Appendix A:

Retained Catch Data from ADFG for the Tanner Crab Assessment

William Stockhausen

21 August, 2018

Contents

Intro	duction	2
Retai	ned catch abundance and biomass	2
Size o	compositions	11
List	of Tables	
1	Retained catch of Tanner crab since 2005, by fishery. TCF: Tanner crab fisheries, SCF: snow crab fishery, RKF: BBRKC fishery.	6
2	All retained catch of Tanner crab since 2005.	
List	of Figures	
1	Retained Tanner crab catch, in millions of crab. TCF: Tanner crab fisheries; SCF: snow crab fishery; RKF: BBRKC fishery.	3
2	Retained Tanner crab catch, in millions of pounds. TCF: Tanner crab fisheries; SCF: snow crab fishery; RKF: BBRKC fishery.	4
3	Retained Tanner crab catch, in 1000's t. TCF: Tanner crab fisheries; SCF: snow crab fishery; RKF: BBRKC fishery	5
4	Total retained Tanner crab catch, in millions of crab	7
5	Total retained Tanner crab catch, in millions of pounds	8
6	Total retained Tanner crab catch, in 1000's t	9
7	Retained catch size compositions at 1-mm bin size	12
8	Retained catch size compositions at 5-mm him size	13

Introduction

This report calculates time series of retained catch abundance and biomass of Tanner crab from fish ticket data, as well as retained catch size compositions from observer "dockside" sampling. Although Tanner crab are incidentally retained in the BBRKC and snow crab fisheries, this incidental catch is a small fraction of the retained catch in the directed fisheries and is currently, as a model simplification, included in the retained catch for the directed fisheries in the assessment model.

Retained catch abundance and biomass

Time series of retained catch abundance and biomass are calculated in this section. First, the retained catch is presented categorized by the fishery in which it occurs. Then it is presented as it occurs in the assessment model, where incidentally-retained catch in the snow crab and BRKC fisheries is lumped in with that in the directed fisheries.

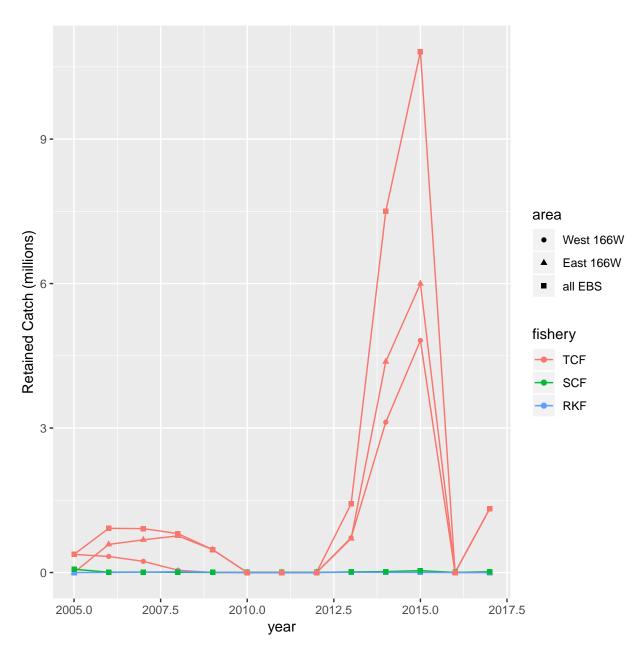


Figure 1: Retained Tanner crab catch, in millions of crab. TCF: Tanner crab fisheries; SCF: snow crab fishery; RKF: BBRKC fishery.

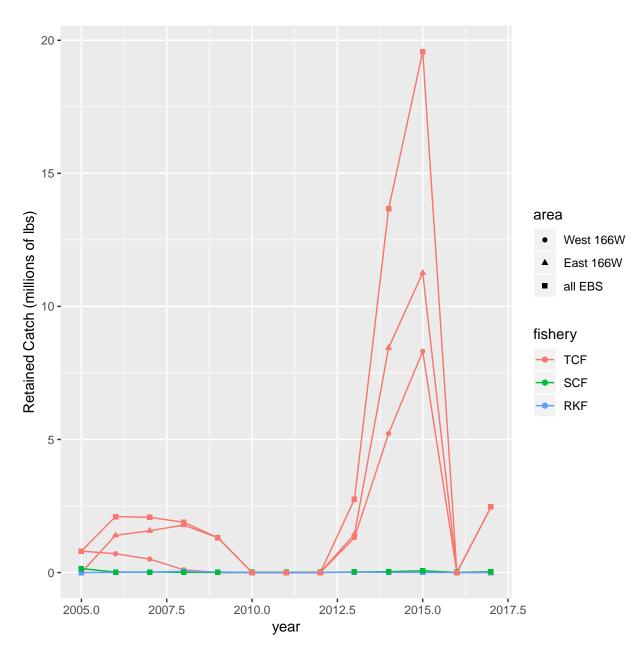


Figure 2: Retained Tanner crab catch, in millions of pounds. TCF: Tanner crab fisheries; SCF: snow crab fishery; RKF: BBRKC fishery.

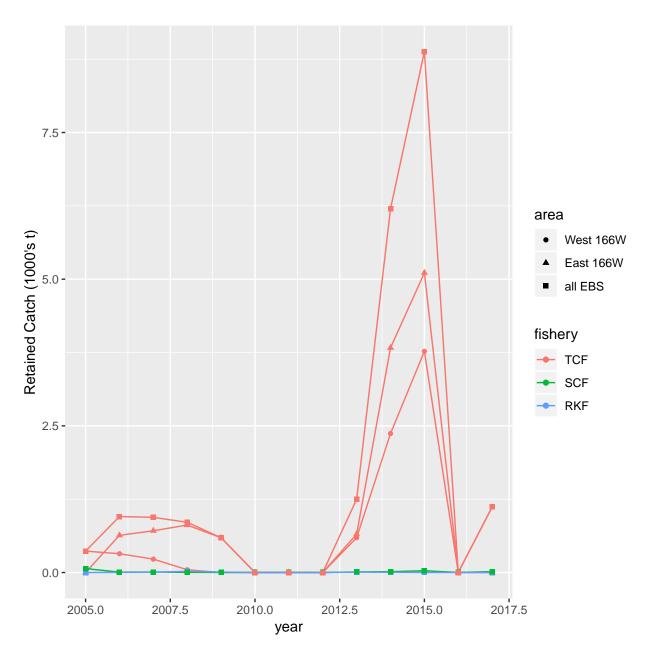


Figure 3: Retained Tanner crab catch, in 1000's t. TCF: Tanner crab fisheries; SCF: snow crab fishery; RKF: BBRKC fishery.

Table 1: Retained catch of Tanner crab since 2005, by fishery. TCF: Tanner crab fisheries, SCF: snow crab fishery, RKF: BBRKC fishery.

	TCF					S	CF	R	KF	
	West 166W		East	166W	all	EBS	all	EBS	all	EBS
year	Abundance	Biomass (kg)	Abundance	Biomass (kg)	Abundance	Biomass (kg)	Abundance	Biomass (kg)	Abundance	Biomass (kg)
2005	376,080	365,110	0	0	376,080	365,110	67,897	67,112	0	0
2006	333,508	320, 187	583,650	633,937	917, 158	954, 124	7,115	6,784	1,830	1,883
2007	232,345	228,829	679, 137	711,640	911,482	940,469	9,328	8,761	6,354	6,334
2008	48,171	47,157	760, 166	809,022	808,337	856, 179	3,300	2,535	18,732	21,068
2009	0	0	476,668	592,417	476,668	592,417	2,544	1,714	6,751	8,402
2010	0	0	0	0	0	0	1,689	1,154	6	3
2011	0	0	0	0	0	0	3,095	2,092	0	0
2012	0	0	0	0	0	0	1,643	1,111	4	3
2013	722,469	593,617	704,201	654,271	1,426,670	1,247,888	13,256	9,882	5,842	6,322
2014	3, 121, 442	2,368,693	4,378,199	3,829,288	7,499,641	6, 197, 981	19,512	14,458	3,691	3,792
2015	4,817,145	3,770,319	5,998,876	5, 107, 722	10,816,021	8,878,041	39,011	30,252	1,386	1,350
2016	0	0	0	0	0	0	1,733	1,177	33	21
2017	1,322,542	1,117,483	139	119	1,322,681	1,117,602	17,688	15,018	25	17

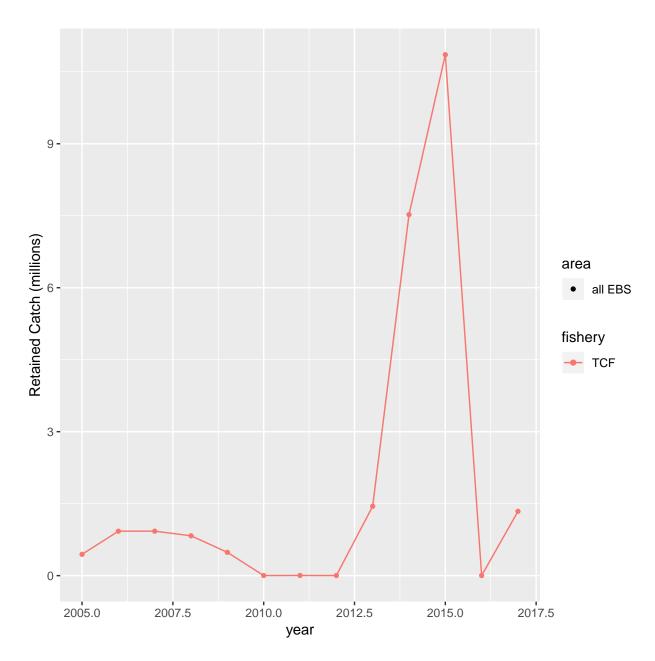


Figure 4: Total retained Tanner crab catch, in millions of crab.

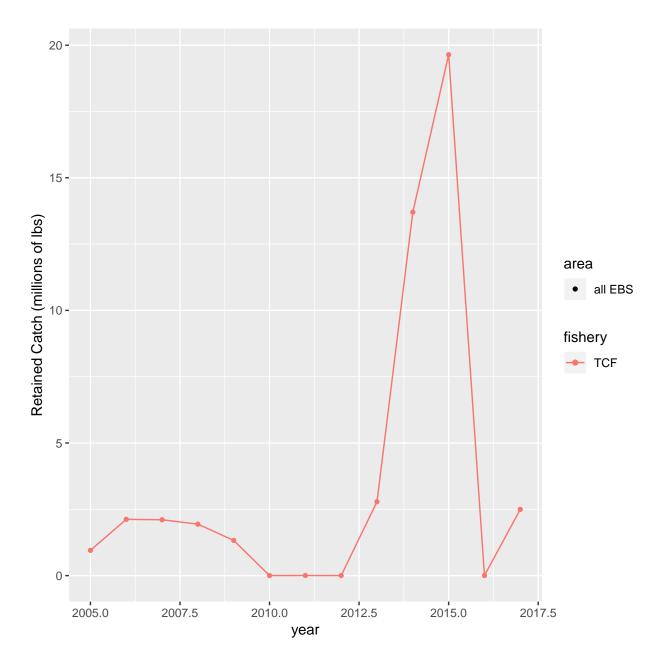


Figure 5: Total retained Tanner crab catch, in millions of pounds.

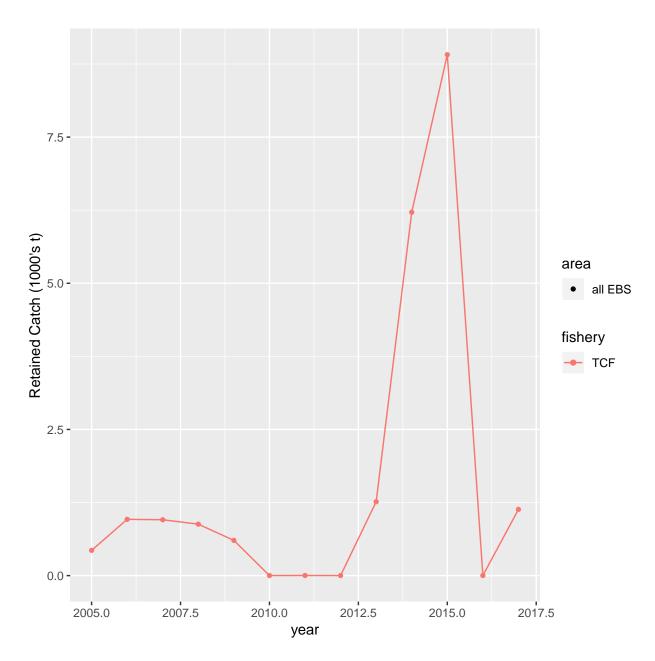


Figure 6: Total retained Tanner crab catch, in 1000's t.

Table 2: All retained catch of Tanner crab since 2005.

year	Abundance	Biomass (lbs)	Biomass (kg)
2005	443,977	952,887	432,222
2006	926, 103	2, 122, 589	962,791
2007	927, 164	2,106,654	955, 564
2008	830, 369	1,939,583	879,782
2009	485,963	1,328,356	602,533
2010	1,695	2,550	1,157
2011	3,095	4,612	2,092
2012	1,647	2,456	1,114
2013	1,445,768	2,786,845	1,264,092
2014	7,522,844	13,704,427	6,216,231
2015	10,856,418	19,642,378	8,909,643
2016	1,766	2,642	1,198
2017	1,340,394	2,497,033	1,132,637

Size compositions

This section calculates size compositions from ADFG dockside sampling for retained Tanner crab in the directed fisheries.

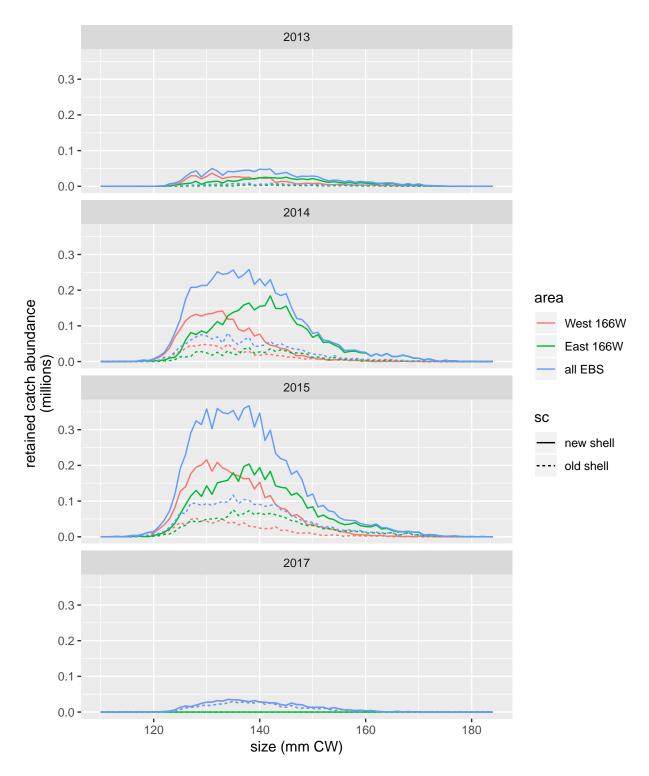


Figure 7: Retained catch size compositions at 1-mm bin size.

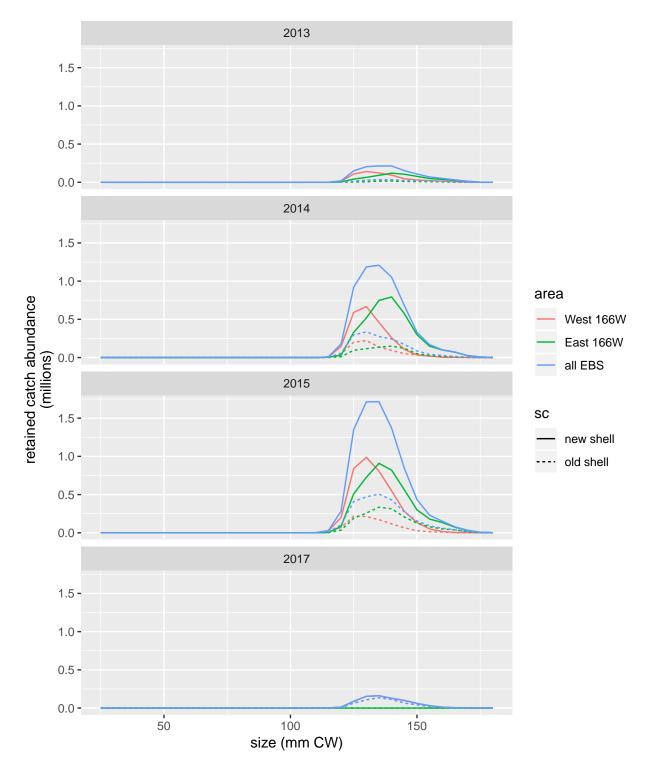


Figure 8: Retained catch size compositions at 5-mm bin size.