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South Australian Charter Boat Fishery 2020/21 Data Summary



Durante, L. M., Smart, J. J., and Tsolos, A.

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S A R D I

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DEVELOPMENT

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Final Report to PIRSA Fisheries and Aquaculture

Durante, L. M., Smart, J. J., and Tsolos, A.

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EXECUTIVE SUMMARY

This report summarises the nominal catch, fishing activity and client dynamics data for the South Australian Charter Boat Fishery (SACBF) between 2007/08 and 2020/21.

There were 82 licences in the SACBF in 2020/21, declining by 4% from 85 licences in 2019/20. There was a 40% decline in active licences since 2007/09, with 48 and 47 active licences in the fishery in 2019/20 and 2020/21, respectively. The number of clients participating in the fishery and number of trips declined by 45% and 44%, respectively, between 2007/08 and 2020/21.

King George Whiting (42.2%), Bight Redfish (18.7%), Silver Trevally (7.2%), Southern Calamari (5.2%), Swallowtail (3.9%) and Southern Bluefin Tuna (3.0%) comprised 80% of the catch in 2020/21. The remainder of the catch comprised 47 different species, including Western Australian Salmon (2.7%), Snook (2.4%), Southern Garfish (2.1%), Leatherjacket (2%), and Blue Crab (1.4%).

Annual total catches of King George Whiting have ranged from 19,249 to 54,563 fish between 2007/08 and 2020/21 but have displayed a declining trend over the past 14 years. In 2019/20 and 2020/21, total nominal catches of King George Whiting were 19,249 and 31,614, respectively. Estimates of retained weight of King George Whiting were 6.6 t in 2019/20 and 10.7 t in 2020/21. The number of under-size King George Whiting that were released annually between 2007/08 and 2020/21 ranged between 2,202 and 8,848 fish, with 2,456 and 3,480 fish released in 2019/20 and 2020/21, respectively.

Annual total catches of Snapper ranged between 178 in 2020/21 (from 1,787 in 2019/20) and 34,450 fish in 2007/08, with a declining trend over this 14-year period. Estimates of retained weight of Snapper were 5.7 t in 2019/20 and 0.4 t in 2020/21. The number of under-size Snapper released annually ranged between 4,334 in 2019/20 and 22,269 in 2009/10. In 2020/21, 6,587 under-size Snapper were released.

Downward trends in client numbers, fleet size (licences and vessels), and annual numbers of trip days may be partly explained by the impact of COVID-19 and the reduced access to Snapper due to fishing closures that limited fishing to areas south of Kangaroo Island and the South-east region.

Keywords: Recreational fishing, commercial tourism, participation, Snapper, King George Whiting, South Australia.

1. INTRODUCTION

1.1. Background

This report provides a summary of logbook data collected by the South Australian Charter Boat Fishery (SACBF) between 2007/08 and 2020/21, presented in detail in Durante et al. (2022), with updated information since Rogers et al. (2020).

The SACBF is a commercial operation that provides clients with access to fisheries resources and other activities in South Australian waters, with purpose-built vessels run by qualified and experienced operators. PIRSA Fisheries and Aquaculture manages the operations of the SACBF under provisions of the *Fisheries Management (Charter Boat Fishery) Regulations* 2016 (https://www.legislation.sa.gov.au) and section 44 of the *South Australian Fisheries Management Act* 2007.

The SACBF can operate in all coastal waters, including the gulfs and bays from the state borders of South Australia (SA) and Western Australia (WA) to SA and Victoria (VIC). The fishery has an annual estimated value of \$2.9M AUD, contributing with \$12.1M to South Australia's Gross State Product and \$7.1M to household income (128 full-time equivalent jobs) in 2020/21 (Dix et al. 2022). The main species targeted by clients of the SACBF include Snapper (*Chyrsophyrs auratus*), King George Whiting (*Sillaginodes punctatus*), Bight Redfish (*Centroberyx gerrardi*), Western Australian Salmon (*Arripis truttaceus*), Snook (*Sphyraena novaehollandiae*), Silver Trevally (*Pseudocaranx dentex*), Southern Bluefin Tuna (*Thunnus maccoyii*), Southern Calamari (*Sepioteuthis australis*) and Southern Garfish (*Hypohamphus melanochir*) (Durante et al. 2022).

1.2. Objectives

This report presents summarised data on fishing activities, client participation, as well as seasonal and regional patterns in nominal catch in the SACBF between 2007/08 and 2020/21.

2. METHODS

2.1. Catch statistics

The SACBF operators are required to report a suite of information describing the activities of each fishing trip, including time and date of trip, start and end times, number of clients and their details, type and area of fishing activity, total fishing time, target species, and catch (in number, i.e., nominal catch). Additional data collected for King George Whiting and Snapper include numbers of under-size (< minimum legal length, MLL) released, legal-sized (≥ MLL) released, retained numbers within size grades, and total estimated weights of the catch of each of the two species during each trip. Logbook data must be submitted to SARDI Aquatic Sciences after the end of each month. Total licences and client numbers, nominal catch of each species retained by type of fishing activity and region, as well as the numbers released and estimated weight retained for King George Whiting and Snapper are presented in this report. Due to the small contribution to total catches, crab nets, diving, lobster pots and nets were amalgamated as 'Other' fishing activities for analyses.

2.2. Spatial structure of the fishery

The SACBF comprises Marine Fishing Areas (MFAs) in five key regions of SA, against which fishing activities are reported and used in the Management Plan for the South Australian Charter Boat Fishery (PIRSA, 2019) (Fig. 1). These include the West Coast, Spencer Gulf, Gulf St. Vincent/Kangaroo Island, Victor Harbor/South-east and 'Other'. The 'Other' region includes eastern and central Great Australian Bight (GAB) from near Cape Catastrophe, Eyre Peninsula out to the continental shelf slope to the SA - WA border, and offshore areas to the south of Kangaroo Island (Fig. 1).

2.3. Data validation

Validation measures undertaken on the SACBF logbook data include code-driven queries activated during data-entry and reporting stages cross-checking during the collation and processing phases. Regular, random checks of data are undertaken as standard procedure (see Vainickis 2010). Catch and effort data were aggregated, tabulated and cross-checked with the previous report (Rogers et al. 2020). Authors also discussed data-handling and quality assurance procedures, to confirm that interpretation of the data was consistent with the structure of the logbook reporting system and the activities in the fishery.

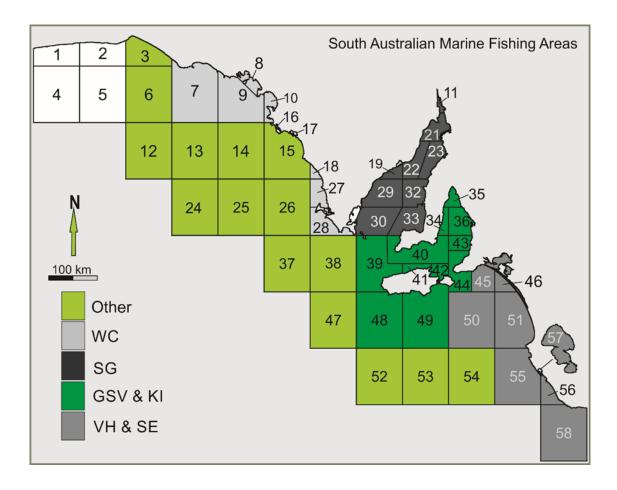


Figure 1. The Charter Boat Fishery reporting regions within the South Australian MFAs. No catch and effort were reported for MFAs 1, 2, 4 and 5.

3. RESULTS

3.1. Client dynamics

The total number of registered licences in the SACBF declined by $\sim 24.8\%$ from a peak of 109 in 2009/10 to 82 in 2020/21 (Table 1). The number of active licences in the fishery ranged from 47 and 79 between 2007/08 and 2020/21. The number of clients participating in the fishery and number of trips declined by 45% and 44.6%, respectively, between 2007/08 and 2020/21. The number of active licences remained stable from 2014/15 to 2018/19, with a steep decline in the last two years. Between 2016/17 and 2020/21, client participation increased by 4.9%, with number of clients ranging between 7,616 and 14,461 clients.

Table 1. Number of clients, number of trips, active licences, and participation rate in the SACBF.

Fin Year	Number of Clients	Number of Trips	Total licences	Active_licences	Participation rate per active licence
2007/08	21,960	3,640	108	78	282
2008/09	21,431	3,561	108	79	271
2009/10	21,846	3,552	109	77	284
2010/11	20,095	3,322	109	77	261
2011/12	23,710	3,566	109	77	308
2012/13	23,532	3,391	109	75	314
2013/14	19,227	2,830	105	74	260
2014/15	15,136	2,389	105	61	248
2015/16	15,646	2,607	102	61	256
2016/17	14,461	2,393	100	59	245
2017/18	14,382	2,412	98	58	248
2018/19	13,364	2,238	88	59	227
2019/20	7,616	1,361	85	48	1 \$9
2020/21	12,081	2,054	82	47	257

3.2. Catch by species

A total of 78 species (or species groups) were caught and retained in the SACBF between 2007/08 and 2020/21. These included a combined total of ~1,527,783 individuals (Table 2). The total catch of 74,964 individuals in 2020/21 was ~33.8% higher than in 2019/20 but was 31.4% lower than the average total catch among all years (mean, SD: 109,127 ± 33,594). Four species comprised ~75% of the catch in 2020/21: King George Whiting, Bight Redfish, Silver Trevally and Southern Calamari (Table 2). Other target species that supported minor components of catches were Swallowtail, Southern Bluefin Tuna, Western Australian Salmon, Snook, Southern Garfish, Leatherjacket, and Blue Crab (Table 2). Species grouped as "all

other species" in Table 2 had small contributions to the total catch in 2020/21 and include Blue Morwong, Blue Mackerel, Sweep, School Shark, Western Striped Grunter and Bronze Whaler.

3.2.1. King George Whiting

There was a declining pattern in annual total catch of King George Whiting over the time-series, ranging from 19,249 to 54,563 fish between 2007/08 and 2020/21 (mean, SD: 39,748 ± 11,123) (Table 2). The proportion of nominal catch remained stable over time, varying between 84 and 92%, with relatively low numbers of fish larger than the MLL being released (Table 3 and Fig. 2A).

3.2.2. Snapper

There was a declining pattern in annual total catch of Snapper between 2007/08 and 2020/21. Total annual catches of Snapper peaked at 34,450 fish in 2007/08 and declined thereafter to 178 fish in 2020/21 (mean, SD: $20,222 \pm 10,346$) (Table 2). The proportion of retained fish remained stable until 2018/19 (54 - 68%), before displaying a large decrease in 2019/20 (23%) and 2020/21 (2%) (Table 3 and Fig. 2B).

3.3. Seasonal patterns in catches

3.3.1. King George Whiting

Nominal catches of King George Whiting were highest in March, April and October between 2007/08 and 2020/21 (Fig. 3A). In 2019/20 (2020/21), catches of King George Whiting were highest in January (January) and lowest in April (August).

3.3.2. Snapper

Generally, highest catches of Snapper were reported in December and January (Fig. 3B), but spatial (West Coast, Spencer Gulf and Gulf St. Vincent) and seasonal (South-east region) closures prevented catches between November and January in 2019/20 and 2020/21 (Appendix 1), resulting in an increase in the proportion of the catch in other months (Fig. 3B).

Table 2. Annual catches (nominal; number of individuals) by species in the SACBF between 07/08 and 20/21, in descending order of total catch across all years. Proportion of catches in 2020/21 and in all years are presented.

Species	07/08	08/09	09/10	10/11	11/12	12/13	13/14	14/15	15/16	16/17	17/18	18/19	19/20	20/21	All years	20/21 %	All years %
King George Whiting	52,531	54,563	49,788	54,327	54,563	42,289	35,526	29,469	35,424	34,125	34,109	28,889	19,249	31,614	556,466	42.17	36.42
Snapper	34,450	30,830	31,828	28,562	28,865	25,569	22,233	20,071	16,801	14,946	13,127	13,854	1,787	178	283,101	0.24	18.53
Bight Redfish	14,903	15,624	17,872	14,034	16,922	17,397	14,454	11,746	12,557	8,970	10,604	9,830	6,999	14,043	185,955	18.73	12.17
Western Australian Salmon	6,732	7,051	6,075	1,954	4,815	5,694	7,112	4,556	5,657	3,566	2,524	2,969	1,177	1,988	61,870	2.65	4.05
Trevally	3,796	3,476	4,693	5,479	4,529	4,540	3,700	4,466	5,326	3,933	3,053	2,566	2,455	5,418	57,430	7.23	3.76
Swallowtail	4,930	6,509	5,952	5,306	6,971	7,919	3,766	2,795	1,933	1,372	1,491	1,519	1,234	2,915	54,612	3.89	3.57
All other species	5,095	5,857	5,125	3,734	7,032	5,552	5,335	2,957	2,115	2,859	2,027	1,697	1,170	2,765	53,320	3.69	3.49
Garfish	1,365	6,259	6,327	6,710	7,117	2,310	4,450	3,958	3,143	1,620	1,707	1,533	2,298	1,557	50,354	2.08	3.3
Southern Calamari	2,137	2,244	3,348	2,307	7,401	6,571	4,572	3,167	2,816	2,364	2,257	1,371	1,365	3,901	45,821	5.2	3
Snook	5,376	3,406	4,260	5,280	4,861	3,575	1,726	2,501	2,340	3,841	1,515	1,510	1,472	1,824	43,487	2.43	2.85
Australian Herring	2,718	2,864	3,240	1,658	1,259	2,120	2,312	2,050	1,314	923	854	436	300	890	22,938	1.19	1.5
Southern Bluefin Tuna	554	736	1,035	1,144	1,552	1,739	1,824	2,320	2,393	1,866	1,962	1,849	1,606	2,224	22,804	2.97	1.49
Leather Jacket	1,932	1,969	1,850	1,711	2,342	2,016	1,901	973	1,159	1,107	964	963	566	1,468	20,921	1.96	1.37
Blue Crab	1,424	1,497	1,383	761	1,112	677	1,018	434	1,612	1,514	945	986	1,892	1,039	16,294	1.39	1.07
Red Mullet	2,373	2,059	1,770	1,263	888	1,270	1,367	913	1,053	972	531	429	432	760	16,080	1.01	1.05
Flathead	1,120	1,260	930	657	766	531	420	400	431	755	527	547	195	459	8,998	0.61	0.59
Parrotfish	608	717	1,059	584	830	949	632	638	667	716	534	236	84	442	8,696	0.59	0.57
Morwong	686	576	637	574	747	780	550	571	715	452	304	441	220	500	7,753	0.67	0.51
Gummy Shark	248	292	460	293	453	656	446	556	414	316	414	367	259	375	5,549	0.5	0.36
Yellowtail Kingfish	118	55	115	121	142	224	132	139	229	138	119	126	181	313	2,152	0.42	0.14
School Shark	83	76	93	45	133	101	256	119	83	79	178	137	140	259	1,782	0.35	0.12
Samsonfish	97	71	144	107	168	242	110	92	144	30	106	48	9	32	1,400	0.04	0.09
TOTAL	143,276	147,991	147,984	136,611	153,468	132,721	113,842	94,891	98,326	86,464	79,852	72,303	45,090	74,964	1,527,783	100	100

Table 3. Estimated retained weight (in tonnes, t) and nominal release numbers of King George Whiting and Snapper, at or above and below the minimum legal length (MML) between 2007/08 and 2020/21 (see Appendix 1 for MML values).

King George Whiting	07/08	08/09	09/10	10/11	11/12	12/13	13/14	14/15	15/16	16/17	17/18	18/19	19/20	20/21
Estimated retained weight (t)	18.6	19.1	17.9	18.2	18.1	13.9	11.8	9.6	12.3	11.6	11.9	9.8	6.6	10.7
Released ≥ MLL (No)	1,170	867	613	780	499	649	472	246	434	543	732	392	156	258
Released < MLL (No)	8,848	6,899	5,697	5,857	5,070	5,085	3,079	2,202	3,923	5,232	3,656	3,046	2,456	3,480
Snapper														
Estimated retained weight (t)	90.5	86.7	92.9	84.1	77.4	71.4	59	52.3	47.4	43.6	39.8	40.4	5.7	0.4
Released ≥ MLL (No)	2,967	3,080	2,624	1,887	1,884	2,075	1,263	1,219	668	684	759	913	1,600	3,275
Released < MLL (No)	17,603	16,341	22,269	17,861	19,690	16,133	11,415	8,273	9,661	10,319	10,482	9,679	4,334	6,587

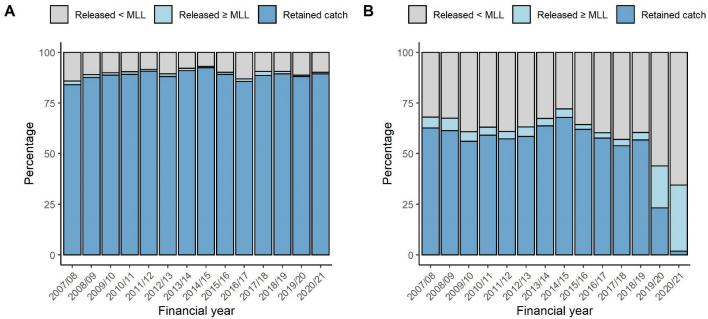


Figure 2. Percentage of retained and released (< MLL and ≥ MLL) catch for (A) King George Whiting and (B) Snapper between 2007/08 and 2020/21. MLL stands for minimum legal length (see Appendix 1 for MLL values).

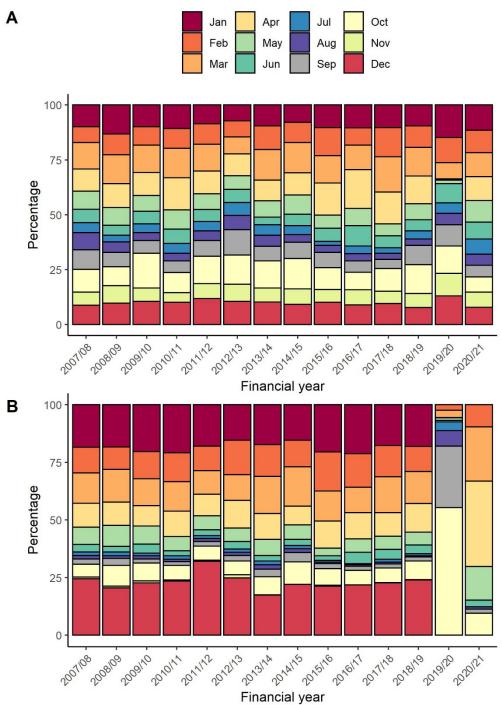


Figure 3. Monthly patterns by financial year in percentage nominal catches for (A) King George Whiting and (B) Snapper.

3.4. Regional patterns in catch

3.4.1. Gulf St. Vincent and Kangaroo Island

Catches in the Gulf St. Vincent and Kangaroo Island region mostly (74.3%) comprised Bight Redfish, King George Whiting, Silver Trevally, Swallowtail and Western Australian Salmon (Table 4) during 2020/21. The remaining 25.7% of the catch comprised of 36 other species.

3.4.2. Spencer Gulf

In the Spencer Gulf region, the catch compositions were dominated (87.4%) by King George Whiting, Southern Calamari, and Silver Trevally in 2020/21 (Table 5). The remaining 12.6% of the catch comprised of 31 species.

3.4.3. West Coast

Catches in the West Coast region were largely confidential in 2019/20 and 2020/21 due to the low number of operators in the region (Table 6).

3.4.4. Victor Harbor and South-east

Catches in the Victor Harbor and South-east region were largely confidential in 2019/20 and 2020/21 due to the low number of operators in the region (Table 7).

3.4.5. 'Other'

Catches in the 'Other' region were largely confidential in 2019/20 and 2020/21 due to the low number of operators in the region (Table 8).

Table 4. Nominal catches (number of individuals) by species and fishing activity in the Gulf St Vincent/Kangaroo Island region. Confidential data (Conf.) not shown. Data were replaced by "-" when there was only one confidential value per species and year.

Species	Activity	07/08	08/09	09/10	10/11	11/12	12/13	13/14	14/15	15/16	16/17	17/18	18/19	19/20	20/21
Western	Game	-	-	-	-	Conf.	Conf.	Conf.	Conf.	Conf.	-	Conf.	Conf.	Conf.	Conf.
Australian Salmon	Inshore	-	-	-	-	4,040	4,883	6,780	4,274	5,507	-	2,406	2,634	-	1,730
	Offshore	Conf.	Conf.	Conf.	Conf.	Conf.	Conf.	Conf.	Conf.	Conf.	Conf.	Conf.	Conf.	-	Conf.
Bight Redfish	Deepsea	-	0	0	-	-	-	0	-	Conf.	-	-	-	-	-
	Game	Conf.	0	0	Conf.	Conf.	Conf.	155	Conf.	-	Conf.	Conf.	Conf.	Conf.	Conf.
	Inshore	-	2,879	4,167	-	-	-	3,599	-	-	-	-	-	-	-
	Offshore	-	11,031	9,842	-	-	-	8,496	-	-	-	-	-	-	-
Blue Crab	Inshore	-	Conf.	Conf.	Conf.	Conf.	0	Conf.	Conf.	1,086	-	-	-	-	-
	Other	Conf.	Conf.	Conf.	Conf.	-	0	Conf.	-	0	Conf.	Conf.	Conf.	Conf.	Conf.
Garfish	Inshore	803	1,638	-	2,689	1,213	937	3,263	2,059	793	1,273	835	Conf.	Conf.	971
	Other	0	0	Conf.	0	0	0	0	0	0	0	0	-	-	0
Gummy Shark	Deepsea	-	0	0	0	-	-	-	-	Conf.	-	-	0	-	0
	Game	Conf.	0	0	0	Conf.	Conf.	Conf.	Conf.	Conf.	Conf.	-	Conf.	Conf.	Conf.
	Inshore	-	195	329	175	-	-	-	-	228	-	-	183	-	146
	Offshore	-	60	62	34	-	-	-	-	67	-	-	Conf.	-	Conf.
	Other	-	0	0	0	-	-	-	-	0	-	Conf.	0	-	0
King George Whiting	Deepsea	-	-	0	-	-	-	-	-	Conf.	0	-	0	-	-
	Game	Conf.	Conf.	0	Conf.	Conf.	Conf.	Conf.	Conf.	Conf.	Conf.	Conf.	0	-	Conf.
	Inshore	-	-	27,959	-	-	-	-	-	17,510	-	-	9,740	-	-
	Offshore	-	-	616	-	-	-	-	-	785	-	-	541	Conf.	-
	Other	-	-	0	-	-	-	-	-	0	Conf.	-	0	-	-

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 Table 4. Continued from previous page.

Species	Activity	07/08	08/09	09/10	10/11	11/12	12/13	13/14	14/15	15/16	16/17	17/18	18/19	19/20	20/21
Leatherjacket	Deepsea	-	0	0	0	0	0	0	-	Conf.	-	-	0	0	0
	Game	-	0	0	0	Conf.	0	Conf.	Conf.	0	-	-	Conf.	Conf.	Conf.
	Inshore	-	1,448	1,417	1,330	1,767	1,310	1,138	-	729	-	-	704	294	784
	Offshore	Conf.	98	158	133	Conf.	186	Conf.	-	Conf.	Conf.	Conf.	Conf.	Conf.	Conf.
Snapper	Deepsea	-	-	0	0	0	-	-	0	0	-	0	Conf.	0	-
	Game	-	Conf.	Conf.	Conf.	Conf.	Conf.	Conf.	Conf.	103	Conf.	Conf.	Conf.	0	-
	Inshore	-	-	9,492	9,470	11,513	-	-	10,110	9,831	-	7,434	7,420	829	-
	Offshore	-	-	3,362	1,620	1,662	-	-	1,146	1,271	-	925	1,364	244	Conf.
	Other	Conf.	-	Conf.	Conf.	Conf.	-	-	Conf.	0	-	Conf.	0	0	-
Snook	Game	0	-	-	-	Conf.	Conf.	Conf.	Conf.	-	Conf.	Conf.	Conf.	Conf.	Conf.
	Inshore	4,287	-	-	-	3,542	2,617	837	-	-	-	1,143	755	675	1,047
	Offshore	0	Conf.	Conf.	Conf.	Conf.	Conf.	Conf.	0	Conf.	-	Conf.	Conf.	Conf.	Conf.
Southern Bluefin Tuna	Deepsea	0	0	0	-	-	0	0	0	0	0	0	0	Conf.	0
	Game	Conf.	Conf.	118	-	-	478	539	592	426	275	250	416	-	517
	Inshore	Conf.	Conf.	Conf.	-	-	458	323	617	538	419	504	307	-	610
	Offshore	Conf.	125	Conf.	Conf.	Conf.	257	311	361	532	450	375	339	-	405
Southern Calamari	Game	-	-	0	-	-	-	-	-	Conf.	-	0	-	Conf.	Conf.
	Inshore	-	-	1,768	-	-	-	-	-	630	-	1,006	-	-	1,350
	Offshore	Conf.	Conf.	Conf.	Conf.	Conf.	Conf.	Conf.	Conf.	Conf.	Conf.	0	Conf.	-	Conf.
	Other	-	-	Conf.	-	-	-	-	-	0	-	0	-	-	-
Swallowtail	Deepsea	-	0	-	-	-	-	-	-	Conf.	-	-	-	-	-
	Game	Conf.	0	-	Conf.	Conf.	Conf.	Conf.	Conf.	Conf.	Conf.	Conf.	Conf.	Conf.	Conf.
	Inshore	-	422	-	-	-	-	-	-	547	-	-	-	-	-
	Offshore	-	5,958	-	-	-	-	-	-	1,157	-	-	-	-	-
	Other	-	0	Conf.	-	-	-	-	-	0	-	-	-	-	-
Trevally	Deepsea	-	0	0	-	0	-	-	-	Conf.	-	0	-	-	-
	Game	-	0	0	Conf.	Conf.	Conf.	Conf.	Conf.	-	Conf.	0	Conf.	Conf.	Conf.
	Inshore	-	1,940	2,812	-	2,357	-	-	-	-	-	1,898	-	-	-
	Offshore	-	943	953	-	1,307	-	-	-	-	-	643	-	-	-
	Other	Conf.	0	0	-	Conf.	-	-	-	-	-	0	-	-	-

Table 5. Nominal catches (number of individuals) by species and fishing activity in the Spencer Gulf region. Confidential data (Conf.) not shown. Data were replaced by "-" when there was only one confidential value per species and year.

Species	Activity	07/08	08/09	09/10	10/11	11/12	12/13	13/14	14/15	15/16	16/17	17/18	18/19	19/20	20/21
Western Australian Salmon	Inshore	218	431	265	263	586	563	189	Conf.	Conf.	190	Conf.	Conf.	Conf.	Conf.
Bight Redfish	Game	0	-	Conf.	-	0	0	0	-	0	-	0	-	-	0
	Inshore	Conf.	Conf.	Conf.	Conf.	Conf.	449	210	Conf.	Conf.	Conf.	0	Conf.	Conf.	0
	Offshore	Conf.	-	Conf.	-	Conf.	0	0	-	Conf.	-	0	-	-	0
Blue Crab	Game	-	-	-	0	-	0	-	0	-	-	-	0	0	Conf.
	Inshore	-	-	-	Conf.	-	641	-	Conf.	-	Conf.	Conf.	521	Conf.	Conf.
	Other	Conf.	Conf.	Conf.	Conf.	Conf.	0	Conf.	Conf.	Conf.	-	-	0	Conf.	Conf.
Garfish	Inshore	466	4,599	3,066	3,997	5,893	1,343	1,187	1,890	2,350	Conf.	870	Conf.	Conf.	Conf.
Gummy Shark	Game	-	0	-	-	0	0	-	-	-	-	-	0	-	Conf.
	Inshore	Conf.	14	-	Conf.	17	Conf.	Conf.	Conf.	Conf.	Conf.	Conf.	Conf.	Conf.	Conf.
	Offshore	-	0	Conf.	-	0	Conf.	-	-	_	_	_	Conf.	-	0
King George Whiting	Deepsea	-	0	-	-	0	-	-	-	Conf.	0	0	_	0	0
	Game	-	0	Conf.	Conf.	Conf.	-	-	-	Conf.	0	0	-	0	0
	Inshore	-	17,454	-	-	29,452	-	-	-	14,916	17,044	17,946	-	11,497	19,547
	Offshore	Conf.	0	-	-	Conf.	Conf.	Conf.	Conf.	0	0	0	Conf.	0	0
Leatherjacket	Game	0	0	Conf.	0	-	-	-	-	-	0	0	0	0	0
	Inshore	119	390	-	166	-	-	-	-	-	257	213	194	198	348
	Offshore	0	0	-	0	Conf.	Conf.	Conf.	Conf.	Conf.	0	0	0	0	0
Snapper	Game	-	0	Conf.	0	-	-	-	-	-	0	0	_	0	0
	Inshore	-	15,660	16,774	15,402	-	-	-	-	-	4,347	3,927	-	507	0
	Offshore	Conf.	0	Conf.	0	Conf.	Conf.	Conf.	Conf.	Conf.	0	0	Conf.	0	0
Snook	Inshore	945	479	1,014	873	1,201	827	874	1,389	1,500	1,944	364	724	Conf.	642
Southern Bluefin Tuna	Game	Conf.	-	Conf.	-	Conf.	-	0	-	0	0	0	-	0	-
	Inshore	Conf.	Conf.	-	Conf.	Conf.	Conf.	0	Conf.	0	0	0	-	0	Conf.
	Offshore	0	-	-	-	0	-	0	-	0	0	0	Conf.	0	-
Southern Calamari	Deepsea	0	0	0	0	0	-	0	0	Conf.	0	0	-	0	0
	Inshore	526	1,403	1,470	1,450	6,050	-	2,683	2,278	-	1,594	1,201	-	768	2,533
	Offshore	0	0	0	0	0	Conf.	0	0	-	0	0	Conf.	0	0
Swallowtail	Inshore	Conf.	0	Conf.	Conf.	Conf.	Conf.	Conf.	Conf.	Conf.	Conf.	Conf.	Conf.	Conf.	Conf.
	Offshore	-	0	Conf.	-	-	-	-	-	-	-	-	_	-	_
Trevally	Deepsea	0	0	0	0	0	-	0	0	Conf.	0	0	0	0	0
•					_	^		^	•		^	^	^	_	•
	Game	0	0	Conf.	0	0	-	0	0	-	0	0	0	0	0
	Game Inshore	0 432	0 305	Conf. 329	0 514	0 138	-	551	0 625	-	0 1,054	420	643	0 954	0 2,091

Table 6. Nominal catches (number of individuals) by species and fishing activity in the West Coast region. Confidential data (Conf.) not shown. Data were replaced by "-" when there was only one confidential value per species and year.

Species	Activity	07/08	08/09	09/10	10/11	11/12	12/13	13/14	14/15	15/16	16/17	17/18	18/19	19/20	20/21
Western	Game	-	0	0	0	0	0	-	0	Conf.	-	0	0	-	0
Australian Salmon	Inshore	Conf.													
	Offshore	-	Conf.	Conf.	Conf.	Conf.	Conf.	-	Conf.	Conf.	-	Conf.	Conf.	-	Conf.
Bight Redfish	Game	Conf.	-	0	Conf.	Conf.	Conf.	-	Conf.	-	0	Conf.	0	0	0
	Inshore	-	-	1,062	1,402	1,129	224	-	Conf.	-	Conf.	Conf.	Conf.	Conf.	Conf.
	Offshore	-	Conf.	678	Conf.	491	Conf.	Conf.	Conf.						
Blue Crab	Game	0	0	0	Conf.	-	-	-	0	0	-	0	-	0	-
	Inshore	Conf.	Conf.	0	0	-	Conf.	Conf.	0	Conf.	Conf.	Conf.	-	Conf.	-
	Other	Conf.	Conf.	0	Conf.	Conf.	-	-	0	Conf.	-	Conf.	Conf.	Conf.	Conf.
Garfish	Inshore	Conf.	Conf.	Conf.	Conf.	Conf.	Conf.	0	Conf.	0	Conf.	-	Conf.	Conf.	Conf.
	Offshore	-	_	_	_	_	_	0	_	0	-	Conf.	-	-	_
Gummy Shark	Inshore	Conf.													
•	Offshore	Conf.	_	Conf.	_	Conf.	Conf.	Conf.	_	_	Conf.	Conf.	Conf.	Conf.	Conf.
King George Whiting	Game	0	-	0	Conf.	Conf.	-	-	-	Conf.	-	-	0	0	-
	Inshore	3,005	_	1,106	1,542	2,309	_	_	_	1,818	-	-	Conf.	Conf.	Conf.
	Offshore	0	Conf.	0	Conf.	_									
Leatherjacket	Inshore	Conf.	0	-											
•	Offshore	Conf.	_	_	Conf.	Conf.	Conf.	-	-	-	-	Conf.	-	0	Conf.
Snapper	Game	0	-	-	Conf.	Conf.	0	-	-	-	-	0	0	0	0
• •	Inshore	Conf.	_	_	293	248	Conf.	_	_	_	-	Conf.	Conf.	Conf.	0
	Offshore	Conf.	0												
Snook	Inshore	Conf.	0	Conf.	Conf.	Conf.	Conf.	Conf.	Conf.						
	Offshore	-	_	_	-	-	-	-	0	-	-	Conf.	-	-	-
Southern Bluefin Tuna	Game	Conf.	49	Conf.											
	Inshore	Conf.													
	Offshore	Conf.	216	Conf.	Conf.	Conf.									
Southern Calamari	Game	-	-	-	-	-	0	-	Conf.	-	0	0	-	0	0
	Inshore	Conf.													
	Offshore	_	_	_	_	_	Conf.	_	0	_	Conf.	Conf.	-	Conf.	Conf.
Swallowtail	Inshore	Conf.	-	Conf.	-	0	0	0	0						
	Offshore	Conf.	Conf.	-	-	Conf.	Conf.	Conf.	-	-	Conf.	0	0	0	0
Trevally	Game	Conf.	0	-	0	0	0	0	0	0	0	0	0	0	0
,	Inshore	247	Conf.	_	Conf.										
	Offshore	Conf.													

Table 7. Nominal catches (number of individuals) by species and fishing activity in the Victor Harbour/South-east region. Confidential data (Conf.) not shown. Data were replaced by "-" when there was only one confidential value per species and year.

Species	Activity	07/08	08/09	09/10	10/11	11/12	12/13	13/14	14/15	15/16	16/17	17/18	18/19	19/20	20/21
Western	Game	-	-	-	0		-	-	Conf.	Conf.	0	-	0	0	0
Australian Salmon	Inshore	Conf.	Conf.	Conf.	0	Conf.	Conf.	Conf.	Conf.	-	0	Conf.	0	0	0
Bight Redfish	Game	-	-	0	Conf.	0	Conf.	Conf.	0	_	0	0	0	0	0
2.9	Inshore	Conf.	Conf.												
	Offshore	-	-	Conf.	Conf.	Conf.	Conf.	Conf.	Conf.	-	Conf.	Conf.	Conf.	Conf.	Conf.
Gummy Shark	Deepsea	0	0	0	0	0	Conf.	0	0	0	Conf.	Conf.	Conf.	0	Conf.
Canning Chains	Game	0	0	0	Conf.	Conf.	Conf.	Conf.	Conf.	Conf.	0	Conf.	Conf.	0	0
	Inshore	Conf.	0	Conf.	Conf.	Conf.	Conf.								
	Offshore	Conf.	61	Conf.	Conf.										
King George Whiting	Game	-	-	-	0	-	0	Conf.	-	0	-	-	0	-	-
rung Geerge rrining	Inshore	Conf.	Conf.	Conf.	602	Conf.	Conf.	_	_	0	Conf.	Conf.	Conf.	Conf.	Conf.
	Offshore	-	-	-	0	-	Conf.	_	Conf.	0	-	-	Conf.	-	-
Leatherjacket	Game	_	_	_		_	Conf.	Conf.	-	0	_	_	0	0	Conf.
Loaniorjaonor	Inshore	Conf.	0	_	Conf.	Conf.	Conf.	Conf.							
	Offshore	-	-	-	-	-	Conf.	0	-	0	Conf.	-	Conf.	Conf.	Conf.
Snapper	Deepsea	_	_	0	0	0	0	0	0	0	0	0	Conf.	Conf.	0
pp	Game	_	_	Conf.	Conf.	Conf.	Conf.	Conf.	Conf.	0	Conf.	Conf.	Conf.	Conf.	Conf.
	Inshore	_	_	990	1,111	749	253	Conf.	54	Conf.	Conf.	Conf.	192	Conf.	Conf.
	Offshore	Conf.	Conf.												
	Other	-	-	0	0	0	0	0	0	Conf.	Conf.	0	0	0	0
Snook	Game	0	Conf.	-	-	-		Conf.	0	-	0	0		<u> </u>	Conf.
	Inshore	0	Conf.	Conf.	Conf.	Conf.	Conf.	-	0	Conf.	0	0	Conf.	Conf.	Conf.
Southern Bluefin Tuna	Deepsea	0	-	0	Conf.	0	-	0	0	Conf.	Conf.	0	0	Conf.	0
	Game	Conf.	367	403	269	168	253	Conf.	Conf.						
	Inshore	0	-	Conf.	Conf.	Conf.	_	Conf.	Conf.	Conf.	0	Conf.	Conf.	Conf.	Conf.
	Offshore	Conf.	_	Conf.	Conf.	Conf.	_	Conf.	Conf.	0	Conf.	Conf.	Conf.	Conf.	Conf.
	Other	0	_	0	0	0	_	0	0	Conf.	0	0	0	Conf.	0
Southern Calamari	Inshore	0	0	Conf.	0	0	0	0	0	0	-	Conf.	0	0	0
	Offshore	0	0	-	0	0	0	0	0	0	Conf.	-	0	0	0
Swallowtail	Game	-	0	0	-	0	Conf.	-	-	-	-	0	-	-	-
	Inshore	Conf.	Conf.	Conf.	-	Conf.	Conf.	Conf.	-	Conf.	-	0	-	Conf.	Conf.
	Offshore	-	Conf.	Conf.	Conf.	Conf.	Conf.	-	Conf.	-	Conf.	0	Conf.	-	-
Trevally	Game	-	-	-	-	-	-	0	0	_	0	-	0	-	Conf.
•	Inshore	Conf.	Conf.	Conf.	Conf.	Conf.	Conf.	0	0	Conf.	0	Conf.	0	Conf.	Conf.

Table 8. Nominal catches (number of individuals) by species and fishing activity in the 'Other' region. Confidential data (Conf.) not shown. Data were replaced by "-" when there was only one confidential value per species and year.

Species	Activity	07/08	08/09	09/10	10/11	11/12	12/13	13/14	14/15	15/16	16/17	17/18	18/19	19/20	20/21
Western	Game	0	-	Conf.	-	-	0	-	Conf.	0	-	-	0	0	0
Australian Salmon	Inshore	Conf.	_	0	_	Conf.	Conf.	-	Conf.	Conf.	-	-	Ö	Ö	Ö
7 140 11 411 411 11 11 11 11 11 11 11 11 11 1	Offshore	Conf.	Conf.	Conf.	Conf.	-	Conf.	Conf.	Conf.	Conf.	Conf.	Conf.	0	0	0
Bight Redfish	Deepsea	0	0	-	-	0	Conf.	-	0	0	0	0	0	0	-
3	Game	Conf.	0	-	-	0	0	-	Conf.	Conf.	0	Conf.	Conf.	0	-
	Inshore	Conf.	Conf.	-	-	Conf.	Conf.	-	Conf.	175	Conf.	0	Conf.	Conf.	-
	Offshore	Conf.	Conf.	Conf.	Conf.	Conf.	Conf.	Conf.	Conf.	Conf.	Conf.	Conf.	Conf.	Conf.	Conf.
Blue Crab	Inshore	0	0	Conf.	0	0	0	0	0	0	-	0	0	0	0
	Other	0	0	-	0	0	0	0	0	0	Conf.	0	0	0	0
Garfish	Inshore	Conf.	0	0	0	0	0	0	0	0	0	0	0	0	0
Gummy Shark	Game	-	0	-	0	-	0	-	-	0	-	0	-	-	Conf.
	Inshore	-	Conf.	-	Conf.	Conf.	Conf.	Conf.	Conf.	0	-	Conf.	-	-	-
	Offshore	Conf.	Conf.	Conf.	Conf.	-	Conf.	-	-	0	Conf.	Conf.	Conf.	Conf.	
King George Whiting	Game	-	0	0	Conf.	Conf.	0	-	-	0	-	-	-	0	Conf.
	Inshore	-	Conf.	Conf.	Conf.	-	Conf.	Conf.	Conf.	Conf.	-	Conf.	Conf.	Conf.	Conf.
	Offshore	Conf.	Conf.	Conf.	0	-	Conf.	-	-	Conf.	Conf.	-	-	Conf.	Conf.
Leatherjacket	Game	Conf.	-	0	0	-	0	0	Conf.	0	-	-	0	0	-
	Inshore	Conf.	-	Conf.	Conf.	Conf.	0	Conf.	Conf.	Conf.	-	-	0	0	Conf.
	Offshore	Conf.	Conf.	Conf.	Conf.	-	0	Conf.	Conf.	Conf.	Conf.	Conf.	0	0	
Snapper	Game	Conf.	0	Conf.	Conf.	0	0	0	0	Conf.	0	0	- .	0	0
	Inshore	393	Conf.	562	525	Conf.	Conf.	Conf.	Conf.	Conf.	Conf.	Conf.	Conf.	Conf.	0
	Offshore	Conf.	Conf.	Conf.	Conf.	Conf.	Conf.	Conf.	Conf.	Conf.	Conf.	Conf.	-	Conf.	0
Snook	Game	Conf.	Conf.	0	Conf.				0	0	-	0	0	0	0
	Inshore	Conf.	Conf.	Conf.	Conf.	Conf.	Conf.	Conf.	0	0		0	0	0	0
	Offshore	Conf.	0	Conf.	Conf.	-		-	0	0	Conf.	0	0	0	0
Southern Bluefin Tuna	Deepsea	-	0	0			Conf.	0	0	0	0	0	0		0
	Game	-	Conf.	81	Conf.	Conf.	Conf.	Conf.	Conf.	Conf.	Conf.	Conf.	Conf.	Conf.	0
	Inshore	- ,	Conf.	Conf.	-	-	Conf.	Conf.	Conf.	Conf.	Conf.	0	0	-	0
	Offshore	Conf.	Conf.	Conf.	-	-	Conf.	Conf.	0	Conf.	Conf.	Conf.	Conf.	-	0
Southern Calamari	Game	Conf.	-	0	- ,	0	-	- ,	0	0	- ,	- ,	0	0	0
	Inshore	Conf.	-	Conf.	Conf.	0		Conf.	Conf.	Conf.	Conf.	Conf.	0	0	0
	Offshore	Conf.	Conf.	Conf.		0	Conf.		Conf.	Conf.	-	-	0	0	0
Swallowtail	Inshore	Conf.	Conf.	- 0f	Conf.	Conf.	Conf.	Conf.	Conf.	- 0f	- 0f	- 0f	- 0f	- 0f	0
	Offshore	Conf.	Conf.	Conf.	Conf.	Conf.	Conf.	Conf.	Conf.	Conf.	Conf.	Conf.	Conf.	Conf.	0
Trevally	Game	Conf.	0	0	0		0	Conf.	Conf.	0	0	-	0	-	0
	Inshore	Conf.	Conf.	Conf.	Conf.	Conf.	Conf.	Conf.	0	Conf.	Conf.	- ,	0	- ,	0
	Offshore	Conf.	Conf.	Conf.	Conf.	-	Conf.	0	Conf.	Conf.	Conf.	Conf.	0	Conf.	0

4. DISCUSSION

The SACBF continued to target a large variety of finfish, shark, and invertebrate species across South Australian waters in 2019/20 and 2020/21, while also providing ecotourism activities to non-fishers. Diversification of potential target species and activities allow operators to satisfy client demands across a range of weather conditions in inshore and offshore areas, and to provide a range of high-quality experiences.

The number of active licences in the SACBF has reduced considerably (~39%) over the past decade from 77 to 47. However, the client participation rate has remained relatively stable since 2013/14 (227-260), except for 2019/20 (159), suggesting there is adequate client demand to support the charter businesses.

Consistent with the previous assessment of the SACBF (Rogers, et al. 2019), King George Whiting and Bight Redfish continued to comprise a large percentage of annual catches in 2019/20 and 2020/21. Snapper displayed a 98.7% decrease in nominal catch between 2018/19 and 2020/21, and although it contributed to ~19% of the catch for all years combined, this value was less than 1% in 2020/21. The remainder of the landings include species with increasing nominal catches since 2018/19, such as Leatherjackets, Southern Calamari, Swallowtail and Silver Trevally.

Numbers of undersized King George Whiting and Snapper that were released declined and then stabilised in 2018/19, consistent with overall patterns in catches and effort. The percentage of Snapper released has increased in 2019/20 and 2020/21 due to fishing closures implemented in October 2019 for Snapper in the West Coast, Spencer Gulf and Gulf St Vincent. These closures were implemented following recent stock assessments which demonstrated that these Snapper stocks were depleted (Fowler et al. 2020). The closures have contributed to increased catches of other species like Southern Calamari, Silver Trevally and Bight Redfish, coupled with a higher proportion of game, deep-sea and offshore fishing, compared to inshore activities.

The SACBF was notably impacted by COVID-19 mitigation measures, such as lockdowns and social distancing. These measures contributed to the decrease in number of fishing trips, participation rates, and total fish retained, resulting in a fee relief program implemented for the SACBF in 2020/21. The number of trips and clients increased in 2020/21 compared to 2019/20, reflecting a recovery of the fishery after the first year of the pandemic.

REFERENCES

- Dix, A., Douglas, J., Carlin, L., and Morison, J. (2022). Economic and Social Indicators for the South Australian Charter Boat Fishery 2020/21. A Report for the Department of Primary Industries and Regions. BDO EconSearch. 64 pp.
- Durante, L. M., Smart, J. J., and Tsolos, A. (2022). South Australian Charter Boat Fishery 2020/21. Final Report to PIRSA Fisheries and Aquaculture. South Australian Research and Development Institute (Aquatic Sciences), Adelaide. SARDI Publication No. F2007/000847-6. SARDI Research Report Series No. 1130. 47pp.
- Fowler, A.J., Smart, J., McGarvey, R., Feenstra, J., Bailleul, F., Buss, J.J., Drew, M., Matthews, D., Matthews, J. and Rogers, T. (2020). Snapper (Chrysophrys auratus) Fishery. Fishery Assessment Report to PIRSA Fisheries and Aquaculture. South Australian Research and Development Institute (Aquatic Sciences), Adelaide. F2007/000523-6. SARDI Research Report Series No. 1072.111pp.
- PIRSA (2019). Management Plan for the South Australian Charter Boat Fishery. April 19. The South Australian Fisheries Management Series Paper number 77: Management Plan for the South Australian Charter Boat Fishery. ISBN 978-0-64824-2-8. ISSN 1332-8072.
- Pita, P., Ainsworth, G. B., Alba, B., Anderson A. B., Antelo M, Alós, J., Artetxe, I., Baudrier, J., Castro, J. J., Chicharro, B., Erzini, K., Ferter, K., Freitas, M., García-de-la-Fuente, L., García-Charton, J. A., Giménez-Casalduero, M., Grau, A. M., Diogo, H., Gordoa, A., Henriques, F., Hyder, K., Jiménez-Alvarado, D., Karachle, P. K., Lloret, J., Laporta, M., Lejk, A. M., Dedeu, A. L., Martín-Sosa, P., Martínez, L., Mira A. M., Morales-Nin, B., Mugerza, E., Olesen, H. J., Papadopoulos, A., Pontes, J., Pascual-Fernández, J. J., Purroy, A., Ramires, M., Rangel, M., Reis-Filho, J. A., Sánchez-Lizaso, J. L., Sandoval, V., Sbragaglia, V., Silva, L., Skov, C., Sola, I., Strehlow, H. V., Torres, M. A., Ustups, D., van der Hammen, T., Veiga, P., Venerus, L. A., Verleye, T., Villasante, S., Weltersbach, M. S. and Zarauz, L. (2021) First Assessment of the Impacts of the COVID-19 Pandemic on Global Marine Recreational Fisheries. Frontiers in Marine Sciences 8:735741.
- Rogers, P. J., Tsolos, A., Boyle, M.K., Steer, M. (2019). South Australian Charter Boat Fishery 2017/18. Final Report to PIRSA Fisheries and Aquaculture. South Australian Research and Development Institute (Aquatic Sciences), Adelaide. SARDI Publication No. F2007/000847-5. SARDI Research Report Series No. 1028. 45 pp.
- Rogers, P. J., Tsolos, A. and Boyle, M. (2020). South Australian Charter Boat Fishery Data Summary. Final Report to PIRSA Fisheries and Aquaculture. South Australian Research and Development Institute (Aquatic Sciences), Adelaide. SARDI Publication No. F2011/000438-3. SARDI Research Report Series No. 1070. 19 pp.
- South Australian Fisheries Management Act 2007 https://www.legislation.sa.gov.au).

Vainickis, A. (2010). SARDI Aquatic Sciences Information systems quality assurance and data integrity report 2010. SARDI Publication No. F09/000267-2. SARDI Research Report Series No. 497.

APPENDIX

COMMONWEALTH MANAGED SPECIES	Individual passenger catch limit (per person, per day) Up to 3 passengers	Charter boat limit More than 3 passengers
Blue Warehou	10	30
Rock Ling	3	18
Silver Warehou	10	30

IMPORTANT INFORMATION

- 1. Individual passenger catch limits are the number of fish permitted per person, per day.
- On multi-day charters, the catch limit for Commonwealth-managed species is restricted to one individual passenger limit or one boat limit, regardless of the number of days fished.
- On multi-day charters, the catch limit for Mulloway, Samsonfish, Southern Bluefin Tuna, Western Blue Groper, Whaler Shark (Bronze/Dusky), and Yellowtail Kingfish is restricted to one per person, regardless of the number of days fished.
- On multi-day charters being more than 3, the catch limit for State-managed species is restricted to 3 times the individual daily catch limit.
- It is an offence to cut up, fillet or otherwise mutilate fish in a boat (except for scaling and gutting) unless the fish are to be eaten on board. This applies to all species subject to minimum legal lengths
- 6. All undersize fish must be carefully returned to the water immediately.
- 7. Charter boat operators and recreational fishers are not permitted to sell their catch.
- Once a passenger has caught their individual catch limit they are not permitted to catch any more of that species during that 24 hour period (applies from midnight to midnight).
- A number of closures are in place in South Australia at certain times of years or in certain areas to protect key species. Charter operators and passengers must comply with closure rules at all times.
- 10. Some species are totally protected in South Australian waters and penalties may apply to anyone who takes or causes them harm. Protected species include; all marine mammals (including whales, seals, sea lions and dolphins); leafy sea dragon; Western Blue Groper in Gulf waters, Investigator Strait and Backstairs Passage; White Shark and all Southern Rock Lobster, Blue Swimmer Crab, Sand Crab and Giant Crab with eggs attached.
- 11. Charter boat operators are not permitted to undertake personal fishing while conducting a chartered fishing trip.

Penalties may apply for non-compliance with these regulations.

NOTE: These limits specifically apply to recreational fishers participating in charter fishing activities, information in this brochure is a guide only and should not be relief on as a legal document. For the latest information or recreational fishing generally, visit pir. sa. gov. au/fishing, download the free SA Fishing app from your app store or contact Fishwatch on 1800 065-592.



www.nir.sa.gov.au/fishing

SPECIES	Size (cm)	Individual passenger catch limi (per person, per day)
Abalone		
Greenlip (western zone)	14.5	3
Greenlip (all other waters)	13	3
Blacklip (all waters)	13	3
All other species	13	3
Albacore	-	1
Australian Herring (Tommy Ruff)	-	40
Barracouta	-	5
Bight Redfish	30	5*
Bloodworm	-	4 litres
Blue Morwong (Queen Snapper)	38	3
Blue Swimmer Crab	11	20*
Bream	30	5
Cockle (other than Pipi)	3	150*
Congolli	-	2
Cuttlefish (Sepia species)	-	8*
Flathead	30	5
Flounder	-	10
Garfish	23	30
Gemfish	-	5
Giant Crab	15	2
Gummy Shark	45	1*
Harlequin Fish	-	2
King George Whiting		
East of 136°E	32	10
West of 136°E	30	10
Morwong (Jackass)	-	5
Mullet (all species)	21	30
Mulloway (outside Coorong)	>82	1
Pipi		
East of 136°E	3.5	300
West of 136°E	3.5	100

South Australian Charter	
Boat Fishing Limits	
Updated July 2021 Government of South Australia Department of Principle industrials	
Dispurser of Primary Industries and Regors	

SPECIES	Size (cm)	Individual passenger catch limit (per person, per day)
Razorfish	-	13
Salmon (Western Australian)	21-35	10
	>35	5
Samsonfish	88	1
Sand Crab	10	20*
Scallops	6.5	50
School Shark	45	1*
School Whiting	-	10
Sea Urchin	-	20
Southern Bluefin Tuna	-	1 (per trip)
Southern Calamari		8
Southern Rock Lobster		
Southern Zone	9.85	2
Northern Zone	10.5	2
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^{*} The daily individual catch limit is a combined limit of two or more species. Combined limits apply to Blue Swimmer Crab/Sand Crab, Bight Redistr/Yelloweye Redistr, Cuttlefist/Southern Calamari, Gummy Shark/School Shark, Vongele/Cockle (other than Pipi).

Appendix 1. Summary of SACBF bag and boat limits and closures (PIRSA 2019).