

# Processed Fishery Products

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## FRESH AND FROZEN

**FISH FILLETS AND STEAKS.** In 2013 the U.S. production of raw (uncooked) fish fillets and steaks, including blocks, was 753.1 million pounds—61.3 million pounds more than the 691.8 million pounds in 2012 due to increases in cod, hake, and Alaska Pollock fillets. There were also increases in tilapia, sablefish and amberjack fillets as well as halibut, salmon and tuna steaks. All fillets and steaks were valued at \$2.1 billion. Alaska pollock fillets and blocks continue to lead all species with 473 million pounds—and increase from the 415 million pounds in 2012 and representing 64 percent of the total. Production of groundfish fillets and steaks (see Glossary Section—Groundfish) was 601.3 million pounds, an increase of 84.6 million pounds from 2012.

**FISH STICKS AND PORTIONS.** The combined production of fish sticks and portions was 185.5 million pounds valued at \$309.2 million compared with the 2012 production of 209.9 million pounds valued at \$346.9 million. The total production of fish sticks amounted to 58.0 million pounds valued at \$86.3 million. The total production of fish portions amounted to 127.5 million pounds valued at \$222.9 million.

**BREADED SHRIMP.** The production of breaded shrimp in 2013 was 104.9 million pounds valued at \$297.3 million. This represents an increase from the 2012 production of 79.7 million pounds valued at \$193.8 million.

## CANNED PRODUCTS

**CANNED FISHERY PRODUCTS.** The pack of canned fishery products in the 50 states, American Samoa, and Puerto Rico was 961.1 million pounds valued at \$1.8 billion—an increase in volume of 80.5 million pounds and an increase in value of 160.5 million dollars compared to 2012. The 2013 pack included 662.4 million pounds with a value of \$1.5 billion for human consumption and 298.7 million pounds valued at \$241.5 million for bait and animal food.

**CANNED SALMON.** The 2013 U.S. pack of salmon was 202.8 million pounds valued at \$571.8 million, increases in volume and value from the 2012 levels of 120.0 million pounds and \$410.4.

**CANNED TUNA.** The U.S. pack of tuna was 383.6 million pounds valued at \$852 million—a decrease of 3.5 million pounds in quantity and of \$34.1 million in value compared with the 2012 pack. The pack of albacore tuna was 152.0 million pounds comprising 40 percent of the tuna pack in 2013. Lightmeat tuna (bigeye, bluefin, skipjack, and yellowfin) comprised the remainder with a pack of 231.5 million pounds.

**CANNED CLAMS.** The 2013 U.S. pack of clams (whole, minced, chowder, juice, and specialties) was 72.9 million pounds valued at \$89.9 million. The pack of whole and minced clams was 16.8 million pounds. Clam chowder and clam juice was 56 million pounds and made up the majority of the pack.

**OTHER CANNED ITEMS.** The pack of pet food and bait was 298.7 million pounds valued at \$241.5 million—a slight increase in volume and a decrease in value from the 2012 levels of 298.6 million pounds worth \$241.7 million.

## INDUSTRIAL FISHERY PRODUCTS

**INDUSTRIAL FISHERY PRODUCTS.** The value of the domestic production of industrial fishery products was \$478.8 million—a decrease of \$18.7 million compared with the 2012 value.

**FISH MEAL.** The domestic production of fish and shellfish meal was 508.1 million pounds valued at \$242.1 million—a decrease of 77.5 million pounds and of \$37.9 million compared with 2012. Most of this production was fish meal (508 million pounds) while shellfish meal production was 91 thousand pounds—a decrease of 401 thousand pounds from the 2012 level.

**FISH OILS.** The domestic production of fish oils was 175.9 million pounds (approximately 22.7 million gallons) valued at \$56.6 million—an increase of 60.8 million pounds and of \$1.4 million in value compared with 2012 production.

**OTHER INDUSTRIAL PRODUCTS.** Oyster shell products, together with agar-agar, animal feeds, crab and clam shells processed for food serving, fish pellets, Irish moss extracts, kelp products, dry and liquid fertilizers, and mussel shell buttons were valued at \$180.1 million.

# Processed Fishery Products

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## METHODOLOGY:

The NMFS Survey of Fishery Processors is the only comprehensive, national survey that focuses on the domestic seafood processing industry. The resulting data are reported in this section of Fisheries of the United States, as well as reports of the Food and Agriculture Organization of the United Nations, Fisheries Economics of the United States, commercial fisheries disposition calculations, annual per-capita consumption figures and other reports.

In all regions except the Northeast, the survey is voluntary. In the Northeast it is mandatory for processors with a federal processing permit to provide the requested data.

The survey instrument is a paper form that asks for monthly employment figures, a list of product types and the quantity and value of each product processed in the previous year. Space is provided for the company to fill in new products. The survey forms are produced by NOAA Fisheries Office of Science and Technology and mailed to five different regional contacts. Each region then proceeds slightly differently:

- Northeast – The distribution of forms to companies is overseen by a lead port agent. Other port agents may assist with collecting information from the companies in their area. Dealer permits are not renewed if the processor has not provided the required data.
- Southeast and Gulf – Forms are distributed through the Southeast Fishery Science Center to the port agents along the coast who are then responsible for obtaining the data from the companies.
- Southwest and Northwest – Forms are distributed through, and returned to, the Pacific States Marine Fisheries Commission office under an agreement with NMFS.
- Pacific Islands – Forms are distributed and collected by Pacific Islands Regional Office staff.

The companies in the survey are those that have reported previously or have been found by research or word-of-mouth. Adding companies in order to have a more complete data frame is a constant goal throughout the year.

Forms are returned to the Office of Science and Technology for data entry. Follow up contact may be attempted to clarify data that is excluded or unclear. Because the survey is voluntary, we do not receive data from every company we contact. We employ various estimation and alternate data collection methods:

- Most Alaska data is obtained from the Alaska Fisheries Information Network (AKFIN).
- Data on salmon processing come from the Alaska Department of Revenue.
- USDA reports provide data on catfish and rainbow trout processing.
- Data from the NOAA Seafood Inspection Program are used to estimate the data for companies that have not reported to the Survey of Fishery Processors but are included in the inspection program
- Finally, imputation is used to estimate the remaining missing companies.

# Processed Fishery Products

**VALUE OF PROCESSED FISHERY PRODUCTS, 2012 AND 2013**  
(Processed from domestic catch and imported products)

Item	2012 (1)		2013	
	Thousand dollars	Percent of total	Thousand dollars	Percent of total
<b>Edible:</b>				
Fresh and frozen	8,468,186	78	8,412,200	78
Canned	1,373,011	13	1,533,579	14
Cured	202,449	2	119,628	1
<b>Total edible</b>	<b>10,043,646</b>	<b>93</b>	<b>10,065,407</b>	<b>93</b>
<b>Industrial:</b>				
Bait and animal food	259,244	2	277,910	3
Meal and oil	335,188	3	298,707	3
Other	156,079	1	172,512	2
<b>Total industrial</b>	<b>750,511</b>	<b>7</b>	<b>749,129</b>	<b>7</b>
<b>Grand total</b>	<b>10,794,157</b>	<b>100</b>	<b>10,814,536</b>	<b>100</b>

(1) Revised. Value is based on selling price at the plant.

**U.S. PRODUCTION OF FISH STICKS, FISH PORTIONS, AND BREADED SHRIMP, 2004-2013**

Year	Fish sticks			Fish portions			Breaded shrimp		
	Thousand pounds	Metric tons	Thousand dollars	Thousand pounds	Metric tons	Thousand dollars	Thousand pounds	Metric tons	Thousand dollars
2004	59,697	27,078	71,419	138,125	62,653	208,579	110,462	50,105	306,456
2005	61,751	28,010	75,654	180,840	82,028	323,353	120,097	54,476	277,613
2006	59,353	26,922	61,942	178,742	81,077	302,984	139,571	63,309	347,152
2007	73,926	33,533	104,974	194,005	88,000	300,137	86,131	39,069	200,147
2008	82,461	37,404	120,615	204,491	92,757	310,213	74,172	33,644	159,416
2009	79,586	36,100	125,258	140,584	63,768	291,569	97,124	44,055	251,594
2010	74,451	33,771	113,069	141,849	64,342	277,466	116,935	53,041	562,928
2011	80,034	36,303	104,829	172,051	78,042	345,686	92,460	41,940	240,976
2012	58,214	26,406	87,430	151,721	68,820	259,504	79,740	36,170	193,837
2013	58,020	26,318	86,278	127,500	57,834	222,878	104,907	47,586	297,347

# Processed Fishery Products

## PRODUCTION OF FRESH AND FROZEN FILLETS AND STEAKS, BY SPECIES, 2012 AND 2013

Species	2012 (1)			2013		
	Thousand pounds	Metric tons	Thousand dollars	Thousand pounds	Metric tons	Thousand dollars
<b>Fillets:</b>						
Amberjack	89	40	704	309	140	3,430
Anglerfish	335	152	2,311	517	235	2,719
Bluefish	99	45	404	110	50	378
Cobia	25	11	268	48	22	478
Cod	63,870	28,971	216,257	69,398	31,479	232,486
Cusk	11	5	42	6	3	17
Dolphinfish	3,624	1,644	24,545	3,848	1,745	25,208
Flounders	16,114	7,309	51,192	14,071	6,383	60,659
Groupers	1,264	573	12,265	1,247	566	13,855
Haddock	10,661	4,836	53,657	11,207	5,083	55,710
Hake	23,139	10,496	34,387	42,897	19,458	62,197
Halibut	4,519	2,050	37,727	3,873	1,757	35,463
Lingcod	169	77	840	188	85	908
Ocean perch:						
Atlantic	1,060	481	4,476	1,492	677	4,557
Pacific	464	210	1,382	770	349	2,722
Opah	218	99	1,898	154	70	1,193
Patagonian Toothfish	435	197	7,221	556	252	10,187
Pollock:						
Atlantic	2,433	1,104	7,792	2,449	1,111	7,844
Alaska	415,089	188,283	642,523	473,096	214,595	713,722
Rockfishes	2,447	1,110	7,945	1,620	735	5,167
Sablefish	94	43	935	213	97	1,524
Salmon	106,651	48,377	485,623	78,416	35,569	446,410
Sea bass	286	130	2,859	358	162	3,371
Sea trout	143	65	851	138	63	873
Shark	65	29	219	138	63	463
Snapper	659	299	6,556	573	260	6,547
Striped bass	171	78	1,616	236	107	2,025
Swordfish	2,526	1,146	20,603	2,919	1,324	23,672
Tilapia	7,576	3,436	25,521	8,055	3,654	26,422
Tuna	11,310	5,130	101,907	10,217	4,634	209,066
Wahoo	286	130	2,406	519	235	2,860
Wolffish	(2)	(2)	(2)	(2)	(2)	(2)
Yellowtail Jack	149	68	1,040	78	35	424
Unclassified	10,865	4,928	59,950	15,830	7,180	66,855
<b>Total Fillet</b>	<b>686,844</b>	<b>311,550</b>	<b>1,817,920</b>	<b>745,544</b>	<b>338,177</b>	<b>2,029,410</b>
<b>Steaks:</b>						
Halibut	839	381	9,931	1,042	473	11,220
Salmon	30	14	183	634	288	4,453
Swordfish	1,058	480	6,279	1,731	785	10,694
Tuna	703	319	6,609	1,455	660	10,509
Unclassified	2,290	1,039	3,031	2,717	1,232	7,491
<b>Total Steaks</b>	<b>4,920</b>	<b>2,232</b>	<b>26,033</b>	<b>7,579</b>	<b>3,438</b>	<b>44,367</b>
<b>Grand total</b>	<b>691,764</b>	<b>313,782</b>	<b>1,843,953</b>	<b>753,123</b>	<b>341,614</b>	<b>2,073,777</b>

(1) Revised

(2) Included in unclassified.

Note: Some fillet products were further processed into frozen blocks.

# Processed Fishery Products

## PRODUCTION OF CANNED FISHERY PRODUCTS, BY SPECIES, 2012 AND 2013

Species	Pounds per case	2012 (1)			2013		
		Standard Cases	Thousand pounds	Thousand dollars	Standard Cases	Thousand pounds	Thousand dollars
<b>For human consumption:</b>							
<b>Fish:</b>							
Herring	23.4	(5)	(5)	(5)	(5)	(5)	(5)
<b>Salmon:</b>							
Chinook	44.25	158	7	90	113	5	54
Chum	44.25	3,141	139	301	37,853	1,675	3,841
Pink	44.25	1,700,362	75,241	189,715	3,790,147	167,714	370,786
Coho	44.25	23	1	9	23	1	9
Sockeye	44.25	1,008,678	44,634	220,290	753,831	33,357	197,130
<b>Total salmon</b>		<b>2,712,362</b>	<b>120,022</b>	<b>410,405</b>	<b>4,581,966</b>	<b>202,752</b>	<b>571,820</b>
Specialties	48	7,583	364	1,613	7,500	360	2,071
Sardines, Maine	23.4	(5)	(5)	(5)	(5)	(5)	(5)
<b>Tuna: (2)</b>							
<b>Albacore:</b>							
Solid	18	7,150,833	128,715	382,139	6,924,611	124,643	333,269
Chunk	18	1,684,611	30,323	72,907	1,522,500	27,405	68,283
<b>Total albacore</b>		<b>8,835,444</b>	<b>159,038</b>	<b>455,046</b>	<b>8,447,111</b>	<b>152,048</b>	<b>401,552</b>
<b>Lightmeat:</b>							
Solid	18	440,389	7,927	23,634	608,056	10,945	35,162
Chunk	18	12,225,444	220,058	407,389	12,254,000	220,572	415,271
<b>Total lightmeat</b>		<b>12,665,833</b>	<b>227,985</b>	<b>431,023</b>	<b>12,862,056</b>	<b>231,517</b>	<b>450,433</b>
<b>Total tuna</b>		<b>21,501,278</b>	<b>387,023</b>	<b>886,069</b>	<b>21,309,167</b>	<b>383,565</b>	<b>851,985</b>
Specialties	48	42	2	25	42	2	25
Other	48	3,958	190	260	833	40	237
<b>Total fish</b>	-	<b>24,225,223</b>	<b>507,601</b>	<b>1,298,372</b>	<b>25,899,508</b>	<b>586,719</b>	<b>1,426,138</b>
<b>Shellfish:</b>							
<b>Clam and clam products: (3)</b>							
Whole and minced	15	1,148,733	17,231	27,317	1,125,333	16,880	28,650
Chowder and juice	30	1,836,000	55,080	39,032	1,866,533	55,996	61,276
Specialties	48	(5)	(5)	(5)	(5)	(5)	(5)
<b>Total clams</b>	-	<b>2,984,733</b>	<b>72,311</b>	<b>66,349</b>	<b>2,991,867</b>	<b>72,876</b>	<b>89,926</b>
<b>Crab meat and specialties</b>							
<b>Total crab meat and specialties</b>	<b>20</b>	<b>13,385</b>	<b>261</b>	<b>1,995</b>	<b>3,077</b>	<b>60</b>	<b>209</b>
Oyster, specialties	48	(5)	(5)	(5)	(5)	(5)	(5)
Shrimp, natural (4)	6.75	(5)	(5)	(5)	(5)	(5)	(5)
Other	48	36,146	1,735	6,295	57,896	2,779	17,305
<b>Total shellfish</b>	-	<b>3,034,264</b>	<b>74,307</b>	<b>74,639</b>	<b>3,052,839</b>	<b>75,715</b>	<b>107,440</b>
<b>Total for human consumption</b>	-	<b>27,259,486</b>	<b>581,908</b>	<b>1,373,011</b>	<b>28,952,347</b>	<b>662,434</b>	<b>1,533,578</b>
<b>For bait and animal food</b>	<b>48</b>	<b>6,222,229</b>	<b>298,667</b>	<b>241,663</b>	<b>6,222,354</b>	<b>298,673</b>	<b>241,547</b>
<b>Grand total</b>	-	<b>33,481,716</b>	<b>880,575</b>	<b>1,614,674</b>	<b>35,174,701</b>	<b>961,107</b>	<b>1,775,125</b>

(1) Revised.

(2) Flakes included with chunk.

(3) "Cut out" or "drained" weight of can contents are given for whole or minced clams, and net contents for other clam products.

(4) Drained weight.

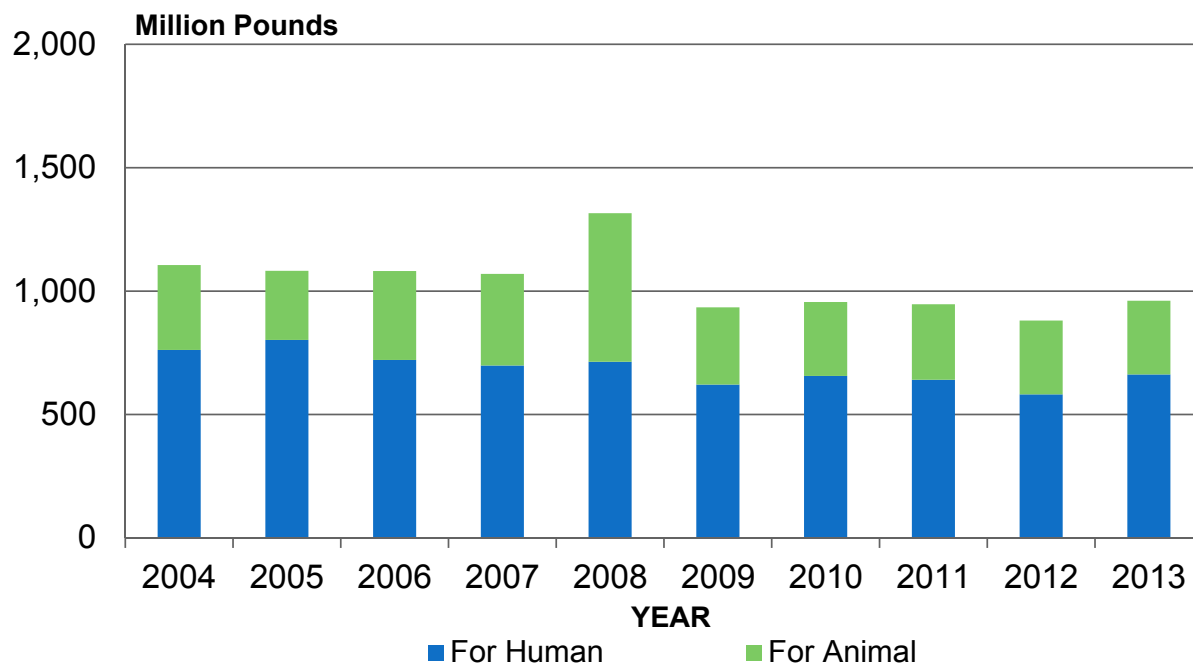
(5) Confidential included with 'Other.'

# Processed Fishery Products

**PRODUCTION OF CANNED FISHERY PRODUCTS, 2004-2013**

Year	For human consumption			For animal food and bait			Total		
	Thousand Pounds	Metric Tons	Thousand dollars	Thousand Pounds	Metric Tons	Thousand dollars	Thousand Pounds	Metric Tons	Thousand dollars
2004	761,562	345,442	966,715	343,895	155,990	133,038	1,105,457	501,432	1,099,753
2005	802,229	363,889	1,081,457	280,268	127,129	129,215	1,082,497	491,017	1,210,672
2006	721,102	327,090	1,100,794	360,241	163,404	229,109	1,081,343	490,494	1,329,903
2007	698,831	316,988	1,090,070	371,032	168,299	233,614	1,069,863	485,287	1,323,684
2008	713,946	323,844	1,191,214	601,678	272,919	231,273	1,315,624	596,763	1,422,487
2009	621,256	281,800	1,190,067	312,887	141,925	217,699	934,143	423,724	1,407,766
2010	656,420	297,750	1,196,346	299,300	135,762	217,583	955,720	433,512	1,413,929
2011	640,917	290,588	1,251,332	305,906	138,209	224,953	946,823	429,476	1,476,285
2012	581,908	263,952	1,373,011	298,667	135,474	241,663	880,575	399,426	1,614,674
2013	662,434	300,478	1,533,578	298,673	135,477	241,547	961,107	435,955	1,775,125

**Production of Canned Fishery Products, 2004-2013**



# Processed Fishery Products

## PRODUCTION OF MEAL AND OIL, 2012 AND 2013

Product	2012			2013		
	Thousand pounds	Metric tons	Thousand dollars	Thousand pounds	Metric tons	Thousand dollars
<b>Dried scrap and meal:</b>						
Fish	585,073	265,387	279,824	507,965	230,411	242,059
Shellfish	492	223	147	91	41	6
<b>Total, scrap and meal</b>	<b>585,565</b>	<b>265,611</b>	<b>279,971</b>	<b>508,056</b>	<b>230,453</b>	<b>242,065</b>
<b>Body oil, total</b>	<b>115,090</b>	<b>52,204</b>	<b>55,217</b>	<b>175,876</b>	<b>79,777</b>	<b>56,642</b>

Note: To convert pounds of oil to gallons divide by 7.75

The above data includes products in American Samoa and Puerto Rico

## PRODUCTION OF INDUSTRIAL PRODUCTS, 2004-2013

Year	Scrap and meal		Marine animal oil		Meal and oil	Other industrial products	Grand total
	Thousand pounds	Metric tons	Thousand pounds	Metric tons	-----Thousand dollars-----		
2004	571,012	259,009	179,400	81,375	187,801	14,642	202,443
2005	565,169	256,359	157,680	71,523	154,335	52,496	206,831
2006	582,900	264,402	142,747	64,750	185,712	61,000	246,712
2007	563,221	255,475	152,205	69,040	277,874	62,025	339,899
2008	492,828	223,545	190,023	86,194	245,240	64,631	309,871
2009	472,805	214,463	168,157	76,276	227,438	61,657	289,095
2010	487,692	221,216	136,362	61,853	218,937	64,040	282,977
2011	620,823	281,603	143,171	64,942	301,462	133,640	435,102
2012	585,565	265,611	115,090	52,204	335,188	162,341	497,529
2013	508,056	230,453	175,876	79,777	298,707	180,073	478,780

Note: Does not include the value of imported items that may be further processed.