

ECONOMIC STATUS REPORT SUMMARY:

BSAI CRAB FISHERIES, 2017

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The Bering Sea/Aleutian Islands (BSAI) crab fisheries managed under the North Pacific Fishery Management Council's Fishery Management Plan (FMP) are currently (as of calendar year 2016) prosecuted by an active fleet of 116 catcher vessels and two catcher processors, and landed and processed at 12 processing facilities throughout the region. Of the 10 crab stocks and 11 fisheries managed under the FMP¹, seven fisheries were open to targeted fishing in 2016. After closure for the 2010/11 through 2012/13 seasons, the Bering Sea Tanner (BST) crab fisheries opened for targeted fishing for 2013/14 through 2015/16 seasons, but were subsequently closed for the 2016/17 season.² Pribilof Islands red and blue king, and Western Aleutian red king crab stocks are currently designated overfished, as detailed in the assessments for these stocks. The Saint Matthew blue king (SMB) crab fishery was closed for the 2013/14 season under the State of Alaska's management strategy, reopened for the 2014/15 and 2015/16 seasons, and closed again for 2016/17.

This report provides a brief summary of key indicators of economic status and performance of BSAI crab fisheries for the 2012 through 2016 calendar year operations. The full Economic Status Report for BSAI Crab Fisheries, 2017 (Crab Economic SAFE, currently being updated for annual release in February, 2018) provides detailed information regarding production, sales, revenue, and price indices in the harvesting and processing sectors, income, employment, and demographics of labor in both sectors, capital and operating expenditures in the fishery, quota share lease and sale market activity, changes in distribution of quota holdings, productivity in the harvesting sector, U.S. imports and exports of king and Tanner crab, price forecasts, performance metrics for catch share programs, and other information regarding data collection and ongoing economic and social science research related the BSAI crab fisheries and related communities. The following document summarizes three sets of primary indicators describing aggregate changes in gross volume and value of production, labor earnings and employment in the crab processing and harvesting sectors, and crab harvest quota leasing activity. Note that results presented below for 2016 calendar year fisheries are preliminary pending completion of data validation and additional analyses, and may be revised in the final update of the full Economic Status Report.

¹There are currently 11 distinctly managed fisheries on the 10 crab stocks managed under the FMP; catch allocations and other management elements are administered separately for the Eastern and Western components of the Bering Sea Tanner crab stock, and for the Eastern and Western components of the Aleutian Islands golden king crab stock, and the Pribilof Island blue and red king crab stocks are managed collectively as a single fishery. For fisheries characterized by a small number of participating entities, individual statistics where indicated in Tables 1 - 3, and elsewhere in the report, are suppressed due to confidentiality restrictions; this includes most values for the Pribilof Island golden king (PIG) crab fishery and the Norton Sound red king (NSR) crab fisheries, and statistics for both Aleutian Islands golden king crab fisheries and both Bering Sea Tanner crab fisheries are reported in aggregate, respectively. Values that are indicated as suppressed for a specific fishery are also excluded from values reported in aggregate over multiple crab fisheries. Except where noted, the suppressed values are sufficiently small that they have minimal effect on the accuracy of aggregate information at the level of precision reported here.

²Most activity in the BSS and BST fisheries occur during January through March of the crab season/year, such that effects of closing the 2016/17 BST fishery occurred primarily during calendar year 2017 and are not reflected in this report.

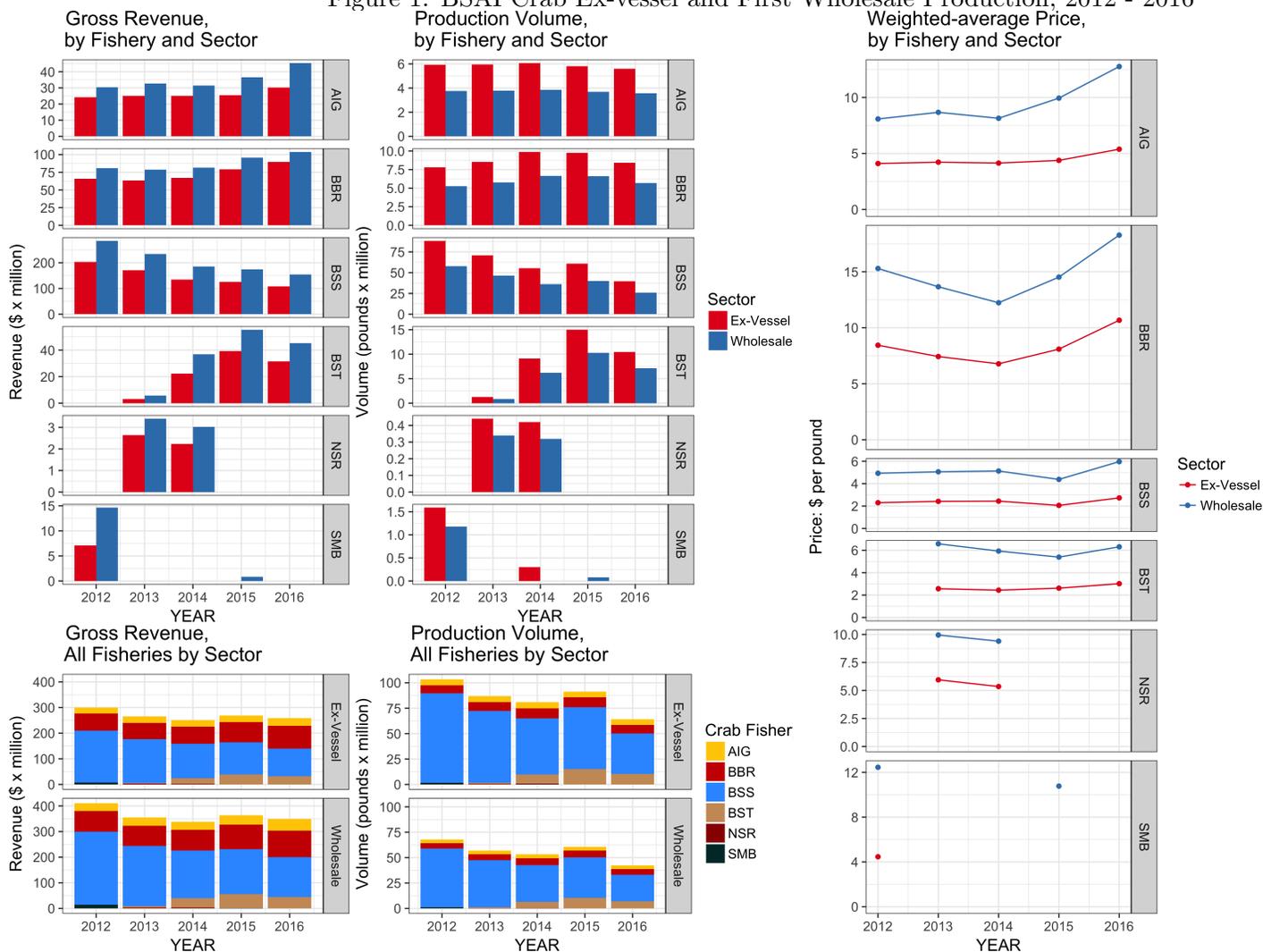
Fishery production and economic value

Harvest and processing sector production statistics by crab fishery, including ex-vessel and first wholesale output, estimated revenue, and average prices are shown in Table 1 for calendar years 2012 through 2016 and summarized in Figure 1. Across all fisheries managed under the BSAI Crab FMP, the total volume of ex-vessel landings commercially sold to processors during 2016 was 64 million pounds (29 thousand metric tons), a 30 percent decrease from the previous year. Processing sector finished production volume during 2016 was 42.3 million pounds (19.2 thousand metric tons) aggregated over all BSAI crab species and product forms, also declining 30 percent from the previous year. The effect of fishery closures and reduced production over all fisheries combined with offsetting price increases produced an aggregate 3.6 percent decrease in total ex-vessel revenues over all fisheries in 2016, totaling \$259.3³ million for the year, and with aggregate first wholesale revenues declining by 3.9 percent to \$349 million.

As of 2016, allowable catch quantities in all BSAI crab fisheries currently open to targeted fishing are fully exploited (> 98% of total allocation landed), and recent inter-annual variation in commercial landings largely reflects the results of stock assessments and the State of Alaska's specified catch limits rather than changes in fishing capacity or exploitation rate. The decrease in aggregate production during 2016 reflected declines across nearly all fisheries compared to 2015, with the total catch of 39.6 million pounds (17.6 thousand mt) landed in the Bering Sea snow crab (BSS) fishery representing the largest decline in both absolute and proportional (-35%) terms. Landings in the BST fisheries decreased 30 percent from 2015 levels, to 10.6 million pounds (4.7 thousand mt), and landings of 8.4 million pounds (3.8 metric tons) in the Bristol Bay red king crab (BBR) fishery declined 14 percent. The 5.6 million pounds (2.5 metric tons) landed in the Aleutian Islands golden king crab (AIG) fisheries during 2016 represented a relatively modest reduction of 3.4 percent from 2015.

³All monetary values in the report, unless otherwise noted, are inflation-adjusted to 2015-equivalent dollars using the GDP-chaintype price index (<https://research.stlouisfed.org/fred2/series/GDPCTPI>). The GDP price index is used to adjust fishery production revenues and costs to account for the change in general US production prices over time.

Figure 1: BSAI Crab Ex-vessel and First Wholesale Production, 2012 - 2016



Source: ADF&G fish tickets, eLandings, CFEC pricing, ADF&G Commercial Operator's Annual Report, NMFS AFSC BSAI Crab Economic Data Report (EDR) database. See Table 1 footnotes for details.

(a) Revenue, (b) Volume, and (c) Weighted Average Price, 2011-2015; gross revenue and production volume by sector are presented in the upper pair of panels by individual crab fishery for comparison of within-fishery variation over time, and summarized over all fisheries in the lower panels to illustrate the variation in aggregate values and relative contribution of each fishery over time. Figure does not display information for PIG fishery due to confidentiality. See Table 1 footnotes for data sources and details.

Similar to ex-vessel production, the 30 percent decrease in processing sector output aggregated over all active crab fisheries was driven in the largest part by the 35 percent decline to 25.9 million pounds (11.8 thousand mt) of finished production in the BSS fishery, and a 30 percent decline in finished volume in the BST fisheries to 7.2 million pounds (3.2 thousand mt).

Increases in average prices reported for both sectors continued for a second year across all crab fisheries during 2016, substantially offsetting production declines in the respective fisheries, resulting in increased ex-vessel and wholesale revenues in both AIG and BBR fisheries and partially mitigating production effects in BSS and BST fisheries (Table 1). Average BBR ex-vessel price increased 32% per landed pound to \$10.67, and average first wholesale price increased 26 percent to \$18.27 per finished pound, while AIG prices increased to o \$5.38 per-pound (+23%) ex-vessel and to \$9.38 (+28%) first wholesale. Prices in the BST fishery increased to \$3.02 ex-vessel (+15%) and \$6.31 (+17%) at first wholesale, and to \$2.73 average ex-vessel (+33%), and \$5.97 average first wholesale (+36%) per-pound.

The combined effect of declining production levels due to catch allocations and fishery closures with market-driven price increases across crab fisheries produced an overall 3.6 percent decrease in gross ex-vessel revenues and 3.9 percent revenue decline in the processing sector for 2016, with aggregate gross ex-vessel revenues of \$259 million and first wholesale revenues of \$349 million. The relatively large proportional price increases and production declines in both sectors of the BSS fishery produced gross revenue of \$108 million in the harvest sector (-14%) compared to 2015, and \$155 million in the processing sector (-11%). The BST fishery produced gross revenue of \$31.6 million ex-vessel and \$45 million in the processing sector, both declining by 19 percent from the previous year. In contrast, gross ex-vessel earnings increased by 13 percent to \$89.6 million in the BBR fishery, and by 8 percent to \$103.7 million first wholesale, while ex-vessel revenues in the AIG fisheries increased by 19 percent to \$30.1 million and by 24 percent in the processing sector to \$45.4 million. The proportional variation in aggregate gross revenue across crab fisheries from 2015 to 2016 was unexceptional relative to inter-annual variation over the last 15 years in the historically volatile crab fisheries; longer time series for these and other measures of production and earnings performance in crab fisheries are presented and more fully examined in the BSAI Crab Economic Status Report currently being updated for 2017 (to be released in February, 2018).

Employment and Income

A summary of selected indicators from the most recent employment data available for Crab Rationalization (CR) program fisheries is provided in Table 2⁴ and depicted graphically in Figure 2. Crab EDR data for calendar year 2016 are reported where available, but note that results are preliminary pending completion of data validation and additional analyses.

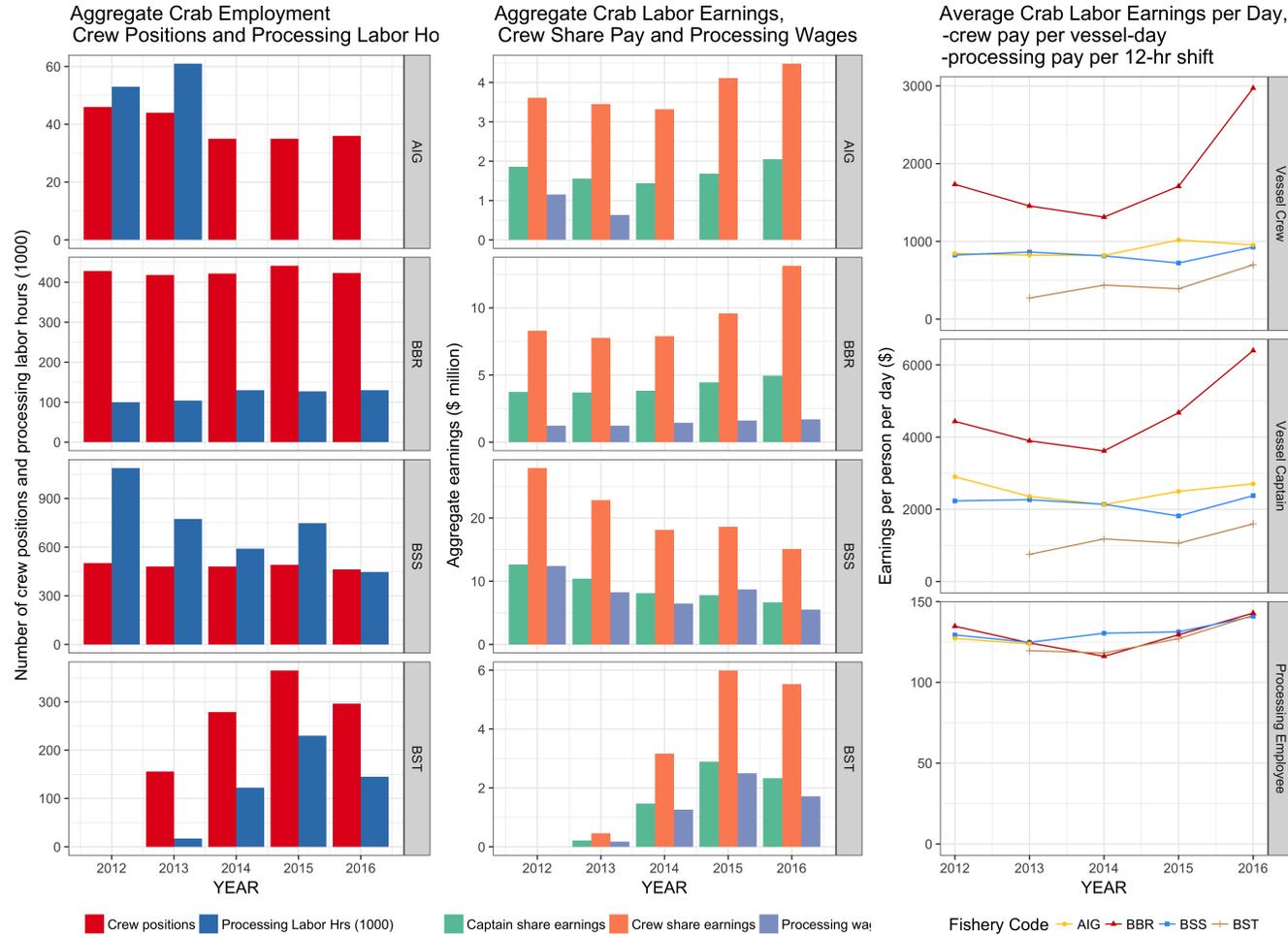
The number of vessels operating in one or more of the CR fisheries in 2016 declined from 82 to 80. The active fleet in the BBR and BSS fisheries were similarly reduced, to 63 and 68, respectively, while 46 vessels participated in the BST fishery, 11 fewer compared to 2015. Based on the number of crew onboard reported by participating vessels during each fishery (averaged over crew size values reported in eLandings catch accounting records for crab vessels), there were an estimated 1,218 crew

⁴BSAI Crab Economic Data Report (EDR) data are collected for CR fisheries only. The NSR and Pribilof Island golden king (PIG) crab fisheries are managed by the State of Alaska under the FMP, but are not included in the CR program.

positions in aggregate across all 80 vessels in CR fisheries in 2016, 114 fewer than the previous year, of which 69 were due to the smaller fleet in the BST fishery.⁵

⁵ Note that the aggregate count of vessels indicates the total number of distinct vessels, while the count of crew positions counts positions separately by fishery and vessel, such that individual crew members are counted more than once.

Figure 2: Harvest and Processing Employment and Compensation, Selected Crab Fisheries, 2012 - 2016



Source: NMFS AFSC BSAI Crab Economic Data Report (EDR) database; ADF&G Shellfish Observer Program, Confidential Interview Form (CIF) database. See Table 2 footnotes for details.

Revenue-share payments to crab vessel crew members as a group totaled approximately \$36 million in 2016, with an additional \$16 million paid to vessel captains, both declining by approximately 5%.

⁶ Aggregate crew and captain earnings in the BSS fishery declined by 19 percent to \$15.1 million and decreased by 14 percent to \$6.7 million, respectively. Aggregate crew and captain earnings in the BBR fisheries increased Sexpryr-1, to \$11.2 million (+17%) and \$5 million (+11%), respectively. Crew and captain earnings in the BST fishery totaled \$5.9 million and \$2.86 million, respectively, nearly doubling the level of earnings in 2014.

Crab processing labor input at processing plants that received IFQ and CDQ crab landings in 2016 is estimated at 788 thousand labor hours, declining 33 percent from 2015, with the number of plants active over all CR fisheries reduced from 9 to 8. Aggregate processing labor income generated across all CR fisheries during 2016 was \$9.6 million, 29 percent less than the previous year. Processing labor pay statistics reflect increasing hourly processing wage rates across all fisheries beginning in 2014 associated with annual incremental increases in Alaska state minimum wage. Median plant-level hourly wage rate increased by 11 percent from 2015, to \$11.93 over all CR fisheries.

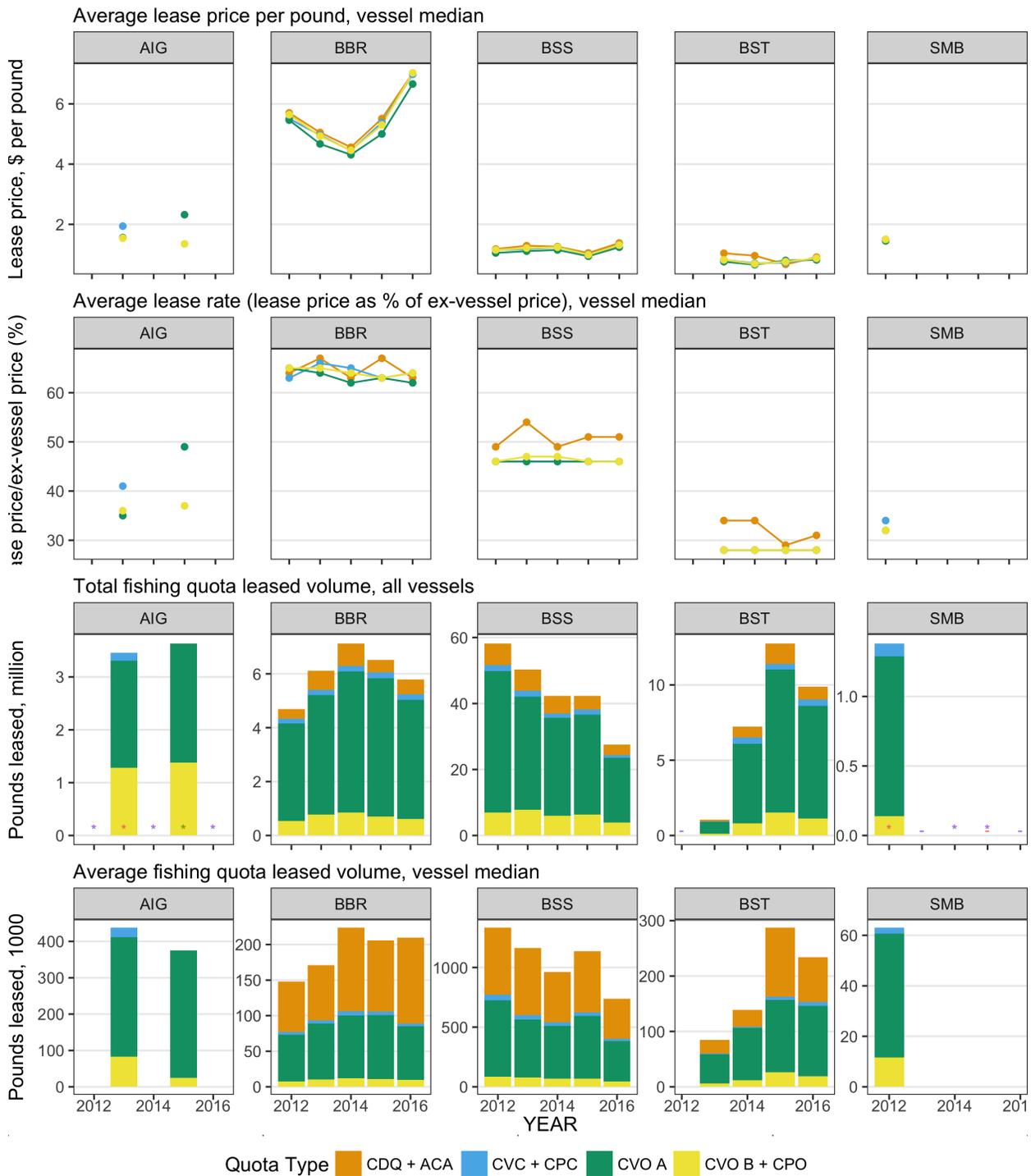
IFQ Leasing

This report provides results from the BSAI Crab Rationalization Economic Data Report (EDR) program collection of crab harvest quota allocation lease data associated with 2012 through 2016 calendar year crab fishing activity. Table 3 and Figure 3 shows aggregated results for crab fishing quota lease volume (in pounds) and cost reported for crab vessels active during the most recent five calendar years for CR fisheries, by fishing quota type category, including total quantities summed over all reporting vessels, and average values (both median and mean) for volume and cost of leased quota per vessel, and average lease price paid (\$US per pound) and average lease rate (lease price as percentage of ex-vessel price) per vessel. Both median and arithmetic mean average value metrics are presented to provide information on the variation in reported values within each stratum, with the higher mean values shown indicating the presence of a subset of high-value data points in these data. Harvest quota types are categorized as the following: catcher vessel owner (CVO) Class A IFQ; catcher vessel owner Class B IFQ and catcher/processor owner (CPO) IFQ; catcher vessel crew IFQ and catcher/processor crew IFQ, and community development quota (CDQ).

The number of vessels reporting quota leases in the 2016 BBR fishery range from 50 vessels leasing CVO Class A shares to 5 vessels leasing CDQ shares (out of 63 crab vessels active during the 2016/17 BBR fishery), and from 54 vessels leasing CVO Class A BSS IFQ allocation to 7 vessels leasing CDQ allocation (out of 67 active vessels) in the BSS fishery. Total volume and cost over all vessels leasing the respective quota types during 2016 range from 4.43 million pounds and \$29.7 million for BBR CVO Class A IFQ, to 201 thousand pounds and \$1.4 million for BBR CVO and CPC crew IFQ allocation; BSS lease volume and cost ranged from 19.6 million pounds and \$26 million for CVO Class A IFQ to 925 thousand pounds and \$1.3 million for crew share IFQ allocation.

⁶ In addition to revenue-share payments, income is derived by some crew and many captains from royalties for harvesting quota shares held by either the captain or crew. While this may become an increasingly important source of income as opportunities for investment in QS ownership are advanced, there is no evidence to date that the proportion of CR fishery quota share pools held by crab crew members has changed in recent years, following a small amount of consolidation occurring during the initial years of the program (see NMFS Alaska Region, Restricted Access Management Program, Bering Sea and Aleutian Islands Crab Rationalization Program Report, Fishing Year 2011/12 for information on quota allocation and transfer activity, and other current CR program administration details).

Figure 3: Crab Harvest Quota Lease Activity; Lease Volume, Price, and Rate, Selected Crab Fisheries, 2012 - 2016



Source: NMFS AFSC BSAI Crab Economic Data Report (EDR) database; ADF&G Shellfish Observer Program, Confidential Interview Form (CIF) database. See Table 3 footnotes for details.

Median vessel-level values⁷ for 2016 BBR quota leased volume and cost ranged from 121 thousand pounds and \$846 thousand per vessel for the five vessels leasing BBR CDQ allocation, 75 thousand

⁷Differences between median and mean average values shown in Table 3 are most pronounced in the per-vessel pounds and cost statistics; this primarily reflects the relative concentration of high-volume quota leasing activity by a small number of vessels within each quota type category.

pounds and \$494 thousand for BBR CVO-A shares, and 4.0 thousand pounds and \$34 thousand for BBR CVO and CPO crew IFQ. BSS per-vessel averages ranged from 337 thousand pounds and \$404 thousand per vessel for BSS CVO- Class A allocation to 22 thousand pounds and \$31 thousand for BSS crew share allocation.

Average (median) lease prices and lease rates in the BBR fishery shown in Table 3 have remained quite stable over the three years for which data are available, varying slightly year-to-year and by quota type within fishery, and with inter-annual variation in price per pound corresponding to changes in ex-vessel prices. In the 2016 BBR fishery, median lease price ranged from \$6.66 per pound for BBR CVO Class A allocation (62% of ex-vessel value) to \$7.02 per pound (median 63% of ex-vessel value) for CDQ allocation. Median lease price and rate in the 2016 BSS fishery were least for CVO Class A IFQ at \$1.32 (median 46% of ex-vessel value), and \$1.37-\$1.43 for other allocation types (ranging from median 46% to 51% of ex-vessel price).

Table 1: BSAI Crab Harvesting and Processing Sector Output – Production Volume, Gross Revenue, and Average Price^a

	Year	Harvesting Sector: Ex-Vessel Statistics ^a						Processing Sector: First Wholesale Statistics ^b					
		Vessels	CFEC permits	Landed volume 1000t	Landed volume million lbs	Buyers	Gross revenue \$million	Average price \$/lb	Plants	Finished volume, 1000t	Finished volume, million lbs	Gross revenue \$million	Average price \$/lb
All	2012	113	284	46.97	103.55	26	\$300.49	-	20	30.84	68.00	\$410.54	-
	2013	115	238	39.39	86.85	29	\$265.06	-	22	25.87	57.03	\$354.79	-
	2014	109	256	36.73	80.97	25	\$251.00	-	17	24.15	53.24	\$338.25	-
	2015	117	270	41.49	91.46	22	\$268.98	-	15	27.45	60.51	\$363.37	-
	2016	118	262	29.04	64.03	21	\$259.32	-	12	19.19	42.31	\$349.04	-
AIG	2012	6	14	2.69	5.92	14	\$24.28	\$4.10	8	1.71	3.76	\$30.38	\$8.08
	2013	6	14	2.70	5.94	13	\$25.06	\$4.22	7	1.71	3.77	\$32.69	\$8.67
	2014	5	11	2.75	6.07	12	\$25.16	\$4.14	5	1.75	3.85	\$31.38	\$8.14
	2015	5	12	2.63	5.80	9	\$25.39	\$4.38	4	1.67	3.68	\$36.59	\$9.94
	2016	5	13	2.54	5.60	11	\$30.13	\$5.38	5	1.61	3.56	\$45.36	\$12.76
BBR	2012	64	74	3.54	7.80	17	\$65.90	\$8.44	12	2.39	5.27	\$80.58	\$15.29
	2013	63	73	3.86	8.52	17	\$63.33	\$7.43	11	2.61	5.75	\$78.58	\$13.66
	2014	63	72	4.48	9.87	17	\$66.93	\$6.78	9	3.02	6.66	\$81.49	\$12.23
	2015	64	71	4.43	9.77	15	\$79.05	\$8.09	10	2.99	6.60	\$95.79	\$14.52
	2016	63	70	3.81	8.41	17	\$89.66	\$10.67	10	2.57	5.68	\$103.72	\$18.27
BSS	2012	72	109	40.02	88.23	16	\$203.21	\$2.30	13	26.21	57.79	\$284.95	\$4.93
	2013	71	90	32.07	70.69	15	\$170.83	\$2.42	12	21.00	46.31	\$234.49	\$5.06
	2014	70	91	25.05	55.22	13	\$134.47	\$2.44	10	16.41	36.17	\$185.45	\$5.13
	2015	70	94	27.63	60.91	14	\$125.35	\$2.06	10	18.10	39.90	\$174.86	\$4.38
	2016	68	86	17.95	39.57	12	\$107.97	\$2.73	8	11.76	25.92	\$154.82	\$5.97
BST	2013	22	26	0.57	1.25	13	\$3.21	\$2.57	9	0.39	0.86	\$5.63	\$6.58
	2014	40	52	4.12	9.09	13	\$22.20	\$2.44	9	2.82	6.23	\$36.91	\$5.93
	2015	55	77	6.79	14.98	13	\$39.19	\$2.62	8	4.65	10.26	\$55.29	\$5.39
	2016	46	63	4.74	10.45	12	\$31.56	\$3.02	7	3.24	7.15	\$45.15	\$6.31
NSR	2012	30	64	*	*	3	*	*	3	*	*	*	*
	2013	34	52	0.20	0.44	5	\$2.64	\$5.95	5	0.16	0.34	\$3.40	\$9.95
	2014	34	65	0.19	0.42	4	\$2.23	\$5.35	4	0.15	0.32	\$3.02	\$9.40
	2015	37	72	*	*	3	*	*	3	*	*	*	*
	2016	37	75	*	*	2	*	*	1	*	*	*	*

Continued on next page.

Table 1: Continued

	Harvesting Sector: Ex-Vessel Statistics ^a							Processing Sector: First Wholesale Statistics ^b					
	Year	Vessels	CFEC permits	Landed volume 1000t	Landed volume million lbs	Buyers	Gross revenue \$million	Average price \$/lb	Plants	Finished volume, 1000t	Finished volume, million lbs	Gross revenue \$million	Average price \$/lb
PIG	2012	1	1	*	*	1	*	*	1	*	*	*	*
	2013	1	1	*	*	1	*	*	1	*	*	*	*
	2014	1	1	*	*	1	*	*	1	*	*	*	*
SMB	2012	17	22	0.72	1.59	11	\$7.11	\$4.46	6	0.53	1.18	\$14.63	\$12.45
	2014	4	5	0.14	0.30	6	*	*	1	*	*	*	*
	2015	3	3	*	*	4	*	*	1	0.04	0.08	\$0.83	\$10.77

Notes: Data shown for all BSAI crab fisheries by calendar year. All dollar values are adjusted for inflation to 2016-equivalent value. Information suppressed for confidentiality where indicated by “*”, and data not available where indicated by “-”.

^a Except where noted, ex-vessel results reflect total commercial sales volume and value across all management programs (LLP/open access, IFQ, CDQ, ACA), inclusive of all harvesting sector production (CV, CP, and catcher-sellers); ex-vessel average price results are sourced from CV sector EDR data where available (2012 to 2015 for CR program fisheries) and secondarily from CFEC gross earnings estimates (2016 for CR fisheries and all years for non-CR fisheries); ex-vessel value of CP and catcher-seller landings are incorporated in revenue total using average CV ex-vessel price as a proxy per-pound value, multiplied by pounds of live catch

^b Counts of buyers include CPs landing and processing their own crab, but exclude catcher sellers (NSR fishery only); processing sector results inclusive of all CP and shoreside processor output; finished volume is sourced from crab processor EDR production reports where available (2012to2015), or eLandings ex-vessel sales volume adjusted by average product recovery rate (PRR) by fishery (2016). Wholesale price results are sourced from crab processor EDR gross earnings reports where available (2012 to 2015) and secondarily from COAR gross earnings estimates (2016); gross wholesale revenue estimates are derived from price and volume sourced or estimated as described.

^cStatistics reported for “All BSAI Fisheries” reflect information aggregated over all FMP crab fisheries, excluding fishery-level confidential information suppressed where indicated by “*”.

^dLandings and ex-vessel revenue suppressed in years where CDQ fishery landings are confidential.

^eData for Norton Sound red king crab are aggregated over the summer and winter commercial fisheries.

Source: ADF&G fish ticket data; eLandings; CFEC ex-vessel pricing; ADF&G Commercial Operator’s Annual Report (COAR) data; NMFS AFSC BSAI Crab Economic Data Report (EDR) database.

Table 2: CR Program Fisheries Crew and Processing Sector Employment and Earnings

	Year	Crew positions ^a			Crew share ^b		Captain share		Processing labor hours ^c			Processing labor payment ^d		
		Vessels	Total	Vessel median	Total \$million	Vessel median \$1,000	Total \$million	Vessel median \$1,000	Plants	Total 1,000 hrs	Plant median 1,000 hrs	Median \$/hour	Total \$million	Plant median, \$1,000
All CR Fisheries	2012	83	1,081	-	\$40.68	-	\$18.64	-	13	1,261.90	71.66	\$10.79	\$15.05	\$628.68
	2013	81	1,099	-	\$34.46	-	\$15.85	-	12	955.77	53.70	\$10.52	\$10.30	\$579.70
	2014	76	1,216	-	\$32.49	-	\$14.85	-	9	905.08	103.11	\$10.24	\$9.78	\$619.16
	2015	82	1,332	-	\$38.32	-	\$16.83	-	9	1,179.34	112.90	\$10.76	\$13.59	\$1,087.08
	2016	80	1,218	-	\$36.33	-	\$16.00	-	8	788.23	95.46	\$11.93	\$9.66	\$723.10
AIG	2012	6	46	7.67	\$3.61	\$657.98	\$1.86	\$329.64	7	53.16	2.60	\$10.60	\$1.15	\$61.69
	2013	6	44	7.33	\$3.45	\$555.20	\$1.56	\$283.36	6	61.09	5.96	\$10.32	\$0.63	\$63.73
	2014	5	35	7.00	\$3.32	\$717.60	\$1.44	\$298.53	4	*	*	*	*	*
	2015	5	35	7.00	\$4.11	\$725.17	\$1.68	\$350.45	3	*	*	*	*	*
	2016	5	36	7.20	\$4.48	\$988.90	\$2.05	\$361.71	4	*	*	*	*	*
BBR	2012	64	428	6.68	\$8.30	\$105.54	\$3.74	\$56.17	10	100.36	6.51	\$11.23	\$1.22	\$70.20
	2013	63	418	6.63	\$7.76	\$97.12	\$3.69	\$54.68	8	103.96	10.00	\$10.37	\$1.23	\$96.98
	2014	63	422	6.70	\$7.90	\$108.64	\$3.82	\$54.00	7	129.98	21.07	\$9.68	\$1.44	\$77.83
	2015	64	441	6.89	\$9.60	\$138.42	\$4.46	\$63.83	8	127.01	14.80	\$10.79	\$1.61	\$120.51
	2016	63	423	6.71	\$11.20	\$157.67	\$4.95	\$70.09	8	129.78	8.93	\$11.91	\$1.69	\$87.49
BSS	2012	72	502	6.97	\$27.88	\$386.58	\$12.65	\$181.51	11	1,087.26	77.94	\$10.78	\$12.43	\$633.98
	2013	71	481	6.77	\$22.80	\$293.40	\$10.38	\$146.39	10	774.12	63.55	\$10.40	\$8.27	\$498.94
	2014	70	480	6.86	\$18.12	\$242.13	\$8.13	\$112.22	8	590.39	76.01	\$10.87	\$6.49	\$468.98
	2015	70	491	7.01	\$18.62	\$243.44	\$7.80	\$113.85	8	747.40	95.42	\$10.94	\$8.72	\$811.52
	2016	68	463	6.81	\$15.11	\$193.75	\$6.67	\$95.05	6	447.00	69.40	\$11.74	\$5.49	\$537.12

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Table 2: Continued

	Year	Crew positions ^a			Crew share ^b		Captain share		Processing labor hours ^c			Processing labor payment ^d		
		Vessels	Total	Vessel median	Total \$million	Vessel median \$1,000	Total \$million	Vessel median \$1,000	Plants	Total 1,000 hrs	Plant median 1,000 hrs	Median \$/hour	Total \$million	Plant median, \$1,000
BST	2013	22	156	7.09	\$0.46	\$15.02	\$0.21	\$7.72	6	16.58	1.86	\$9.97	\$0.17	\$16.13
	2014	41	279	6.80	\$3.16	\$70.83	\$1.47	\$31.74	7	122.27	8.51	\$9.85	\$1.26	\$81.23
	2015	55	365	6.63	\$5.99	\$114.43	\$2.89	\$46.74	7	230.41	21.84	\$10.59	\$2.50	\$210.24
	2016	46	296	6.42	\$5.53	\$80.15	\$2.33	\$39.20	6	144.87	18.44	\$11.79	\$1.71	\$199.52
SMB	2012	17	106	6.24	\$0.88	\$45.56	\$0.40	\$23.22	6	21.12	0.76	\$10.13	\$0.25	\$7.57
	2014	4	*	*	*	*	*	*	1	*	*	*	*	*
	2015	3	*	*	*	*	*	*	1	*	*	*	*	*

Notes: Data shown for all BSAI crab fisheries by calendar year. All dollar values are adjusted for inflation to 2016-equivalent value. Information suppressed for confidentiality where indicated by “*”, and data not available where indicated by “-”.

^a For catcher/processors, EDR reporting may be used to adjust eLandings crew size reporting in order to estimate the number of fishing crew positions.

^b Crew and captain payments reflect amounts paid for labor during the crab fishery and include all post-season adjustments, bonuses, and deductions for shared expenses such as fuel, bait, and food and provisions; payments for IFQ royalties, labor outside of crab fishery, health/retirement or other benefits are excluded.

^c Processing labor hours reflect hours worked by processing-line employees working at shoreside and floating processor sectors only, excluding processing employees on catcher/processors and salaried workers employed in the processing sectors. /// ^d Pay per hour statistics reflect only the shoreside and floating processing sectors; all other processing labor pay statistics are reported inclusive of catcher/processors

Source: NMFS AFSC BSAI Crab Economic Data Report (EDR) database, and Crew positions from eLandings.

Table 3: Crab Harvest Quota Lease Activity, Volume, Cost, and Average Lease Prices and Rates, CR Program Fisheries

	Year	Vessels ^a	Pounds Leased (1000lbs)			Cost (\$1000)			Lease Price (\$/pound) ^b		Lease Rate (percent of ex-vessel price) ^c		
			Total	Median	Mean	Total	Median	Mean	Median	Wtd mean	Median	Wtd mean	
AIG	CVO A	2012	4	*	*	*	*	*	*	*	*	*	*
		2013	5	2,026.23	327.87	405.25	\$3,730.16	\$596.00	\$746.03	\$1.56	\$1.84	35%	43%
		2014	4	*	*	*	*	*	*	*	*	*	*
		2015	5	2,252.00	351.05	450.40	\$5,262.67	\$934.37	\$1,052.53	\$2.32	\$2.34	49%	49%
		2016	3	*	*	*	*	*	*	*	*	*	*
	CVO B + CPO	2012	4	*	*	*	*	*	*	*	*	*	*
		2013	6	1,284.80	83.15	142.76	\$1,904.95	\$239.64	\$211.66	\$1.54	\$1.48	36%	37%
		2014	4	*	*	*	*	*	*	*	*	*	*
		2015	5	1,375.30	24.30	196.47	\$2,043.77	\$73.56	\$291.97	\$1.35	\$1.49	37%	36%
		2016	4	*	*	*	*	*	*	*	*	*	*
	CVC + CPC	2012	4	*	*	*	*	*	*	*	*	*	*
		2013	5	151.06	27.36	25.18	\$318.68	\$46.51	\$53.11	\$1.94	\$2.11	41%	49%
		2014	4	*	*	*	*	*	*	*	*	*	*
		2015	4	*	*	*	*	*	*	*	*	*	*
		2016	3	*	*	*	*	*	*	*	*	*	*
	CDQ + ACA	2012	4	*	*	*	*	*	*	*	*	*	*
		2013	2	*	*	*	*	*	*	*	*	*	*
2014		3	*	*	*	*	*	*	*	*	*	*	
2015		3	*	*	*	*	*	*	*	*	*	*	
2016		3	*	*	*	*	*	*	*	*	*	*	

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Table 3: Continued

	Year	Vessels ^a	Pounds Leased (1000lbs)			Cost (\$1000)			Lease Price (\$/pound) ^b		Lease Rate (percent of ex-vessel price) ^c		
		Total	Median	Mean	Total	Median	Mean	Median	Wtd mean	Median	Wtd mean		
BBR	CVO A	2012	50	3,618.97	65.48	72.38	\$18,818.95	\$322.68	\$376.38	\$5.46	\$5.20	65%	62%
		2013	51	4,425.47	78.75	86.77	\$21,072.63	\$357.10	\$413.19	\$4.67	\$4.76	64%	65%
		2014	50	5,229.07	88.41	104.58	\$22,743.48	\$381.64	\$454.87	\$4.31	\$4.35	62%	64%
		2015	49	5,128.51	90.14	104.66	\$26,265.72	\$441.47	\$536.04	\$5.00	\$5.12	63%	64%
		2016	50	4,433.41	75.26	88.67	\$29,676.52	\$493.65	\$593.53	\$6.66	\$6.69	62%	62%
	CVO B + CPO	2012	42	539.10	7.60	11.72	\$3,077.73	\$43.96	\$68.39	\$5.64	\$5.78	65%	67%
		2013	45	777.86	10.07	15.56	\$3,848.12	\$49.12	\$76.96	\$4.93	\$4.95	65%	64%
		2014	43	853.62	11.77	17.42	\$3,811.95	\$55.74	\$77.80	\$4.46	\$4.47	64%	63%
		2015	42	696.51	10.89	14.82	\$3,858.85	\$59.98	\$82.10	\$5.30	\$5.54	63%	66%
		2016	43	609.89	9.68	12.45	\$4,371.69	\$67.25	\$89.22	\$7.03	\$7.17	64%	64%
	CVC + CPC	2012	36	171.60	4.24	4.52	\$947.71	\$22.41	\$24.94	\$5.51	\$5.52	63%	64%
		2013	37	198.96	4.52	4.85	\$1,012.31	\$22.48	\$24.69	\$4.96	\$5.09	66%	66%
		2014	34	212.79	5.98	5.91	\$947.86	\$24.22	\$26.33	\$4.45	\$4.45	65%	66%
		2015	40	222.10	5.04	5.29	\$1,222.23	\$29.17	\$29.10	\$5.38	\$5.50	63%	65%
		2016	37	200.51	4.04	5.14	\$1,395.88	\$34.48	\$35.79	\$6.98	\$6.96	64%	69%
CDQ + ACA	2012	5	368.62	70.68	73.72	\$2,304.14	\$457.11	\$460.83	\$5.70	\$6.25	64%	72%	
	2013	8	713.42	77.40	89.18	\$3,598.69	\$389.18	\$449.84	\$5.05	\$5.04	67%	66%	
	2014	7	826.41	117.86	118.06	\$3,780.14	\$514.32	\$540.02	\$4.56	\$4.57	63%	66%	
	2015	5	467.90	99.74	93.58	\$2,633.12	\$549.12	\$526.62	\$5.51	\$5.63	67%	68%	
	2016	5	550.41	120.52	110.08	\$4,005.38	\$846.14	\$801.08	\$7.02	\$7.28	63%	67%	

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Table 3: Continued

	Year	Vessels ^a	Pounds Leased (1000lbs)			Cost (\$1000)			Lease Price (\$/pound) ^b		Lease Rate (percent of ex-vessel price) ^c		
			Total	Median	Mean	Total	Median	Mean	Median	Wtd mean	Median	Wtd mean	
BSS	CVO A	2012	55	42,796.16	640.32	778.11	\$44,954.90	\$693.36	\$817.36	\$1.05	\$1.05	46%	46%
		2013	56	34,352.58	486.63	613.44	\$38,362.25	\$534.65	\$685.04	\$1.11	\$1.12	46%	47%
		2014	57	29,682.64	442.04	520.75	\$33,060.99	\$499.72	\$580.02	\$1.15	\$1.11	46%	46%
		2015	55	30,362.23	523.30	552.04	\$29,847.68	\$490.45	\$542.69	\$0.94	\$0.98	46%	48%
		2016	54	19,639.88	337.36	363.70	\$25,954.20	\$402.58	\$480.63	\$1.24	\$1.32	46%	49%
	CVO B + CPO	2012	47	6,989.61	83.97	131.88	\$8,246.92	\$105.93	\$155.60	\$1.15	\$1.18	46%	48%
		2013	50	7,740.91	78.48	133.46	\$9,917.67	\$98.37	\$170.99	\$1.21	\$1.28	47%	50%
		2014	48	5,987.69	69.15	106.92	\$7,342.55	\$95.85	\$131.12	\$1.24	\$1.23	47%	56%
		2015	47	6,288.75	69.80	118.66	\$6,540.65	\$75.80	\$123.41	\$0.99	\$1.04	46%	48%
		2016	45	3,867.74	44.16	77.36	\$5,462.55	\$65.39	\$109.25	\$1.31	\$1.41	46%	50%
	CVC + CPC	2012	39	1,879.88	47.96	45.85	\$2,118.60	\$53.17	\$52.97	\$1.15	\$1.14	46%	46%
		2013	41	1,767.02	35.03	40.16	\$2,163.16	\$41.49	\$49.16	\$1.18	\$1.23	46%	48%
		2014	37	1,258.30	29.13	31.46	\$1,496.12	\$35.19	\$38.36	\$1.24	\$1.20	46%	47%
		2015	37	1,515.74	32.75	36.97	\$1,573.77	\$37.36	\$39.34	\$1.00	\$1.05	46%	49%
		2016	36	925.25	21.91	25.01	\$1,271.44	\$31.05	\$34.36	\$1.31	\$1.37	46%	47%
CDQ + ACA	2012	11	6,463.57	563.35	587.60	\$7,699.41	\$699.44	\$699.95	\$1.18	\$1.19	49%	50%	
	2013	11	6,409.21	563.98	582.66	\$8,304.71	\$777.51	\$754.97	\$1.29	\$1.29	54%	53%	
	2014	10	5,367.24	422.75	536.72	\$6,474.85	\$521.45	\$647.49	\$1.26	\$1.21	49%	58%	
	2015	7	4,150.07	509.28	592.87	\$4,449.54	\$546.60	\$635.65	\$1.05	\$1.07	51%	52%	
	2016	7	3,041.67	334.55	434.52	\$4,339.59	\$457.33	\$619.94	\$1.38	\$1.43	51%	52%	

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Table 3: Continued

	Year	Vessels ^a	Pounds Leased (1000lbs)			Cost (\$1000)			Lease Price (\$/pound) ^b		Lease Rate (percent of ex-vessel price) ^c		
		Total	Median	Mean	Total	Median	Mean	Median	Wtd mean	Median	Wtd mean		
BST	CVO A	2013	16	776.65	52.73	48.54	\$565.57	\$26.24	\$35.35	\$0.76	\$0.73	28%	29%
		2014	32	5,255.66	94.55	128.19	\$3,507.63	\$66.82	\$85.55	\$0.66	\$0.67	28%	27%
		2015	43	9,486.94	130.54	163.57	\$7,262.24	\$90.36	\$125.21	\$0.80	\$0.77	28%	30%
		2016	37	7,478.40	126.71	169.96	\$6,732.11	\$108.51	\$153.00	\$0.82	\$0.90	28%	31%
	CVO B + CPO	2013	13	130.35	6.21	8.15	\$124.07	\$4.68	\$7.76	\$0.82	\$0.95	28%	47%
		2014	25	819.58	11.65	21.02	\$616.76	\$9.45	\$15.81	\$0.69	\$0.75	28%	34%
		2015	27	1,527.35	26.10	33.20	\$1,212.94	\$19.48	\$26.37	\$0.76	\$0.79	28%	33%
		2016	31	1,124.51	19.40	26.15	\$1,135.94	\$17.32	\$26.42	\$0.87	\$1.01	28%	33%
	CVC + CPC	2013	10	41.62	1.10	3.20	\$32.82	\$1.21	\$2.53	\$0.82	\$0.79	28%	31%
		2014	24	427.60	2.64	11.25	\$186.22	\$2.05	\$4.90	\$0.71	\$0.44	28%	17%
		2015	24	381.57	5.93	8.87	\$263.79	\$4.01	\$6.14	\$0.73	\$0.69	28%	26%
		2016	24	440.96	7.14	12.25	\$529.73	\$6.52	\$14.72	\$0.87	\$1.20	28%	29%
	CDQ + ACA	2013	5	88.01	24.87	17.60	\$77.23	\$16.26	\$15.45	\$1.04	\$0.88	34%	34%
		2014	6	728.51	29.61	80.95	\$596.77	\$31.92	\$66.31	\$0.96	\$0.82	34%	38%
		2015	8	1,341.70	125.15	149.08	\$1,193.51	\$93.13	\$132.61	\$0.67	\$0.89	29%	35%
		2016	7	829.85	80.60	103.73	\$765.37	\$73.81	\$95.67	\$0.91	\$0.92	31%	32%

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Table 3: Continued

	Year	Vessels ^a	Pounds Leased (1000lbs)			Cost (\$1000)			Lease Price (\$/pound) ^b		Lease Rate (percent of ex-vessel price) ^c	
			Total	Median	Mean	Total	Median	Mean	Median	Wtd mean	Median	Wtd mean
CVO A	2012	17	1,149.28	49.07	67.61	\$1,719.94	\$69.85	\$101.17	\$1.45	\$1.50	32%	34%
	2014	3	*	*	*	*	*	*	*	*	*	*
	2015	3	*	*	*	*	*	*	*	*	*	*
SMB CVO B + CPO	2012	10	143.73	11.56	11.06	\$219.20	\$18.94	\$16.86	\$1.50	\$1.53	32%	35%
	2014	2	*	*	*	*	*	*	*	*	*	*
	2015	3	*	*	*	*	*	*	*	*	*	*
CVC + CPC	2012	9	94.70	2.48	10.52	\$47.54	\$5.66	\$5.28	\$1.50	\$0.50	34%	11%
	2014	2	*	*	*	*	*	*	*	*	*	*
	2015	2	*	*	*	*	*	*	*	*	*	*
CDQ + ACA	2012	3	*	*	*	*	*	*	*	*	*	*
	2014	1	*	*	*	*	*	*	*	*	*	*

Notes: Other fishery data is not shown due to insufficient observations. Lease data shown represent arms-length lease transactions reported by quota purchasers in the EDR. Harvest quota types are categorized in this report as the following: CVO A (catcher vessel owner Class A IFQ), CVO B + CPO (catcher vessel owner Class B IFQ and catcher/processor owner IFQ), and CVC + CPC (catcher vessel crew IFQ and catcher/processor crew IFQ). Statistics reported represent results pooled over all quota types and/or regional designations within each category.

^a Vessels column shows total count of vessel-level observations for fishery-year where both pounds and cost of quota leased were reported as non-zero values; in a small number of observations where leased pounds was reported for a given fishery/quota type but lease cost was missing, the mean price over all complete observations was used to impute the missing data in computing the total aggregate lease cost over all vessels.

^b Average lease price statistics by fishery and quota type are calculated as the median and arithmetic mean, respectively, over all observations where both pounds and cost for one or more quota type within the respective category were reported as non-zero values.

^c Average lease rate statistics by fishery and quota type are calculated as the median and mean, respectively, of the ratio of lease price to ex-vessel price, over all observations where both ex-vessel and lease pounds, and ex-vessel revenue and lease cost, were reported as non-zero values. Lease rate for each quota type is calculated with respect to ex-vessel value of crab sold using the same quota type. As such, variation in lease price and lease rate in a given fishery may not be consistent between different quota types.

Source: NMFS AFSC BSAI Crab Economic Data Report (EDR) database.