

## Processed Product Weight and Value for Groundfish Harvested in the CDQ Fisheries, 2003-2005

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This report summarizes the weights and values of Community Development Quota (CDQ) groundfish processed products in 2003, 2004, and 2005. These estimates are based on weekly and daily production reports submitted to National Marine Fisheries Service (NMFS), and price per pound data summarized in Table 26 of the 2006 Economic Status of the Groundfish Fisheries off Alaska, published by the Alaska Fisheries Science Center.

The product weights are aggregates of many different products. Because the product recovery rates range from 5 percent for some ancillary products to 100 percent for whole fish, these values estimate tonnage of the processed products but do not represent the total catches. Total catch data are primarily derived from other sources and are published on the NMFS Alaska region Web site: (<http://www.fakr.noaa.gov/cdq/default.htm>).

The tables and figures in this report do not include values for halibut or crab. These numbers are derived from the estimated weights and the estimated values of the groundfish processed products from the CDQ fisheries (Table 1). The product values are not the royalties paid to the CDQ groups by the processors, but an estimation of the total value of the processed products. Table 6 lists the groundfish royalties that fishing vessels paid to the CDQ groups for the right to harvest CDQ fish.

**Table 1. CDQ PRODUCT WEIGHTS AND VALUES**

	2003 product weight	2003 product value	2004 product weight	2004 product value	2005 product weight	2005 product value
Pollock	43,597	\$102,883	44,312	\$115,713	44,468	\$131,360
Pacific Cod	6,355	\$15,532	7,630	\$18,092	7,105	\$19,926
Yellowfin Sole	3,792	\$2,908	4,286	\$3,753	5,018	\$5,435
Sablefish	118	\$925	a	a	398	\$3,778
Atka Mackerel	2,461	\$1,925	2,813	\$2,324	2,629	\$2,767
Rock Sole	190	\$180	303	\$345	773	\$1,285
Pacific Ocean Perch	410	\$636	308	\$509	395	\$1,011
Flathead Sole	63	\$73	119	\$170	473	\$665
Arrowtooth Flounder	55	\$42	70	\$54	172	\$251
Skates	221	\$416	238	\$308	168	\$249
Northern Rockfish	74	\$97	149	\$247	92	\$229
Greenland Turbot	41	\$94	32	\$75	41	\$134
Minor Species	57	\$52	a	a	17	\$30
<b>Total</b>	<b>57,434</b>	<b>\$125,762</b>	<b>60,514</b>	<b>\$142,675</b>	<b>61,750</b>	<b>\$167,120</b>

Weights are in metric tons and values are in thousands of dollars.

<sup>a</sup>To preserve confidential data, values for 2004 sablefish and minor species were omitted.

While pollock and cod still dominate the CDQ groundfish fisheries, the fisheries for some of the other species are rapidly developing and becoming significant components of the total CDQ Program. In this period, the increase in the catch of sablefish and the flatfish species accounted for the majority of increase in product by weight. This led to an increase in relative production of these species compared to the dominant fishery for pollock (Table 2). This is primarily the result of a more complete utilization of available quotas for these species (Table 3).

**Table 2. PERCENT OF TOTAL CDQ GROUND FISH PRODUCT BY WEIGHT**

	Percent of 2003 product	Percent of 2004 product	Percent of 2005 product
Pollock	75.9%	73.2%	72.0%
Pacific Cod	11.1%	12.6%	11.5%
Yellowfin Sole	6.6%	7.1%	8.1%
Atka Mackerel	4.3%	4.6%	4.3%
Rock Sole	0.3%	0.5%	1.3%
Flathead Sole	0.1%	0.2%	0.8%
Sablefish	0.2%	a	0.6%
Pacific Ocean Perch	0.7%	0.5%	0.6%
Arrowtooth Flounder	0.1%	0.1%	0.3%
Skates	0.4%	0.4%	0.3%
Northern Rockfish	0.1%	0.2%	0.1%
Greenland Turbot	0.1%	0.1%	0.1%
Minor Species	0.1%	a	0.0%
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

Weights are in metric tons and values are in thousands of dollars.

<sup>a</sup>To preserve confidential data, values for 2004 sablefish and minor species were omitted.

The product weights of the more developed fisheries were more stable. Both skates and minor species had declines in processed product weight. Skates are primarily harvested as incidental catch in the hook-and-line cod fishery, and the primary product is skate wings. The decrease in product weight for skates reflects a decrease of incidental catch in the hook-and-line cod fishery. The largest component of the minor species category is Alaska plaice. About half of the decrease in value and product weight for this category reflects a decrease in the retention of this species.

**Table 3. PERCENTAGE OF CDQ ALLOCATION HARVESTED**

	2002	2003	2004	2005
Yellowfin Sole	31%	89%	98%	90%
Rock Sole	14%	19%	29%	59%
Flathead Sole	25%	26%	38%	61%
Arrowtooth Flounder	49%	57%	48%	64%
Fixed Gear Sablefish	48%	22%	21%	81%

Data are from NMFS catch accounting system

The value of the processed product for most species increased substantially between 2003 and 2005. The flatfish and the fixed gear sablefish fisheries had substantial increases in the amount of product produced as well as in the price per pound of the products. This created increases in the percentage of total processed product value for these species (Table 4).

**Table 4. PERCENT OF TOTAL CDQ PROCESSED PRODUCT BY VALUE**

	Percent of 2003 value	Percent of 2004 value	Percent of 2005 value
Pollock	81.8%	81.1%	78.6%
Pacific Cod	12.4%	12.7%	11.9%
Yellowfin Sole	2.3%	2.6%	3.3%
Sablefish	0.7%	a	2.3%
Atka Mackerel	1.5%	1.6%	1.7%
Rock Sole	0.1%	0.2%	0.8%
Pacific Ocean Perch	0.5%	0.4%	0.6%
Flathead Sole	0.1%	0.1%	0.4%
Arrowtooth Flounder	0.0%	0.0%	0.2%
Skates	0.3%	0.2%	0.1%
Northern Rockfish	0.1%	0.2%	0.1%
Greenland Turbot	0.1%	0.1%	0.1%
Minor Species	0.0%	a	0.0%
<b>Total</b>	100.0%	100.0%	100.0%

Weights are in metric tons and values are in thousands of dollars.

<sup>a</sup>To preserve confidential data, values for 2004 sablefish and minor species were omitted.

For yellowfin sole, this led to a 32 percent increase in processed product weight and an 87 percent rise in processed product value. For fixed gear sablefish and the other flatfish species, there was an increase in processed product weight ranging from 215 percent to 615 percent, and an increase in processed product value ranging from 308 percent to 810 percent (Table 5).

Despite the growth of other groundfish fisheries, the increase in value of pollock products accounted for the majority of the rise in total value of all products from all fisheries due to the much larger size of the pollock fishery. In 2005, pollock accounted for 79 percent of the groundfish allocated to the CDQ program. This is roughly an order of magnitude larger than the allocation for Pacific cod, which is the next largest species allocation.

In addition to a decreased quantity of processed product, the price per pound of at-sea skate wings decreased over this period, leading to reduced values for skates in total value and in relation to other species. While the price and catch of Atka mackerel remained relatively steady with a modest price increase, more Atka mackerel were processed as a headed and gutted product in 2005 as opposed to frozen whole fish in earlier years. This more valuable product accounts for most of the rise in the 2005 value of Atka mackerel.

**Table 5. Percent change in product weight and value from 2003 to 2005**

	Product weight change from 2003 to 2005	Product value change from 2003 to 2005
Pollock	2%	28%
Pacific Cod	12%	28%
Yellowfin Sole	32%	87%
Sablefish	237%	308%
Atka Mackerel	7%	44%
Rock Sole	307%	616%
Pacific Ocean Perch	-4%	59%
Flathead Sole	651%	810%
Arrowtooth Flounder	215%	494%
Skates	-24%	-40%
Northern Rockfish	25%	135%
Greenland Turbot	0%	42%
Minor Species	-70%	-41%
All Species	8%	33%

Species are listed in descending order of 2005 product value except for All Species which is an aggregate of all groundfish species.

The royalty rates expressed as royalties paid to the CDQ groups by the harvesters as a percentage of the total processed product value are much higher for pollock than for most other groundfish species (Table 6). Due to the higher royalty rates, pollock accounted for 90 percent of 2005 CDQ groundfish royalties despite having a value of 78.6 percent of the total CDQ groundfish processed product value.

**Table 6. ROYALTIES AS A PERCENT OF PRODUCT VALUE**

	2003 royalties	2003 royalties per product value	2004 royalties	2004 royalties per product value	2005 royalties	2005 royalties per product value
Pollock	\$42,779,382	42%	\$45,862,634	40%	\$48,508,879	37%
Pacific Cod	\$3,365,920	22%	\$3,884,197	21%	\$4,042,917	20%
Other Groundfish	\$767,846	10%	\$804,258	9%	\$1,270,837	8%
Total	\$46,913,148	37%	\$50,551,089	35%	\$53,822,633	32%

These values exclude halibut and crab data.

Pollock has more value-added products than other species (Figures 1-6). Figures 1-3 depict the primary products by weight, and Figures 4-6 show the primary products by value. In all three years, the primary products for pollock were roe, surimi, fillets, mince, and fish meal by both weight and value. For every other species the primary products were either headed and gutted fish (including headed and gutted with tail removed and kirimi), or whole fish.

For the following figures, yellowfin sole and Atka mackerel products have been aggregated to preserve confidential data. In 2004, sablefish was included with other products to preserve confidential data. The abbreviation "H&G" refers to headed and gutted product.

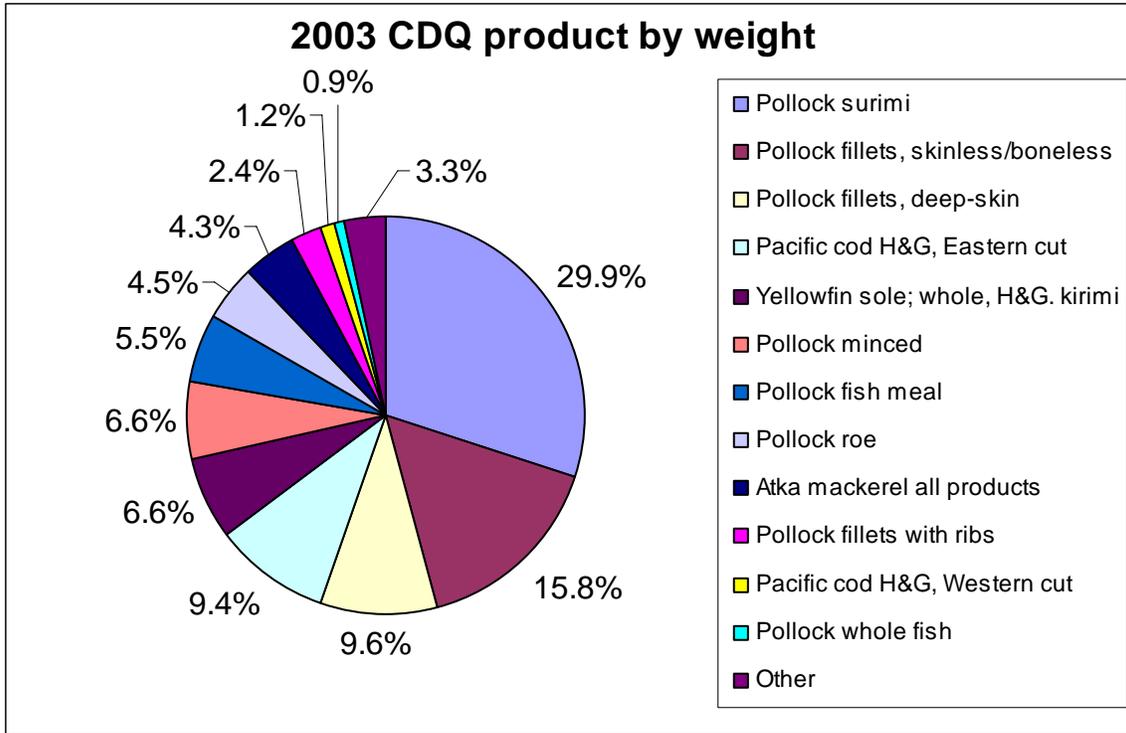


Figure 1.

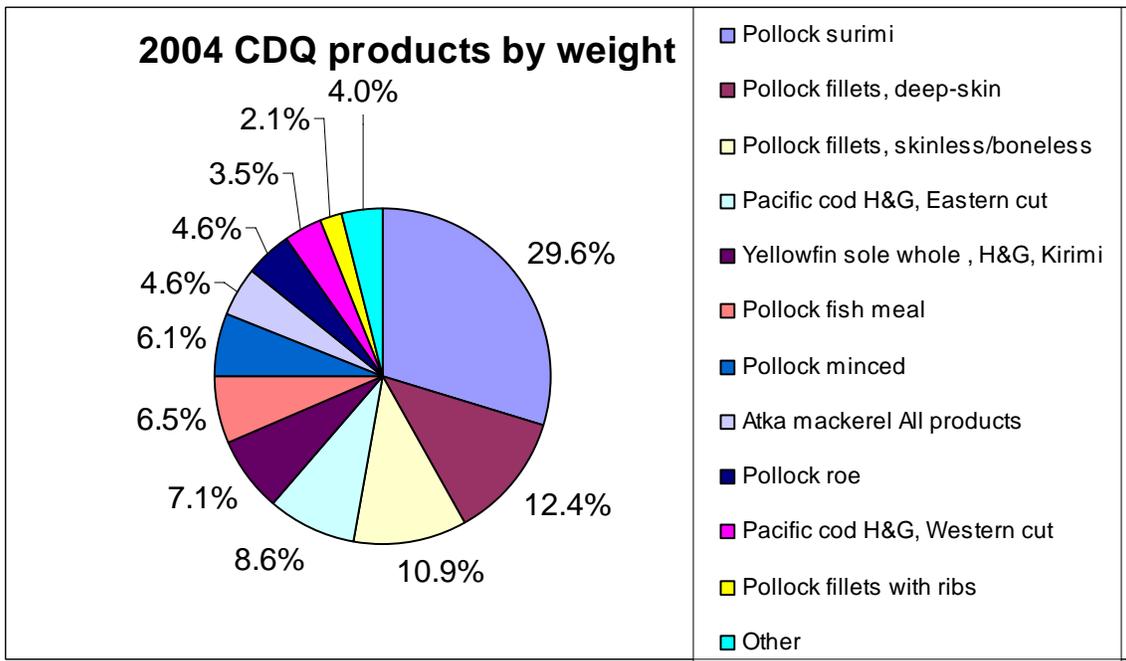


Figure 2.

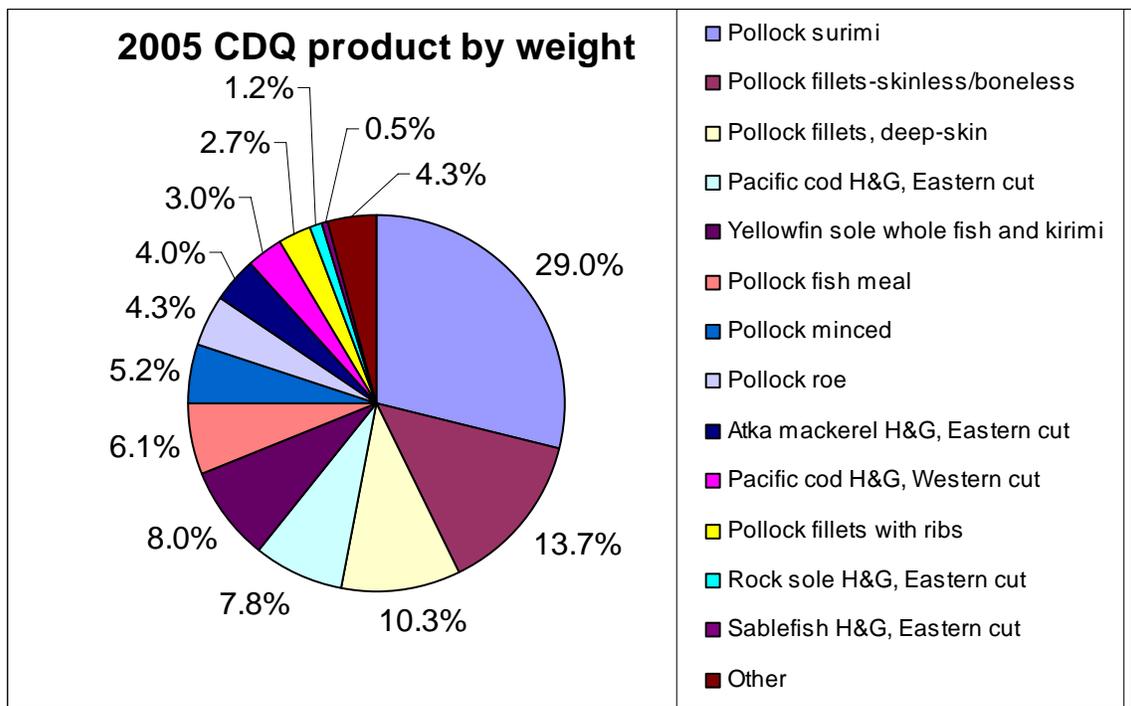


Figure 3.

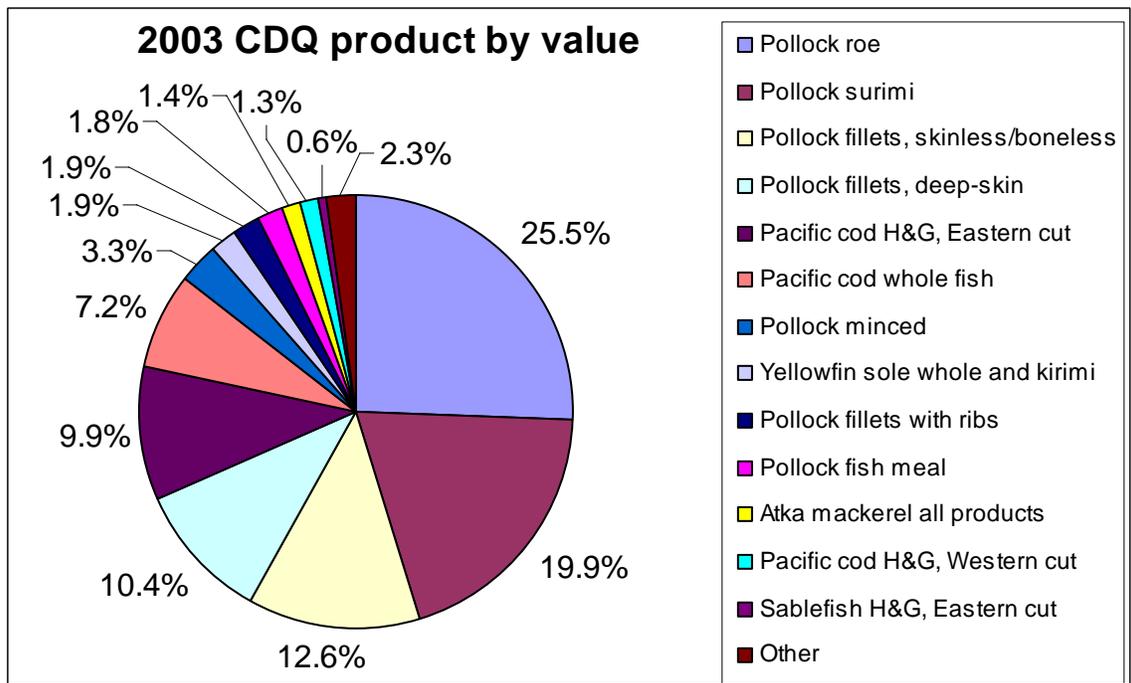


Figure 4.

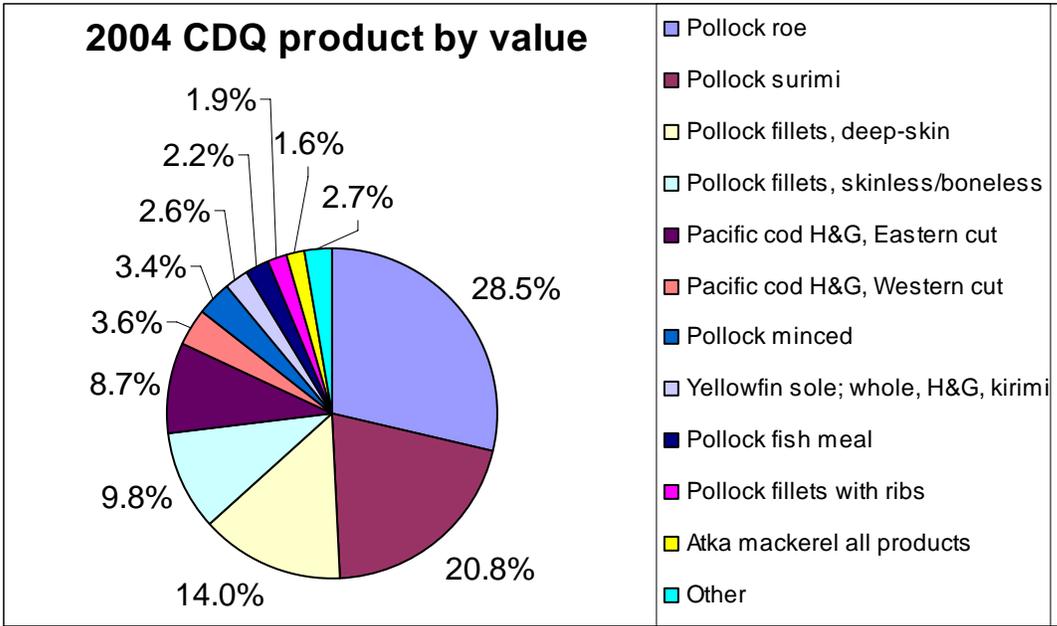


Figure 5.

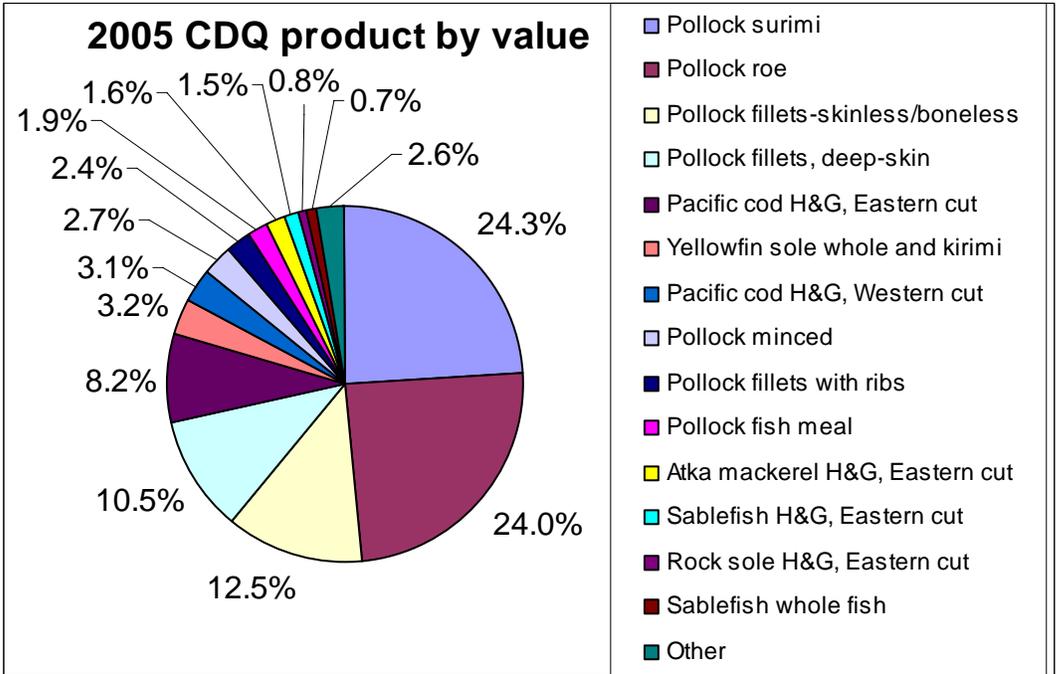


Figure 6.