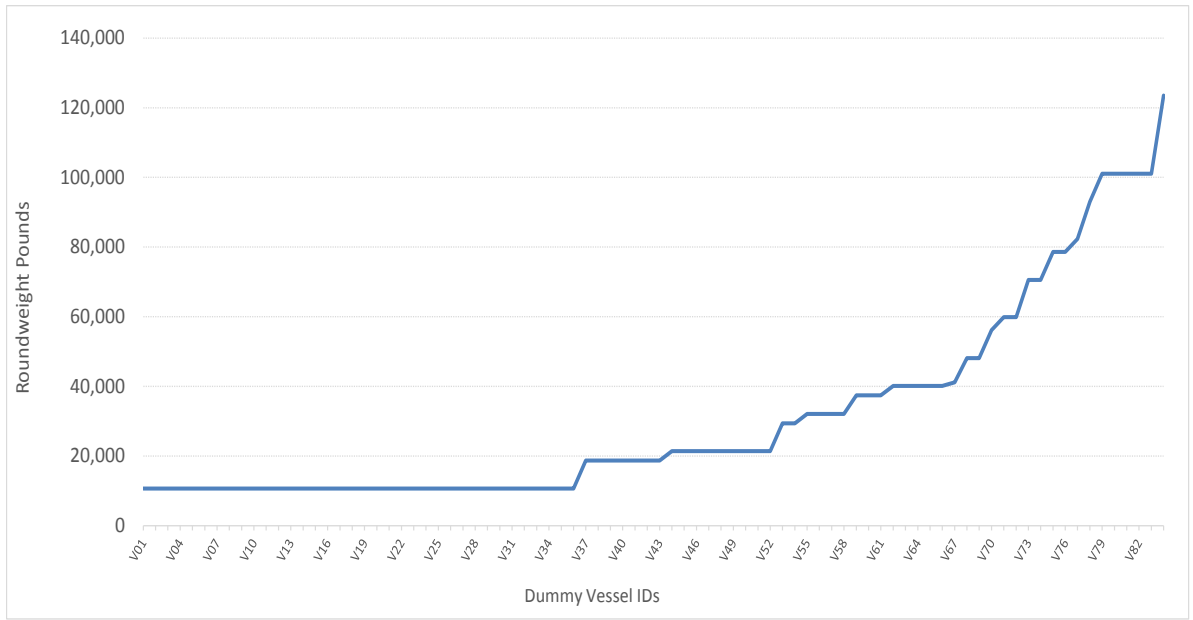
**Table 4. 2015 tier limits and permit counts:**

Tier	No. of permits	2015 tier limits	
		lbs	mts
Tier 3	94	10,695	456
Tier 2	42	18,716	357
Tier 1	28	41,175	523
<b>Total</b>	<b>164</b>	<b>70,586</b>	<b>1,336</b>

To avoid double counting, a snapshot of permits associated with vessels on 07-01-2015 was used to illustrate the distribution of northern sablefish quota among vessels participating in the primary fishery. There were 160 sablefish tier permits registered to 84 vessels on 07-01-2015 (and four tier 3 permits that were not associated with identified vessels on that date). Figure 3 is included to provide additional context regarding comparisons of historical DTL landings, hypothetical DTL quota allocations described above, and current vessel tier limits.

In Figure 3, vessels are arrayed with those with the lowest associated tier limits on the left hand side and those with the highest on the right.

- V01 to V37 are vessels that each have only a single tier 3 permit
- V38 to V43 are vessels with a single tier 2 permit
- V44 to V52 are vessels with two tier 3 permits
- V53 and V54 are vessels with one tier 2 permit and one tier 3 permit
- V55 to V58 are vessels with three tier 3 permits, etc.



**Figure 3. Total sablefish tier limits for vessels associated with tier permits on 07-01-2015.**