

Estimates of total capture and discard mortality of snow crab in Bering Sea Tanner fisheries  
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**Proposal 250 – Allow full retention of Bering Sea snow crab (BSS) in the Western Bering Sea Tanner crab (WBT) fishery.**

A. Estimate total BSS catch (including discards) in the WBT directed fishery.

Season	WBT	Total WBT	Legal BSS Observer samples <sup>a</sup>			Est. BSS Total Catch		BSS lb caught as % of WBT lb retained
	Directed harvest lb <sup>a</sup>	harvest observed <sup>a</sup>	Retained	Discarded	Total	Number	Lb <sup>b</sup>	
2013/14	1,308,701	32.9%	1	6,463	6,464	19,647	25,542	1.95%
2014/15	5,222,067	24.1%	0	39,472	39,472	163,784	212,920	4.08%
2015/16	8,312,120	24.5%	204	52,148	52,352	213,682	277,786	3.34%

Sources: <sup>a</sup> ADF&G, 2017, RIR 4K17-01. <sup>b</sup> Estimation based on mean weight of BSS as reported in Leon et al. (2017).

Estimation of discard mortality of Bering Sea snow crab in the Western Bering Sea Tanner crab fishery.

Season	Observed Discards Number <sup>a</sup>	30% Mortality Number	Unobserved Expansion Number	Average Weight Lb <sup>b</sup>	Discard Biomass Lb
2013/14	6,463	1,939	5,893	1.3	9,061
2014/15	39,472	11,842	49,135	1.3	60,646
2015/16	52,148	15,644	63,855	1.3	96,961

Sources: <sup>a</sup> ADF&G, 2017, RIR 4K17-01. <sup>b</sup> Mean weight of BSS as reported in Leon et al. (2017).

**Proposal 255 – Allow full retention of Bering Sea snow crab (BSS) in the Eastern Bering Sea Tanner crab (EBT) fishery.**

A. Estimated total BSS catch (including discards) in the EBT directed fishery.

Season	EBT Directed harvest lb <sup>a</sup>	Total EBT harvest observed <sup>a</sup>	Legal BSS Observer samples <sup>a</sup>			Est. BSS Total Catch		BSS lb caught as % of WBT lb retained
			Retained	Discarded	Total	Number	Lb <sup>b</sup>	
2013/14	372,876	28.5%	0	97	97	340	442	0.12%
2014/15	1,962,781	25.8%	0	822	822	3,186	3,823	0.19%
2015/16	2,750,086	24.4%	15	28,192	28,207	115,602	161,843	5.89%

Sources: <sup>a</sup> ADF&G, 2017, RIR 4K17-01. <sup>b</sup> Estimation based on mean weight of BSS as reported in Leon et al. (2017).

Estimation of discard mortality of Bering Sea snow crab in the Eastern Bering Sea Tanner crab fishery.

Season	Observed Discards Number <sup>a</sup>	30% Mortality Number	Unobserved Expansion Number	Average Weight Lb <sup>b</sup>	Discard Biomass Lb
2013/14	97	29	102	1.3	133
2014/15	822	247	956	1.2	1,147
2015/16	28,207	8,458	34,662	1.4	48,527

Sources: <sup>a</sup> ADF&G, 2017, RIR 4K17-01. <sup>b</sup> Mean weight of BSS as reported in Leon et al. (2017).