

ADVICE TO: PIRSA FISHERIES AND AQUACULTURE

FROM: SARDI AQUATIC AND LIVESTOCK SCIENCES

SUBJECT: SARDI ALGAL BLOOM RESPONSE: ASSESSMENT OF FISH STOCKS IN SPENCER GULF AND GULF ST VINCENT

DATE: 20 MARCH 2026

KEY ISSUES

- PIRSA Fisheries and Aquaculture have requested an Advice Note on the impact on key fish stocks in Spencer Gulf and Gulf St Vincent from the harmful algal bloom.
- Using data available up to 6 March 2026, this impact assessment used a combination of (i) spatial and temporal analyses of commercial and recreational catch data; (ii) targeted fishery-independent surveys; (iii) targeted fishery-dependent surveys; (iv) bycatch sampling; and (v) Service Level Agreement stock assessment surveys.
- **Gulf St Vincent/Kangaroo Island:** Evidence of recent declines in **King George Whiting** with widespread indication of post-settlement failure. **Southern Calamari** and **Southern Garfish** have been severely affected, with near absence reported in many areas. No Southern Calamari egg masses were detected in dive surveys at known spawning areas. Juvenile Southern Garfish numbers also appear impacted. **Western King Prawn** fishery-independent surveys have recorded historically low relative biomass. Elasmobranch and Southern Calamari bycatch were noticeably absent from prawn trawl surveys. Commercial **Blue Swimmer Crab** catches have been impacted but catch rate estimates from recent targeted surveys indicate that abundances have improved. High levels of **Abalone** mortality have been observed in the gulf. **Sardine** catches are impacted.
- **Spencer Gulf:** Catches of **King George Whiting**, **Southern Garfish**, **Western King Prawn**, **Blue Swimmer Crab**, **Abalone** and **Sardine** remain relatively stable but with strong evidence of declines in **Southern Calamari**.
- Southern Rock Lobster stocks are outside the gulfs and the areas impacted by the harmful algal bloom and remain largely unaffected. Regional declines in Pipi abundance were observed in Younghusband Peninsula but overall biomass remains high.
- Overall, this assessment indicates that the harmful algal bloom continues to have the most pronounced negative impacts on fish stocks in Gulf St Vincent/Kangaroo Island and, while impacts in Spencer Gulf appear to be more limited, there is strong evidence of a substantial negative impact on Southern Calamari in Spencer Gulf.

BACKGROUND

In mid-March 2025, a harmful algal bloom, dominated by *Karenia* spp., was identified in the waters around the Fleurieu Peninsula in South Australia (SA). The bloom has subsequently spread, primarily into Gulf St Vincent (GSV), but also into the Spencer Gulf (SG), southern Yorke Peninsula (YP), Kangaroo Island (KI) and the Coorong. It is estimated the harmful algal bloom has affected over 500 species of fish, invertebrates and associated marine and coastal diversity

(source: iNaturalist). This has included mortality of commercial species such as Pipi and Snapper, iconic species such as Leafy Seadragons, and larger marine life, including many species of sharks and rays.

As part of the extensive SARDI Algal Bloom Response, fisheries and fish stocks are being assessed to understand the impact of the harmful algal bloom. PIRSA Fisheries and Aquaculture have requested updated advice on the impact on fish stocks in both SG and GSV/KI. This Advice Note provides updated advice on the potential impact to King George Whiting, Southern Garfish, Southern Calamari, Western King Prawn, Blue Swimmer Crab, Southern Rock Lobster, Abalone, Pipi and Sardine. All data are non-confidential.

Details of the Fish Stock Assessment Program for the algal bloom response are attached (Attachment 1). In summary, the program is structured around five core components:

1. **Spatial and temporal analyses** of commercial logbook across all fishing sectors and voluntarily reported recreational data (via the new recreational fishing App).
2. **Fishery-independent surveys** designed to provide comparable data with historical survey programs.
3. **Fishery-dependent surveys** where contracted fishers operate within assumed algal bloom-affected areas to provide targeted information.
4. **Bycatch and biological sampling** to collect detailed data on non-target species and biological parameters of key species.
5. **Service Level Agreement stock assessment surveys** including those for the Southern Rock Lobster, Western King Prawn, Blue Swimmer Crabs, Abalone and Pipi fisheries.

At the time of reporting for the Marine Scalefish Fishery (MSF) and other sectors (see Figure A1 for zonation), there were several outstanding returns from July 2025 to February 2026 (Table 1). Note that data from February are not due until 15 March 2026. Targeted MSF fishery-dependent surveys commenced on 29 September 2025, with 181 days of sampling undertaken to date. The GSV/KI zone was closed to commercial fishing on 01 November 2025. Consequently, all catch data from this zone from October onwards are based on targeted MSF fishery-dependent surveys. This report compares 2025/26 catch and CPUE data against monthly 3-year averages (baseline) from February 2022 – February 2025. Indices are categorised as having changed by <50% of 3-year monthly average; 50-80% of 3-year monthly average, or >80% of 3-year monthly average.

Table 1. Number of outstanding returns/digital reports for different fishery sectors from July 2025 to February 2026.

Sector	Month							
	July 25	Aug 25	Sept 25	Oct 25	Nov 25	Dec 25	Jan 26	Feb 26
Marine Scalefish	1	3	4	9	12	14	30	66
Lakes and Coorong	Nil	Nil	Nil	Nil	3	4	10	24
Charter Boat	1	4	3	4	7	9	16	18
Sardine	Nil	Nil	Nil	Nil	Nil	Nil	11	13

RESULTS

King George Whiting

Data sources: Commercial logbook, charter boat fishery, fishery-dependent research and post-settlement surveys.

Monthly catches and catch rates from GSV/KI during the algal bloom period from March–August 2025 remained broadly within recent ranges. The total catch in September and October 2025 declined sharply, as did catch rates from targeted fishing from November 2025 to February 2026 (Figure 1). Both are now >80% below baseline at the zonal (Table A1, Table A2) and regional (Table A5, Table A6) scales. SG catch and catch rate have remained consistent with historical averages (Figure 1, Table A1, Table A2, Table A5, Table A6). Charter boat data broadly reflect those of commercial MSF logbook data but with lower monthly catches in GSV/KI in all months, and from November 2025 to February 2026 in SG, compared to historical averages (Figure 2).

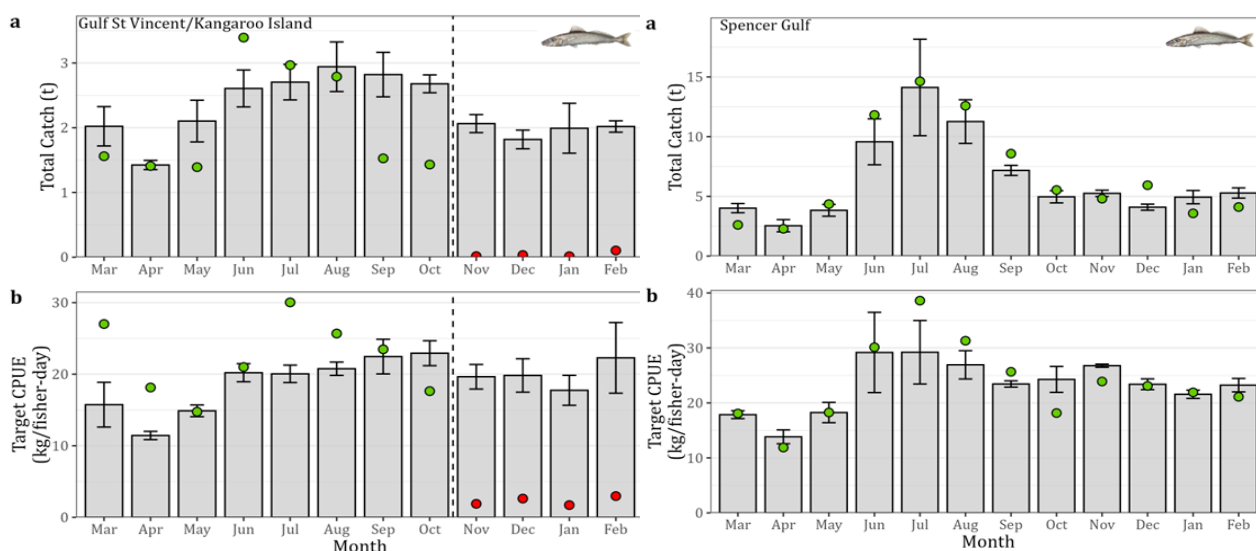


Figure 1. Commercial Fishery statistics for King George Whiting in the Gulf St Vincent/Kangaroo Island and Spencer Gulf fishing zones. A) Total catch (t) and B) Targeted CPUE (kg/fisher-day) during the algal bloom period (March 2025 onwards; dot) compared to the 3-year monthly average (February 2022 – February 2025; grey bars). Error bars indicate standard error. Green dot indicates change in catch/CPUE <50% of 3-year monthly average; orange dot indicates change in catch/CPUE of 50-80% of 3-year monthly average, red dot indicates change in catch/CPUE >80% of 3-year monthly average. Dashed line indicates closure of commercial fishery in Gulf St Vincent/Kangaroo Island fishing zone from 01 November 2025. Data from November 2025 onwards (GSV/KI) from targeted fishing program only.

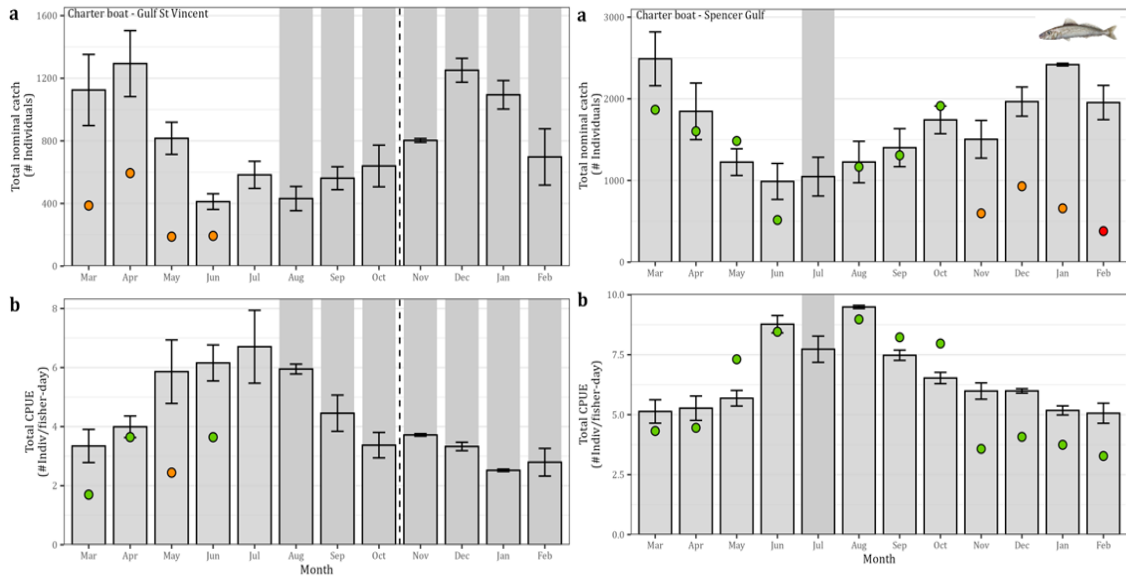


Figure 2. Charter Boat Fishery statistics for King George Whiting in the Gulf St Vincent/Kangaroo Island and Spencer Gulf fishing zones. A) Total nominal catch (# Individuals) and B) Total CPUE (#Individuals/fisher-day) during the algal bloom period (March 2025 onwards; dot) compared to the 3-year monthly average (February 2022 – February 2025; grey bars). Error bars indicate standard error. Green dot indicates change in catch/CPUE <50% of 3-year monthly average; orange dot indicates change in catch/CPUE of 50-80% of 3-year monthly average, red dot indicates change in catch/CPUE >80% of 3-year monthly average. Grey bars indicate months where data were removed due to confidentiality (< 5 licences).

Fishery-independent recruitment surveys of post-settled King George Whiting have been conducted since the late 1970s, with sampling sites in 2025 chosen to match 2016 and 2017 surveys for direct comparison. A total of 18 locations across Gulf St Vincent, Spencer Gulf, Investigator Strait and the West Coast were sampled and grouped into seven sub-regions. Five additional 2025 sites, not previously sampled, were excluded from year-to-year comparisons but will be incorporated into future assessments.

Across the 18 locations sampled in 2025, post-settled King George Whiting densities were at their lowest levels on record, with declines of 37–97% since the most recent survey in 2017 (Table 2). The greatest reductions occurred in Lower Eyre Peninsula, Northern Gulf St Vincent and Southern Gulf St Vincent while Southern Spencer Gulf was the only region to show an increase.

Table 2. Total number and density (KGW per 100 m²) of post-settled KGW sampled within each region in 2016, 2017, and 2025. NA – not sampled, No. of KGW – number of KGW sampled, % Change – percentage difference in KGW per.100m² from 2017 to 2025. FWC – Far West Coast, LEP – Lower Eyre Peninsula, NSG – Northern Spencer Gulf, SSG – Southern Spencer Gulf, NGSV – Northern Gulf St Vincent, SGSV – Southern Gulf St Vincent, KI – Kangaroo Island.

Region	2016		2017		2025		% Change for 2017–2025 (KGW per 100 m ²)
	No. of KGW	KGW per 100 m ²	No. of KGW	KGW per 100 m ²	No. of KGW	KGW per 100 m ²	
FWC	NA	NA	481	120	377	75	-37.5
LEP	265	33	215	108	38	5	-95.4
NSG	241	20	223	56	284	23	-58.9
SSG	49	2	134	17	500	18	+5.9
NGSV	2,021	101	533	24	33	1	-95.8
SGSV	74	37	256	128	15	3	-97.7
KI	37	2	57	7	28	2	-71.4

Southern Calamari

Data sources: Commercial logbook, charter boat fishery, fishery-dependent research and fishery-independent dive surveys.

Commercial logbook and targeted fishing data from GSV/KI show marked declines, with catch and CPUE from July 2025 to February 2026 negligible relative to the 3-year average (Figure 3). Both are now >80% below baseline at zonal (Tables A1; A2) and regional (Tables A5; A6) scales. In SG, catch and CPUE were broadly consistent with previous years until September 2025. From October 2025 to February 2026, catch declined to >80% below baseline, while CPUE decreased consecutively from 56% to 72% below baseline from December 2025 to February 2026 (Tables A1 and A2). Declines are widespread across both northern and southern SG regions (Tables A7–A8). Charter boat data broadly mirror commercial MSF logbook trends in SG (Figure 4).

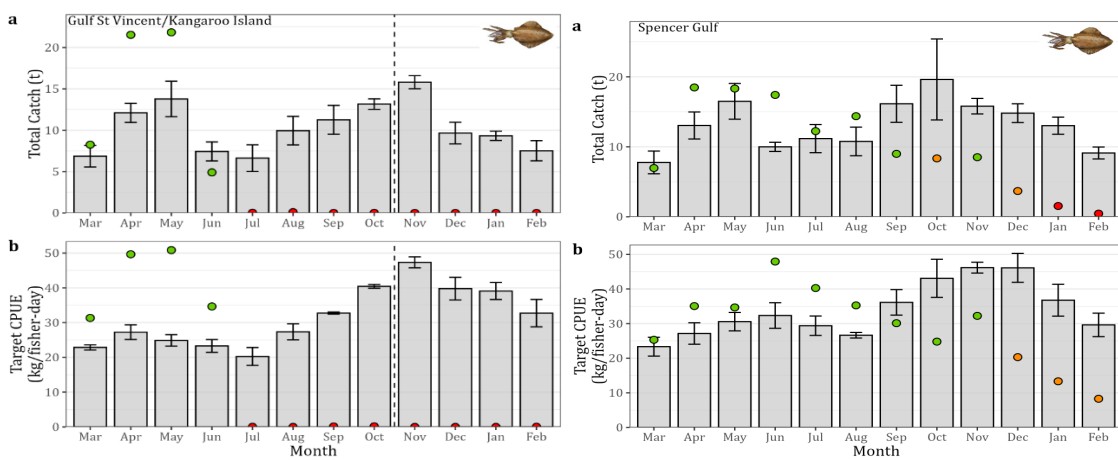


Figure 3. Commercial Fishery statistics for Southern Calamari in the Gulf St Vincent/Kangaroo Island and Spencer Gulf fishing zones. A) Total catch (t) and B) Targeted CPUE (kg/fisher-day) during the algal bloom period (March 2025 onwards; dot) compared to the 3-year monthly average (February 2022 – February 2025; grey bars). Error bars indicate standard error. Green dot indicates change in catch/CPUE <50% of 3-year monthly average; orange dot indicates change in catch/CPUE of 50-80% of 3-year monthly average, red dot indicates change in catch/CPUE >80% of 3-year monthly average. Dashed line indicates closure of commercial fishery in Gulf St Vincent/Kangaroo Island fishing zone from 01 November 2025. Data from November 2025 onwards (GSV/KI) from targeted fishing program only.

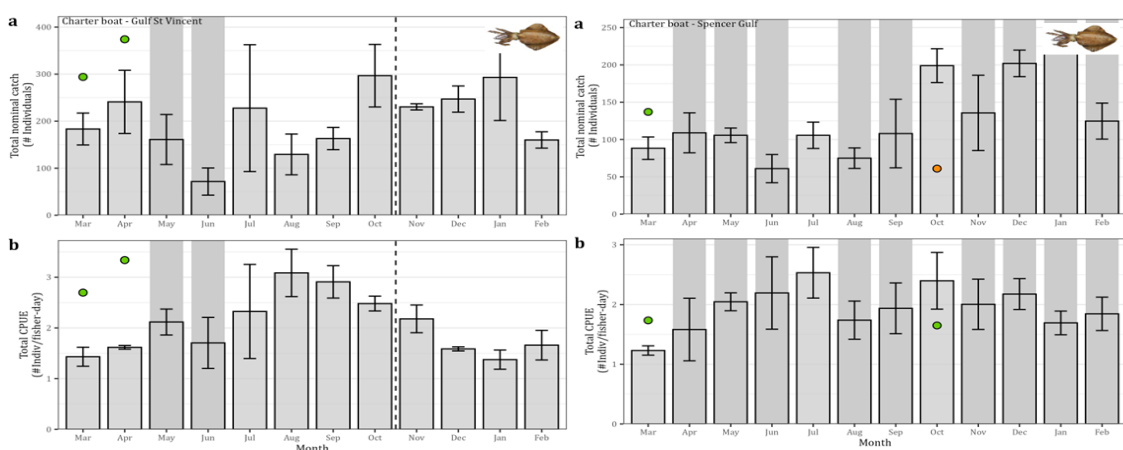


Figure 4. Charter Boat Fishery statistics for Southern Calamari in the Gulf St Vincent/Kangaroo Island and Spencer Gulf fishing zones. A) Total nominal catch (# Individuals) and B) Total CPUE (#Individuals/fisher-day) during the algal bloom period (March 2025 onwards; dot) compared to the 3-year monthly average (February 2022 – February 2025; grey bars). Error bars indicate standard error. Green dot indicates change in catch/CPUE <50% of 3-year monthly average; orange dot indicates change in catch/CPUE of 50-80% of 3-year monthly average, red dot indicates change in catch/CPUE >80% of 3-year monthly average. Dashed line indicates closure of commercial fishery in Gulf St Vincent/Kangaroo Island fishing zone from 1st November 2025. Grey bars indicate months where data were removed due to confidentiality (< 5 licences).

Five fishery-independent diver surveys of Southern Calamari egg masses have been completed: four in GSV (Myponga/Sellicks on 24/10/25 and 18/12/25 and Marino/Seacliff on 6/11/25 and 5/12/25) and one in SG (Point Riley/Myponie Point on 13/11/25; Table 3). In GSV, no eggs were observed at either location during the October to December 2025 surveys, compared with the ~7000–10,500 eggs recorded each month in 2005–06. Water clarity improved markedly between the November and December surveys, with low densities of reef fish (e.g., silver drummer, magpie perch, sweep) present at all dive locations. Large schools of Australian Salmon were also observed at both locations in November. Seagrass communities continued to appear healthy however, invertebrate presence appeared severely diminished at both locations. In SG, first-time surveys across four exploratory sites recorded four small egg masses (154 strands) in clear water with normal fauna, suggesting low Southern Calamari abundance rather than localised effects of the algal bloom. In contrast, at Tiparra Reef, divers did observe deposits of Southern Calamari eggs on abalone transects.

Table 3. Total number of Southern Calamari egg strands observed during the November and December 2006, and 2025 diver-based surveys. Na indicates not available.

Gulf	Site	Nov-06	Nov-25	Oct-Dec-06	Oct-Dec-25
GSV	Marino/Seacliff	10,544	0	10,670	0
GSV	Myponga/Sellicks	11,541	0	7,166	0
SG	Pt Riley/Myponie	na	154	na	na

Southern Garfish

Data sources: [Commercial logbook](#), [fishery-dependent research](#) and [fishery-independent surveys](#).

Logbook data from GSV/KI indicate strong negative impacts of the algal bloom. From May 2025 to February 2026, catches and CPUE were consistently below the previous 3-year average (Figure 5). Both are now >80% below baseline at the zonal (Table A1, Table A2) and regional (Table A5, A6) scales. For SG, however, catches and CPUE were largely consistent with historical baseline data (Figure 5). Charter boat data broadly mirror commercial MSF logbook trends in SG (Figure 6).

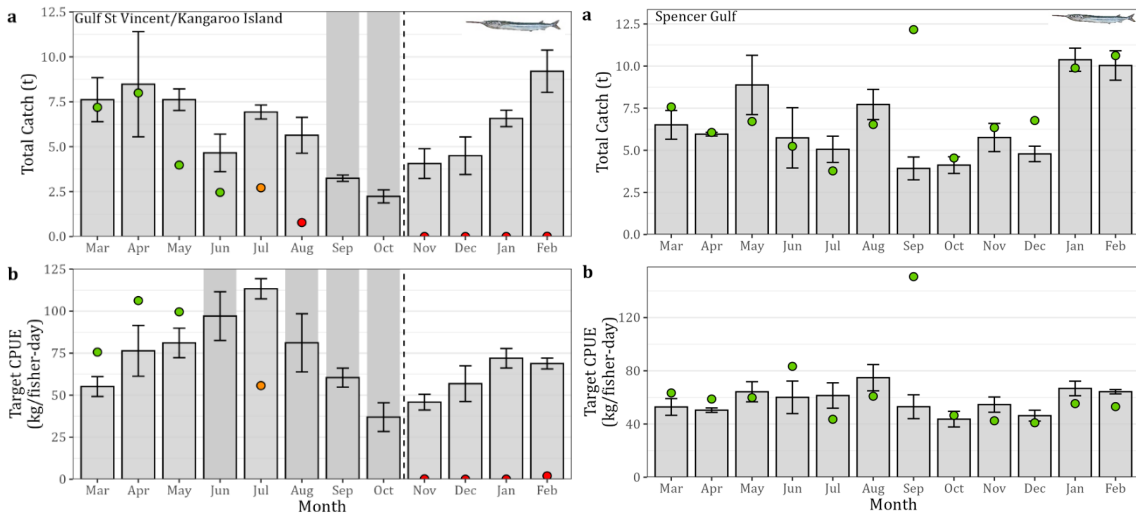


Figure 5. Commercial Fishery statistics for Southern Garfish in the Gulf St Vincent/Kangaroo Island and Spencer Gulf fishing zones. A) Total catch (t) and B) Targeted CPUE (kg/fisher-day) during the algal bloom period (March 2025 onwards; dot) compared to the 3-year monthly average (February 2022 – February 2025; grey bars). Error bars indicate standard error. Green dot indicates change in catch/CPUE <50% of 3-year monthly average; orange dot indicates change in catch/CPUE of 50-80% of 3-year monthly average, red dot indicates change in catch/CPUE >80% of 3-year monthly average. Dashed line indicates closure of commercial fishery in Gulf St Vincent/Kangaroo Island fishing zone from 01 November 2025. Data from November 2025 onwards (GSV/KI) from targeted fishing program only. Grey bars indicate months where data were removed due to confidentiality (< 5 licences).

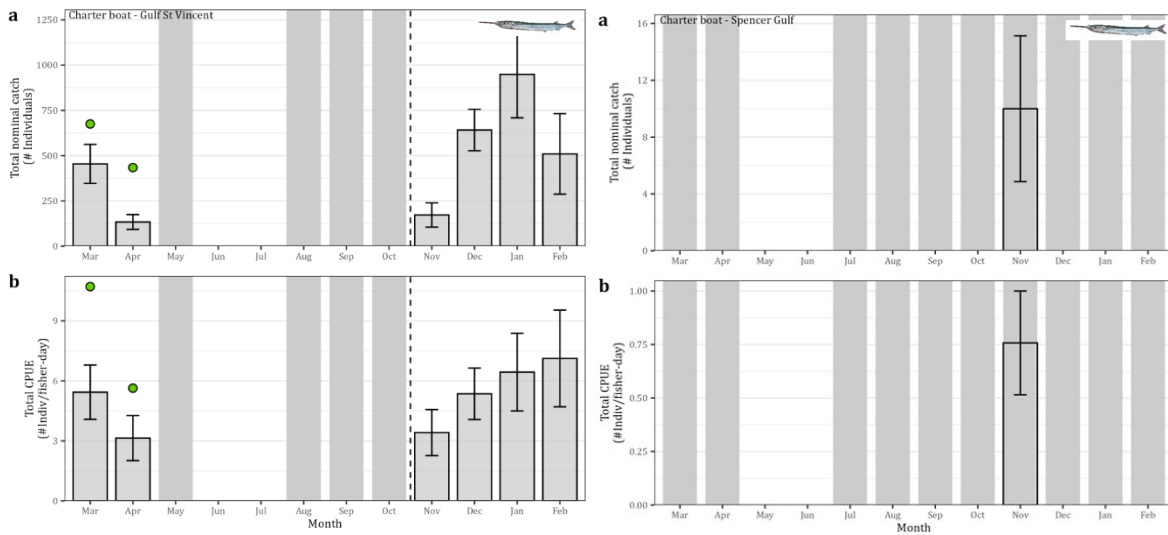


Figure 6. Charter Boat Fishery statistics for Southern Garfish in the Gulf St Vincent/Kangaroo Island and Spencer Gulf fishing zones. A) Total nominal catch (# Individuals) and B) Total CPUE (#Individuals/fisher-day) during the algal bloom period (March 2025 onwards; dot) compared to the 3-year monthly average (February 2022 – February 2025; grey bars). Error bars indicate standard error. Green dot indicates change in catch/CPUE <50% of 3-year monthly average; orange dot indicates change in catch/CPUE of 50-80% of 3-year monthly average, red dot indicates change in catch/CPUE >80% of 3-year monthly average. Dashed line indicates closure of commercial fishery in Gulf St Vincent/Kangaroo Island fishing zone from 1st November 2025. Grey bars indicate months where data were removed due to confidentiality (< 5 licences).

Fishery-independent abundance surveys for Southern Garfish were conducted on 21–22 November 2025 (Glenelg), 23–24 November 2025 (North Haven), 15–16 February 2026 (Middle Beach), and 21–22 February 2026 (Edithburgh). Each survey consisted of fifteen 15-min transects conducted nightly across three depth strata (inner, mid and outer). Southern Garfish were observed in 95% of transects but at substantially lower numbers than recorded in comparable surveys undertaken between 2016 and 2018 (Figure 7). Total catch declined by 61% at Glenelg (929 to 366), 88% at North Haven (816 to 99), 84% at Middle Beach (1044 to 166), and 25% at Edithburgh (444 to 332). Most garfish observed were small individuals. Few other species were recorded, except for large numbers of Blue Swimmer Crabs at Middle Beach. Surveys will continue monthly during the new moon when weather conditions permit. As sampling to date is limited, results should be considered preliminary and interpreted with caution.

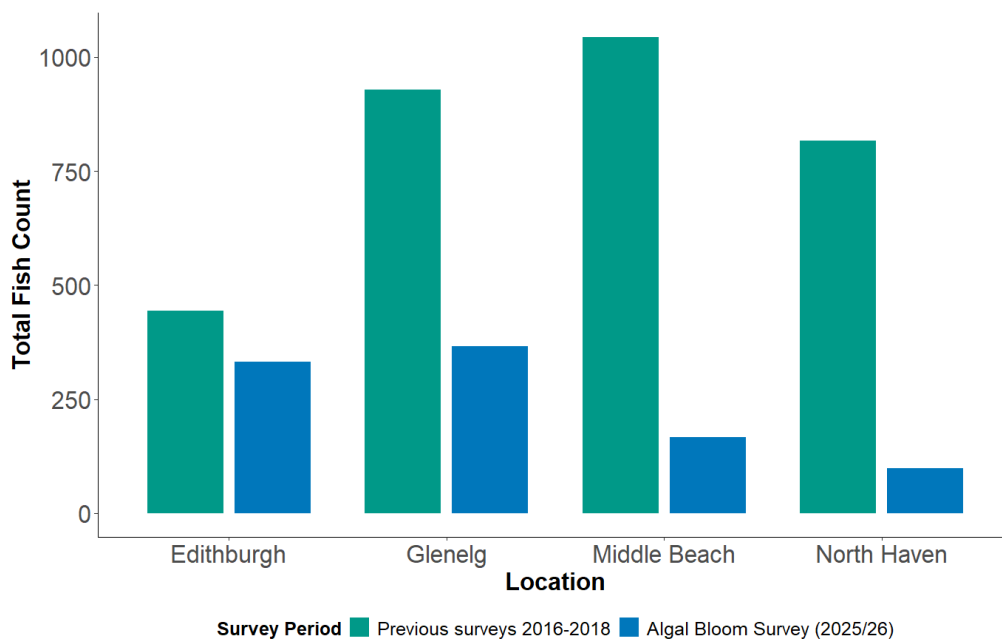


Figure 7. Comparison of Southern Garfish abundances at various sites from fishery-independent surveys in 2016-18 and 2025/26.

Western King Prawn

Data sources: [Commercial logbook and fishery-independent surveys](#)

Monthly logbook catch and catch rate data in SG indicated no negative impact from the algal bloom on Western King Prawn biomass (noting that fishing is not undertaken in SG from July to September; Figure 8; Table A1, Table A2). However, in GSV, both catch and CPUE were >80% below baseline from October to December 2025, except for CPUE in November (Figure 8, Table A1, Table A2).

Three fishery-independent surveys have been undertaken in SG since August 2025. The first was carried out over three nights (30 August to 1 September 2025), with a total of 32 x 30 minute trawl-shots completed (Table A5). Mean CPUE of Western King Prawn was 25.3 kg/shot (1.86 lb/min). A total of 1,571 kg of bycatch/byproduct was recorded at an average catch rate of 49 kg/shot. Southern Calamari and Blue Swimmer Crab comprised 0.4% and 13% of the bycatch (by weight), respectively. Elasmobranch species comprised 11% of the total bycatch/byproduct (Table A9).

The second survey was undertaken in October/November 2025 as part of ongoing stock assessment for the SGPF. There was no evidence to suggest a negative impact from the algal bloom on Western King Prawn in SG, with CPUE 38% above the previous 10-year annual mean (Figure 9). Analyses of bycatch in these surveys indicated that bycatch of Southern Calamari was at the lowest level since 2020, with a 46% decrease since the previous October/November fishery-independent survey in 2024 (Table A10).

The most recent fishery-independent survey SG was undertaken in February 2026 where the use of a single LED light for potential reduction of Southern Calamari byproduct catch was trialled. A total of 36 shots were completed across four locations in the central and northern SG fishing grounds, with tow durations of 30–50 minutes. Total catches comprised 3,755 kg of prawns and 1.6 kg of Southern Calamari (72 individuals). The overall prawn catch rate was 152 kg/hr, while Southern Calamari catch rates were very low at 0.06 kg/hr in control (no LED) (Table 4) trawls.

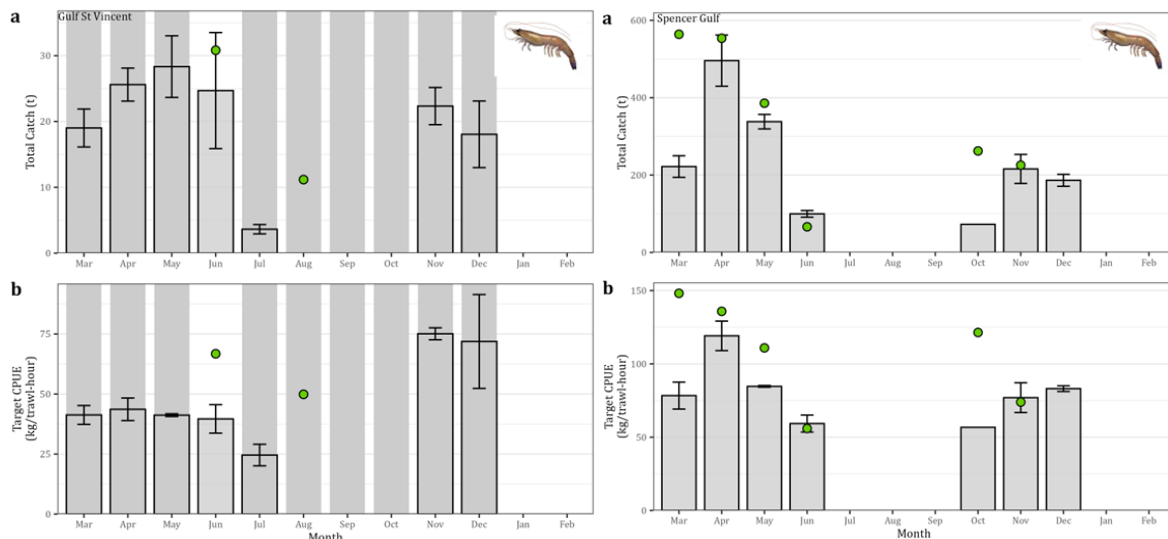


Figure 8. Commercial Fishery statistics for Western King Prawn in the Gulf St Vincent/Kangaroo Island and Spencer Gulf fishing zones. A) Total catch (t) and B) Targeted CPUE (kg/rawl-hour) during the algal bloom period (March 2025 onwards; dot) compared to the 3-year monthly average (February 2022 – February 2025; grey bars). Error bars indicate standard error. Green dot indicates change in catch/CPUE <50% of 3-year monthly average; orange dot indicates change in catch/CPUE of 50-80% of 3-year monthly average, red dot indicates change in catch/CPUE >80% of 3-year monthly average. Grey bars indicate months where data were removed due to confidentiality (< 5 licences).

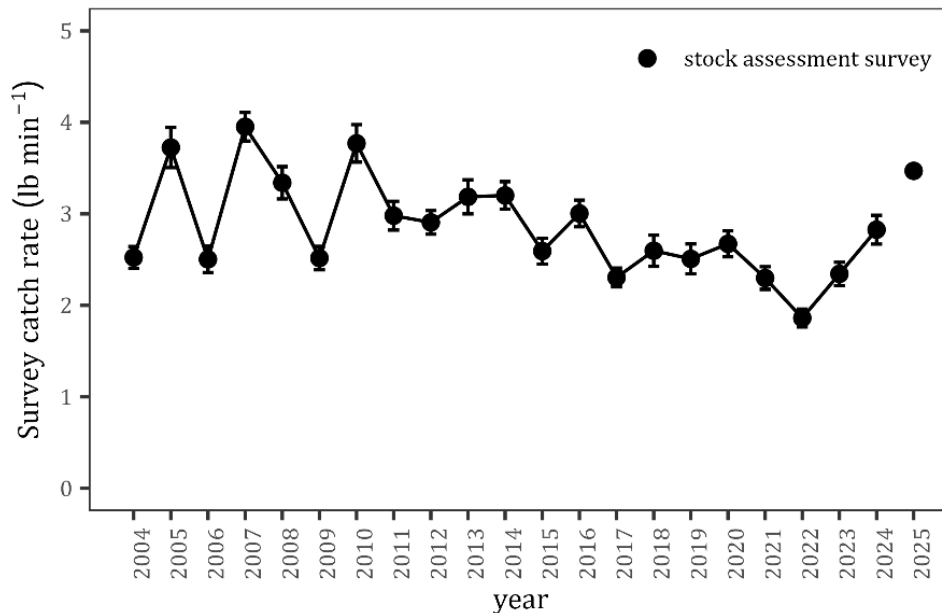


Figure 9. Mean survey catch rate (lb min⁻¹) ± SE of adult prawns for October/November stock assessment surveys in the SGPF from 2004 to 2025 (black). SE = standard error is presented for validated data (i.e., 2025 data is preliminary).

Table 4. Average prawn and calamari catch rates(kg/h) per shot on the control side (no light) during the February trials. n = number of shots.

Total	Prawns (kg/h)	Southern Calamari (kg/h)
	152 kg/h	0.06 kg/h
<i>Locations</i>		
Musgrave (n=10)	303	0.07
Stones (n=10)	127	0.012
Wallaroo (n=10)	86.6	0.02
Cowell (n=6)	51.3	0.20

In GSV, five algal bloom fishery-independent surveys were carried out from August to December 2025 (Table A11). Across the standardised set of algal bloom survey locations (n shots per survey: 20–24), mean CPUE of Western King Prawn declined from 13.8 kg/shot in August to 5.5 kg/shot in October and further in December to 3.8 kg/shot (a total decrease of 72%).

Data from Fishery Independent Surveys (FIS) undertaken in November (n = 41 shots) and December (n = 56 shots) 2025 were compared to historical FIS data since 2004 (n = 27–58 shots per survey) (Figure 10). Estimates of nominal CPUE (kg/trawl-shot) in November and December 2025 were low relative to historical estimates. The November 2025 estimate of 5.6 ± 0.6 (SE) kg/trawl-shot was the lowest November estimate on record and 71% below the average nominal CPUE estimated from five November surveys in years prior to the algal bloom (2004/05–2024/25: 19.4 ± 2.9 kg/trawl-shot).

Similarly, the December 2025 estimate of 4.6 ± 0.4 (SE) kg/trawl-shot was the lowest December estimate on record and 81% below the average nominal CPUE estimated from five December surveys in years prior to the algal bloom (2004/05–2010/11: 25.0 ± 3.6 kg/trawl-shot) (Figure 9). The December 2025 FIS results were consistent with the November 2025 FIS and indicate a significant decline in Western King Prawn stock biomass in GSV following onset of the algal bloom in March 2025.

Total bycatch/byproduct recorded in 2025 surveys ranged from 3,908 to 8,174 kg, with respective catch rates of 195–389 kg/shot. Blue Swimmer Crab comprised 0.16–1.02% of the total bycatch/byproduct. Southern Calamari were not observed as part of the bycatch in any of the five surveys in GSV since August 2025 (Table A11). Elasmobranch species were not recorded between August and November and one individual was recorded from the 20 bycatch shots in December 2025.

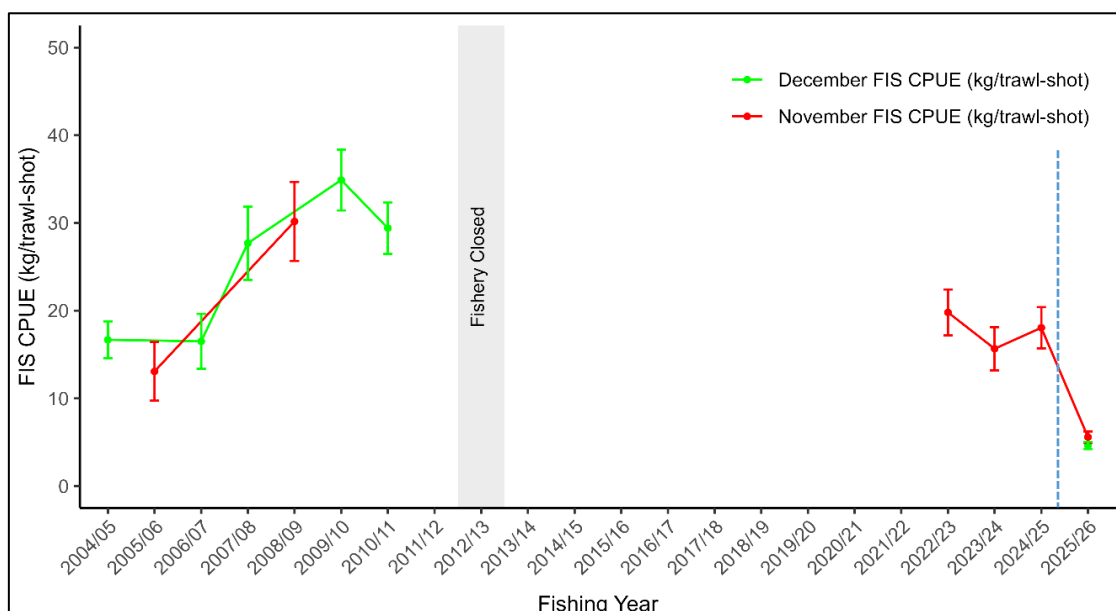


Figure 10. Nominal Fishery Independent Survey (FIS) CPUE from the November and December surveys between 2004/05 and 2025/26. Error bars are standard error (SE). Blue Dotted line indicates timing of the algal bloom onset in March 2025.

Blue Swimmer Crab

Data sources: [Commercial logbook and fishery-independent surveys](#)

Monthly logbook catch and catch rate data for GSV show clear negative impacts of the algal bloom on Blue Swimmer Crab, with catches and CPUE declining rapidly since March 2025 (Figure 11). From August to October 2025, both were >80% below baseline (Table A1, Table A2). In contrast, there was no evidence of negative impacts of the algal bloom on Blue Swimmer Crabs in SG.

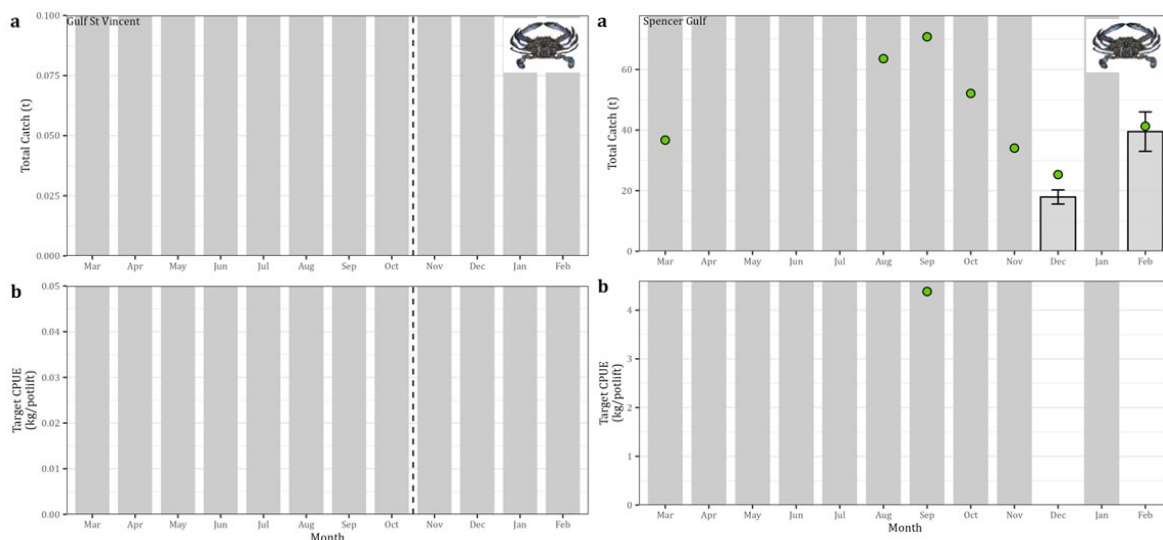


Figure 11. Commercial Fishery statistics for Blue Crab in the Gulf St Vincent/Kangaroo Island and Spencer Gulf fishing zones. A) Total catch (t) and B) Targeted CPUE (kg/potlift) during the algal bloom period (March 2025 onwards; dot) compared to the 3-year monthly average (February 2022– February 2025; grey bars). Error bars indicate standard error. Green dot indicates change in catch/CPUE <50% of 3-year monthly average; orange dot indicates change in catch/CPUE of 50-80% of 3-year monthly average, red dot indicates change in catch/CPUE >80% of 3-year monthly average. Dashed line indicates closure of commercial fishery in Gulf St Vincent/Kangaroo Island fishing zone from 01 November 2025. Grey bars indicate months where data were removed due to confidentiality (< 5 licences).

Three fishery-independent surveys were undertaken in GSV between 31 August 2025 and 5 February 2026 to assess potential impacts of the algal bloom. Surveys were conducted from 31 August–3 September 2025, 25 September–1 October 2025, and 27 January–5 February 2026 at consistent sites along the Yorke Peninsula and the Metropolitan and Northern coastlines.

Across the three surveys, catch and catch rates varied between research pots (smaller mesh) and commercial pots, and across months. In total, 2.8 t of legal-size Blue Swimmer Crabs (8,936 individuals) were captured from 1,249 pot lifts (Table 5). Catch rates increased markedly across the sampling period. Trip 1 (Aug/Sep 2025) recorded very low catch rates in both pot types. Catch rates improved in Trip 2 (Sep/Oct 2025) and increased substantially in Trip 3 (Jan/Feb 2026), when the highest CPUE values were recorded.

Commercial-pot catch rates during Trip 3 (6.4 kg pot⁻¹) were well above the long-term January average (3.1 ± 0.4 kg pot⁻¹). Research-pot catch rates were within the range typically observed during March–April stock monitoring surveys (2.4–5.3 kg pot⁻¹). Undersize catch rates remained relatively low overall, although higher in Trip 3, consistent with increased abundance. Research-pot undersize catch rates during Trips 2 and 3 (0.2–1.2 kg pot⁻¹) were also within the expected March–April survey range (0.1–3.5 kg pot⁻¹). Sex composition followed typical seasonal patterns. The proportion of females declined in Trip 3 as mature females moved offshore after spawning; however, the late-summer reproductive peak meant a higher proportion of females remaining inshore were berried, particularly in commercial pots.

Table 5. Summary of pot lifts, catch, CPUE, size composition, and sex structure from research (R; smaller-mesh) and commercial (C) pots across three sampling trips in Gulf St Vincent in 2025 and 2026. Monthly 10-year average commercial CPUE is included for context.

Metric	Trip 1 (Aug/Sep)		Trip 2 (Sep/Oct)		Trip 3 (Jan/Feb)	
	R	C	R	C	R	C
Pot lifts	39	389	39	387	39	350
Legal-size (number)	22	216	161	1,155	604	6,778
Legal-size (kg)	5	54	42	312	190	2,244
CPUE – legal (crabs/pot)	0.6	0.6	4.1	3	15.5	19.4
CPUE – legal (kg/pot)	0.1	0.1	1.1	0.8	4.9	6.4
Undersize (number)	7	32	43	47	317	151
Undersize (kg)	1	5	7	8	46	25
% Female	62%	74%	60%	51%	13%	8%
% Berried	0%	0%	0%	0%	26%	50%
10-year mean CPUE (kg/pot)	NA	3.4 ± 0.3 (Sep)	NA	2.8 ± 0.3 (Oct)	NA	3.1 ± 0.4 (Jan)

Southern Rock Lobster

Data sources: [Commercial logbook and fishery-independent surveys](#)

Based on monthly logbook catch and catch rates in both the Northern and Southern Zones, there was no evidence of a negative impact from the algal bloom on Southern Rock Lobster (Figure 12, Table A3, Table A4). The latest fishery-independent survey was undertaken in the Southern Zone in August/September 2025. In 2025, the catch rates of legal and undersized Southern Rock Lobsters were 81% and 194% higher than 2024 estimates, respectively (Figure A2).

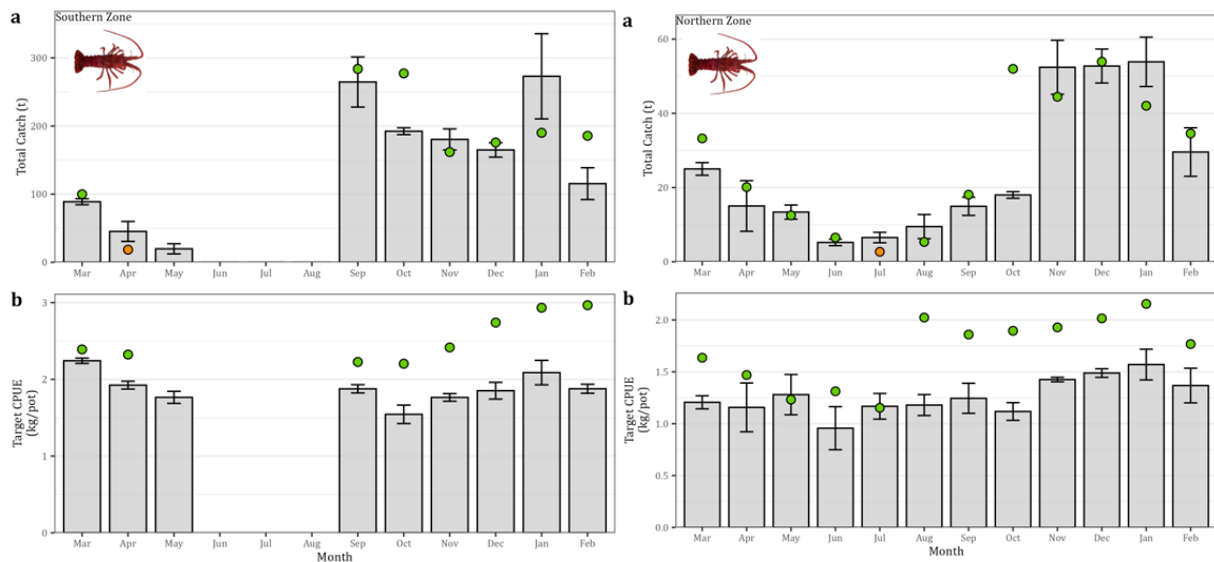


Figure 12. Commercial Fishery statistics for Southern Rock Lobster in the Southern and Northern fishing zones. A) Total catch (t) and B) Targeted CPUE (kg/haul) during the algal bloom period (March 2025 onwards; dot) compared to the 3-year monthly average (February 2022 – February 2025; grey bars). Error bars indicate standard error. Green dot indicates change in catch/CPUE <50% of 3-year monthly average; orange dot indicates change in catch/CPUE of 50-80% of 3-year monthly average, red dot indicates change in catch/CPUE >80% of 3-year monthly average.

Abalone

Data source: [Commercial logbook and fishery-independent surveys](#)

Monthly logbook data show that catch of Greenlip Abalone in GSV/KI ceased from August 2025 (Figure 13). In SG, catches from October 2025 to February 2026 were below baseline averages, with the exception of December 2025. However, this likely reflects a combination of reductions in TACCs, current low market demand, and HAB impacts. Monthly CPUE in SG over the same period remained broadly consistent with historical baseline levels.

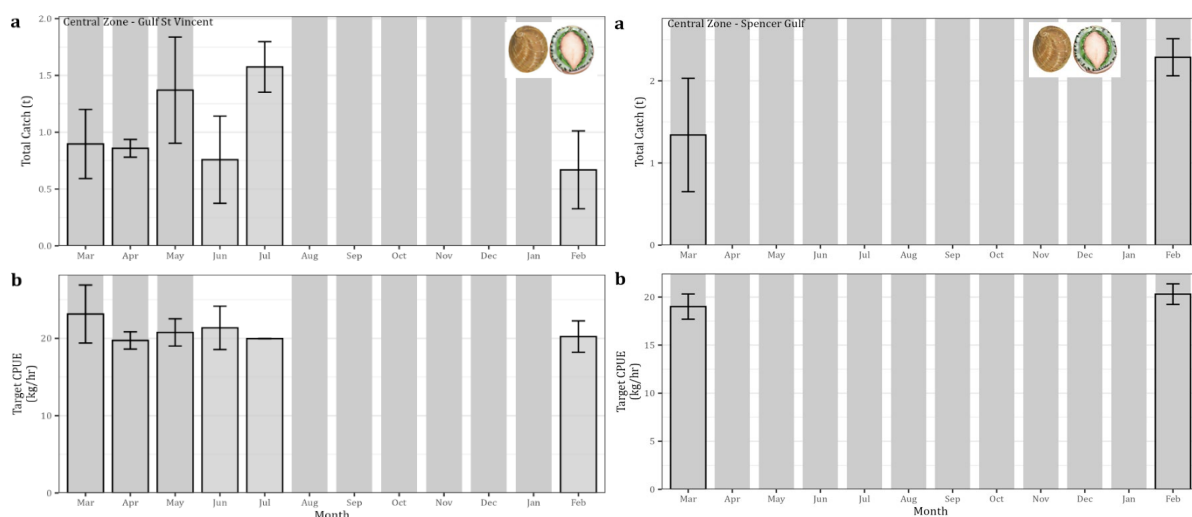


Figure 13. Commercial Fishery statistics for Greenlip Abalone in the Gulf St Vincent and Spencer Gulf fishing zones (subset of Central Zone Spatial Assessment Units). A) Total catch (t, meat weight) and B) Targeted CPUE (kg/hr, meat weight) during the algal bloom period (March 2025 onwards; dot) compared to the 3-year monthly average (February 2022 – February 2025; grey bars). Error bars indicate standard error. Green dot indicates change in catch/CPUE <50% of 3-year monthly average; orange dot indicates change in catch/CPUE of 50-80% of 3-year monthly average, red dot indicates change in catch/CPUE >80% of 3-year monthly average. Grey bars indicate months where data were removed due to confidentiality (< 5 licences).

Fishery-independent surveys support observed logbook data. Dive surveys were undertaken to the West (SG; Corny Point, Hardwicke Bay, Port Victoria and Tiparra Reef) and East (GSV; Stansbury and Edithburgh) of Yorke Peninsula between August and November 2025 (Figure A3).

The surveys at Corny Point and Tiparra Reef had the highest number of legal sized Greenlip Abalone since surveys began in 2015 and 1990, respectively. Corny Point also had a higher abundance of sub-legal-sized Greenlip Abalone than the previous survey while for Tiparra Reef it was similar (Figure A4). For Hardwicke Bay, counts of both legal- and sub-legal-sized Greenlip Abalone were higher in 2025 than the most recent survey in 2023, and similar to counts from surveys in 2019 and 2021. At Port Victoria, counts of Greenlip Abalone were similar to those recorded in the previous 2023 survey. Consequently, there was no evidence of algal bloom impacts on Greenlip Abalone in SG.

In contrast, at all sites surveyed by divers at Stansbury and Edithburgh (Table A13), there was evidence that the algal bloom has impacted abalone in GSV. At Stansbury, divers observed three species of unwell, dying or dead abalone of all three species (*Haliotis laevisgata*, *H. scalaris*, *H. cyclobates*). Samples of these three species (n=10) were collected and tested for Abalone Viral Ganglioneuritis (AVG), with all tests returning a negative a result. Some live abalone were observed at this location, and abundance varied among sites (Table A13; Mean 1.075 Greenlip Abalone/min). There are no previous surveys for temporal comparison but estimates from all four dive sites suggested 70 to 90% of Greenlip Abalone were unwell or dead, and almost all other abalone species were dead.

At Edithburgh, the evidence of impact from the algal bloom appeared to be less severe than that observed at Stansbury. With few exceptions, the four abalone species present in this area (*H. laevisgata*, *H. rubra*, *H. scalaris*, *H. cyclobates*) were healthy, and there was no evidence of mass mortality. Counts of Greenlip Abalone were higher than those observed at Stansbury (Table A13; 1.26 Greenlip Abalone/min).

In addition, (1) there was widespread evidence of mortality of molluscs and sponges in the areas surveyed off Stansbury, and mortality of sponges and some molluscs in the areas surveyed off Edithburgh; and (2) while no data on fish abundance were collected, divers noted that there were fewer fish compared to what would normally be expected to be observed in South Australian temperate marine habitats (i.e. diversity of species, often in high numbers) in the areas surveyed off Stansbury and Edithburgh. This was most apparent at Stansbury where no fish were observed.

On 04 January 2026, a recreational fisher reported a pocket of 50-100 dead Greenlip Abalone had been seen on Wedge Island. SARDI conducted dives at four locations on 06 January 2026, finding dead Blacklip Abalone at one location, but no dead Greenlip Abalone. Water and Greenlip Abalone samples have been sent for testing for AVG. The AVG test result was negative.

Pipi

Data sources: Commercial logbook and fishery-independent surveys

The commercial fishery for Pipi operates on Younghusband Peninsula (YHP). Commercial logbook data showed no evidence of decline in catch or CPUE compared to the 3-year historic average until July 2025 (Figure 14, Table A3, Table A4), when the fishery was closed due to the presence of brevetoxins. In October 2025, the fishery reopened for bait sales only, with a partial reopening of the regular fishery in February 2026.

Fishery-independent surveys indicate some impacts from the algal bloom in terms of biomass reduction (Figure 15). The baseline estimate of mean relative biomass before the algal bloom event (November 2024 to April 2025) was 35.5 kg/4.5 m². Mean relative biomass immediately after the mortalities reported from the algal bloom (May 2025) was 22.6 kg/4.5 m², which was below the pre-bloom baseline value but remained historically high. In 2025-26, (November 2025 – February 2026) mean relative biomass on YHP had increased to 26.8 kg/4.5 m².

The recreational fishery for Pipi primarily operates on Sir Richard Peninsula (SRP). The only available estimates of mean relative biomass on SRP were 17.6 kg/4.5 m² in November 2025 and 11.5 kg/4.5 m² in February 2026. The mean relative biomass of 14.6 kg/4.5 m² is consistent with the annual long-term mean value observed on Younghusband Peninsula.

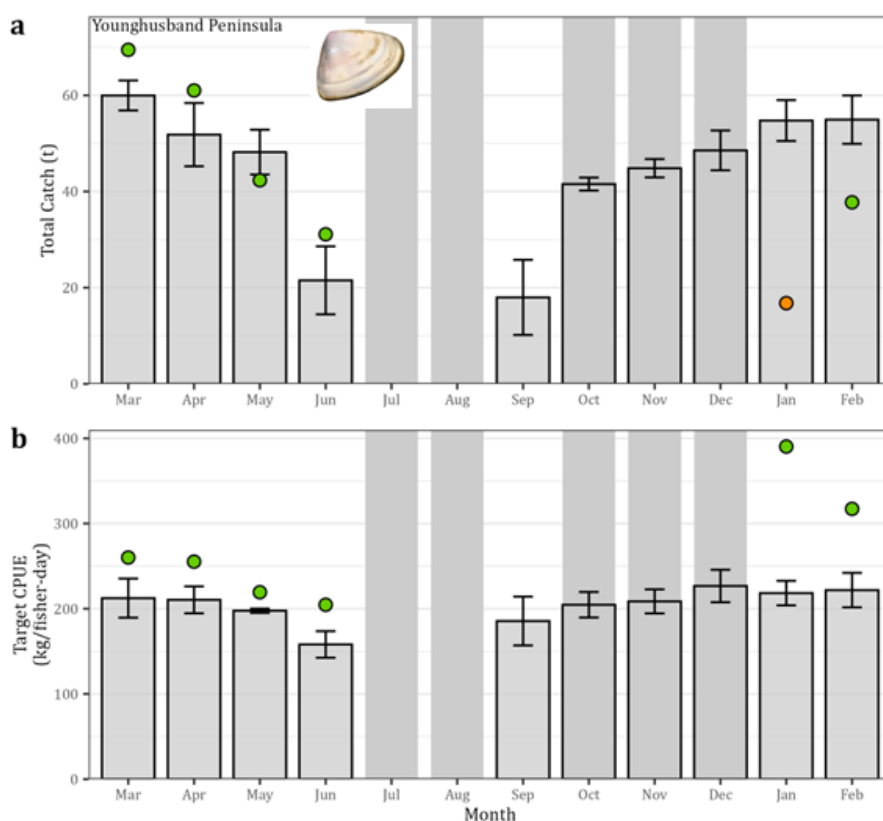


Figure 14. Commercial Fishery statistics for Pipi on the Younghusband Peninsula. A) Total catch (t) and B) Targeted CPUE (kg/fisher-day) during the algal bloom period (March 2025 onwards; dot) compared to the 3-year monthly average (February 2022 – February 2025; grey bars). Error bars indicate standard error. Green dot indicates change in catch/CPUE <50% of 3-year monthly average; orange dot indicates change in catch/CPUE of 50-80% of 3-year monthly average, red dot indicates change in catch/CPUE >80% of 3-year monthly average. Grey bars indicate months where data were removed due to confidentiality (< 5 licences).

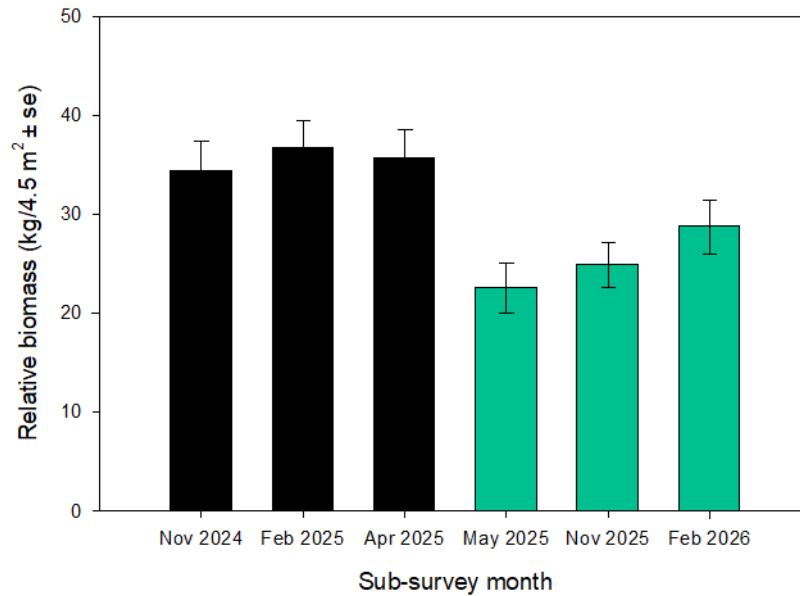


Figure 15. Mean relative biomass for Youngusband Peninsula from fishery-independent sub-surveys before (black) and after (green) the algal bloom event.

Sardine

Monthly logbook catch and catch rate data for GSV show negative impacts of the algal bloom on Sardine, with low catches and CPUE from April to June 2025 (Figure 16, Table A3, Table A4). In contrast, there was no evidence of negative impacts of the algal bloom on Sardine in SG until February 2026, when the catch was 50-80% below the historical mean.

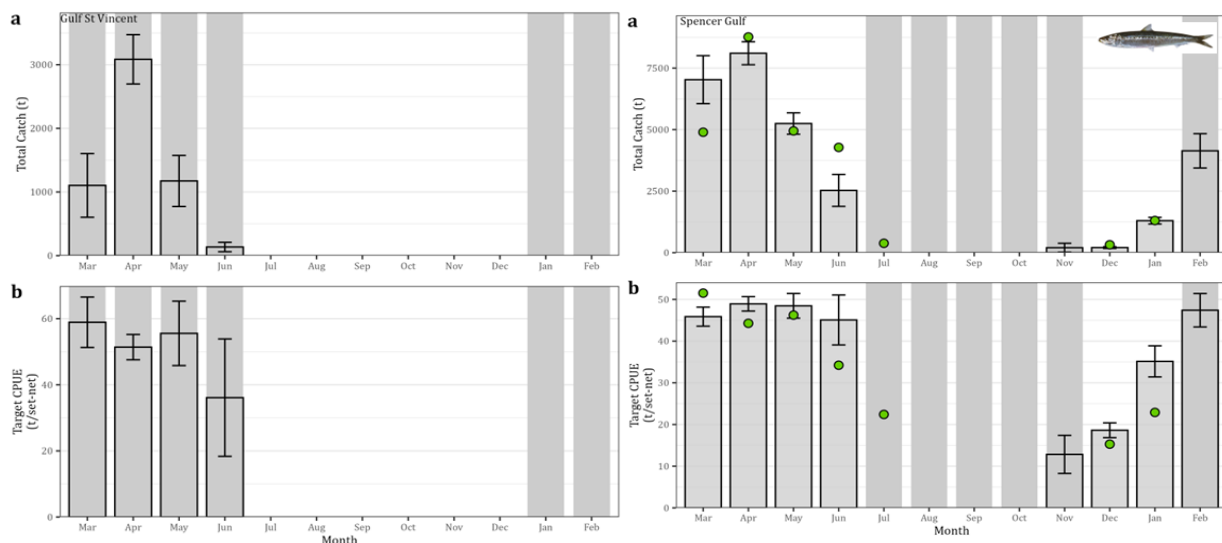


Figure 16. Commercial Fishery statistics for the Gulf St Vincent and Spencer Gulf fishing zones. A) Total catch (t) and B) Targeted CPUE (t/set-net) during the algal bloom period (March 2025 onwards; dot) compared to the 3-year monthly average (February 2022 – February 2025; grey bars). Error bars indicate standard error. Green dot indicates change in catch/CPUE <50% of 3-year monthly average; orange dot indicates change in catch/CPUE of 50-80% of 3-year monthly average, red dot indicates change in catch/CPUE >80% of 3-year monthly average. Grey bars indicate months where data were removed due to confidentiality (< 5 licences).

Recreational fishing

Recreational catch information was collected from two independent sources: voluntary reports submitted by fishers through the South Australian Fishing app and observations recorded by Fisheries Officers during compliance inspections. Voluntary reporting, launched on 29 August 2025, provides self-reported catch data from participating fishers but is subject to participation

bias and does not represent all fishing activity. Fisheries Officer inspections, initiated on 01 December 2025, record catch observed during routine patrols; these data are opportunistic, spatially biased toward areas where officers operate, and may overlap with voluntary reports if interviewed fishers also report through the app. Because of these differences, the two datasets cannot be combined and are presented separately. The spatial distribution of voluntary reports and officer inspections is shown in Figure 17, providing context for the following summaries.

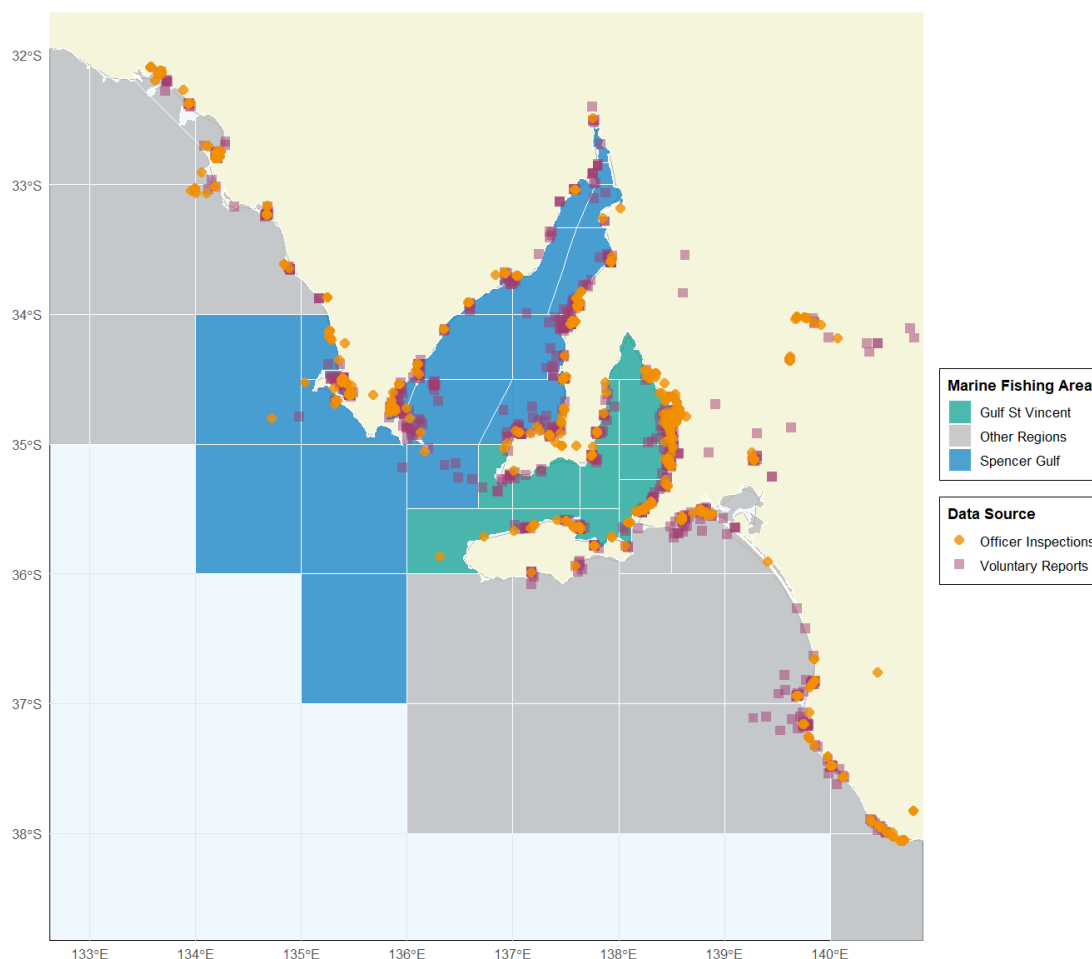


Figure 17. Locations of recreational fishing activity recorded by fisheries officers and voluntary reporters across South Australia. Points represent data sources: orange circles indicate officer inspections, and purple squares indicate voluntary reports. Marine fishing areas are shown by region: Spencer Gulf (blue), Gulf St Vincent (green), and Other regions (grey), which include the West and South East coasts and inland waters.

Voluntary reporting

A total of 886 fishing events (Figure 17) were reported by the public with 410 unique devices participating between 30 June 2025 and 28 February 2026, with most reports from SG (44%), followed by GSV (28%) and ‘Other’ regions (28%). The main species reported was King George Whiting, comprising 34% of the state’s retained catch by number. Regionally, the species accounted for approximately 37% and 36% of the retained catch by number in GSV and SG, respectively (Figure 18). In GSV, Western Australian Salmon and Blue Swimmer Crab accounted for 23% and 12.5% of the retained catch, respectively. In SG, Australian Herring and Southern Garfish comprised 12% and 11%, respectively. In ‘Other’ regions, encompassing the West and

South East Coast, King George Whiting (24.5%), Pipi (15%), and Australian Herring (6%) were the most reported species.

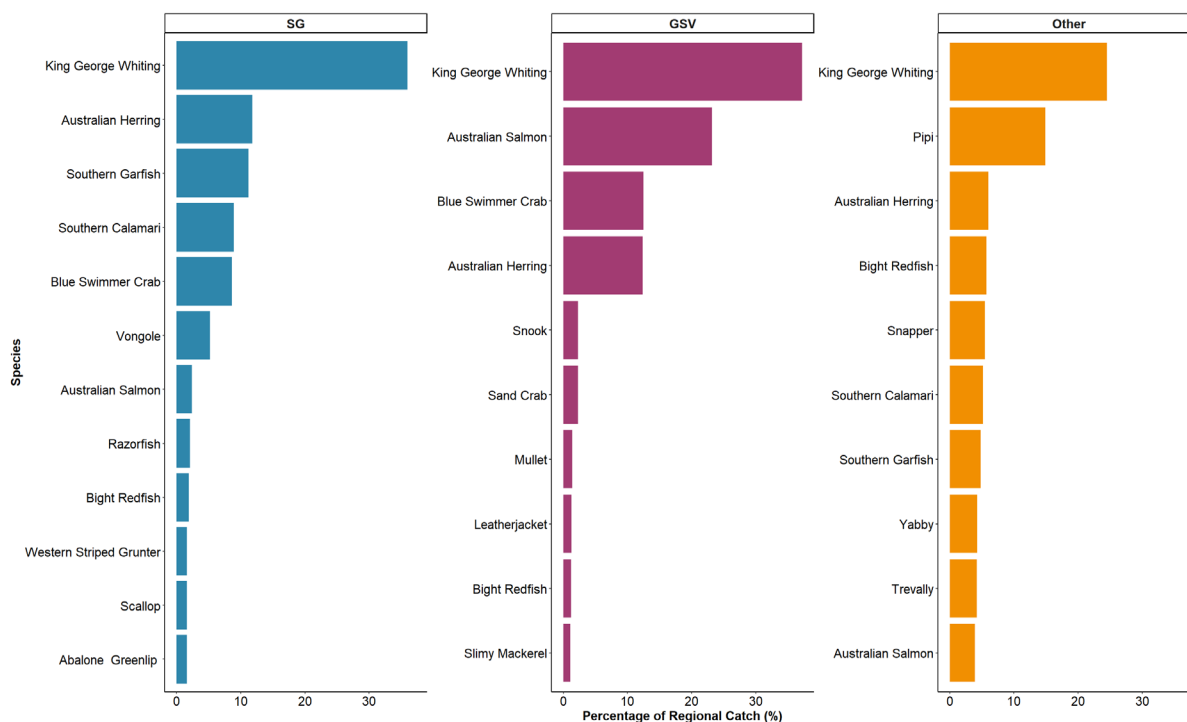


Figure 18. Percentage of species catch per region. SG (Spencer Gulf), GSV (Gulf St Vincent), “Other” encompasses both the West and South East coasts.

Monthly reporting patterns were examined (Figure 19), but the small number of reports each month means that apparent seasonal differences, such as higher reporting of King George Whiting in Spring or Southern Calamari in July, likely reflect variable fisher participation rather than biological change. Most reports indicate fishing events occurred from a private boat (55%) and from shore (beach, rocks, jetty; 40%), using rod or handline (90%), lasting between 1–6 hours (85%), and mostly performed by intermediate (48%) and experienced (17.5%) fishers, ranging between 35-44 years (19.5%) and 55-64 years (19.1%).

Fishery Officer reports

A total of 1,348 events were reported by fishery officers (Figure 17), of which 1089 included the catch of at least one fish by the interviewed fishing party. Most reports were from SG (42%), followed by ‘Other’ regions (30%) and GSV (28%). In GSV, Blue Swimmer Crab (54%), King George Whiting (18.5%), and Australian Salmon (5.5%) accounted for most of the inspected catch (Figure 20). In SG, King George Whiting (22%), Blue Swimmer Crab (18%), and Vongole (11%) were the most reported species. In ‘Other’ regions, Pipi dominated the inspected catch (82%), followed by King George Whiting (4%), and Blue Swimmer Crab (4%).

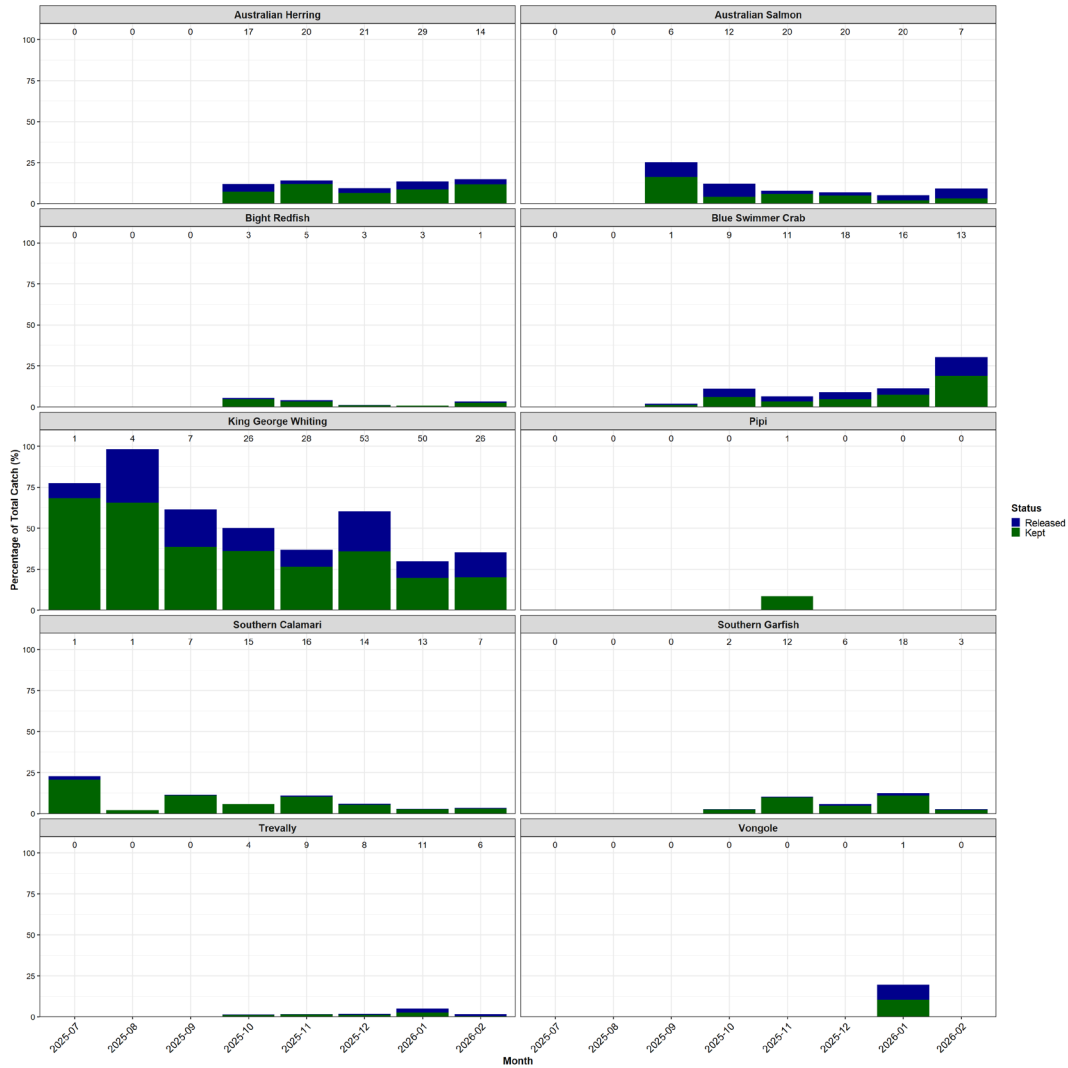


Figure 19. Percentage of total catch per month for the 10 most reported species statewide. This data encompasses 8036 catches across 1236 reports.

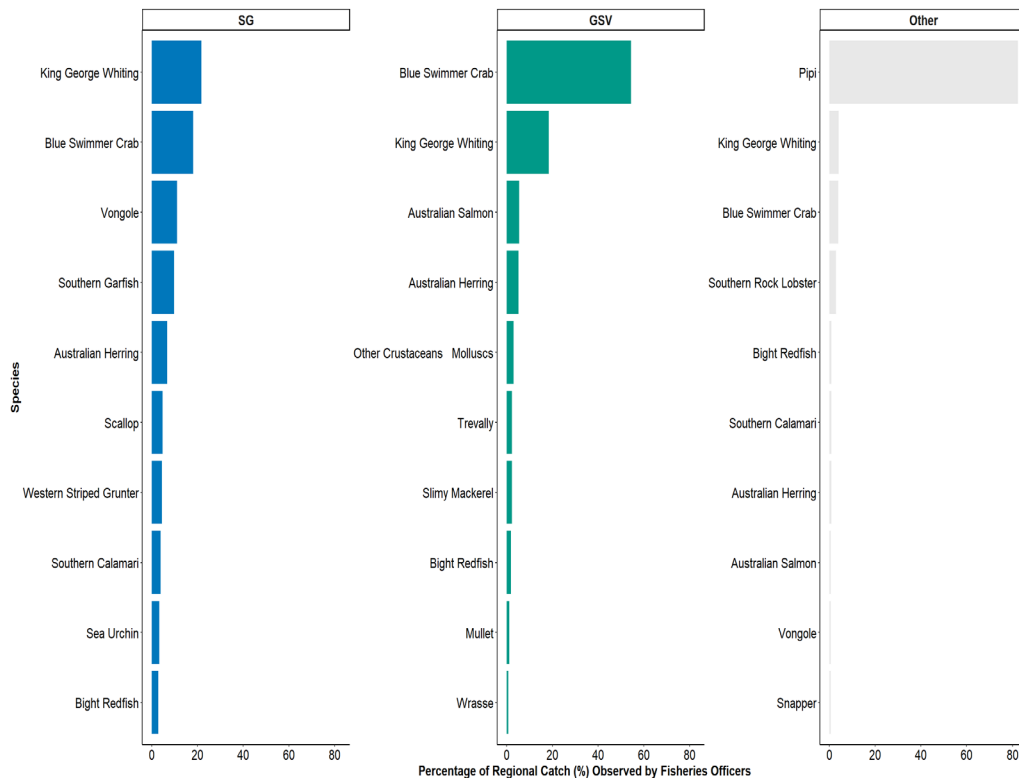


Figure 20. Percentage of marine species catch per region as reported by fisheries officers. SG (Spencer Gulf), GSV (Gulf St Vincent), "Other" encompasses both the West and South East coasts.

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Acknowledgements

Thanks to the all the SARDI technical staff members for undertaking the surveys in, at times, very challenging conditions.

Appendices

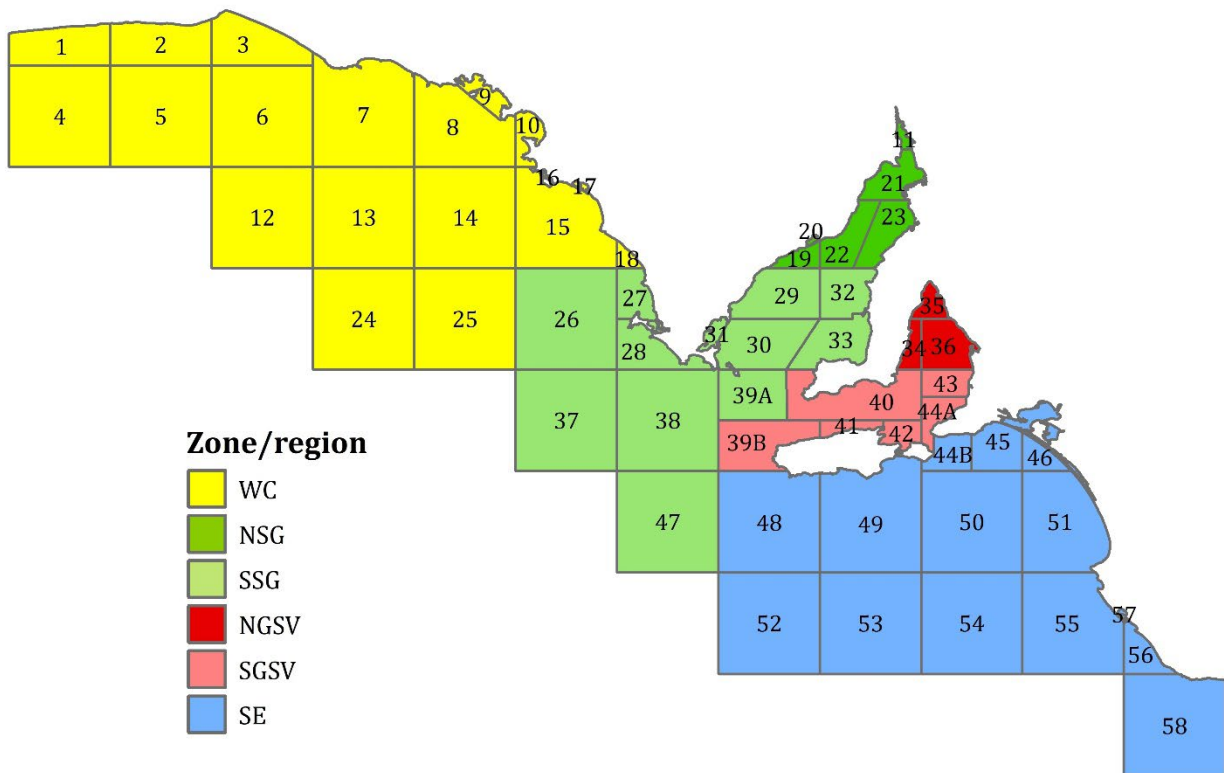


Figure A1. Management zones and marine fishing areas (blocks) in the Marine Scalefish Fishery. Abbreviations for management zones: WC, West Coast; NSG, Northern Spencer Gulf; SSG, Southern Spencer Gulf; NGSV, Northern Gulf St Vincent; SGSV, Southern Gulf St Vincent; SE, South East.

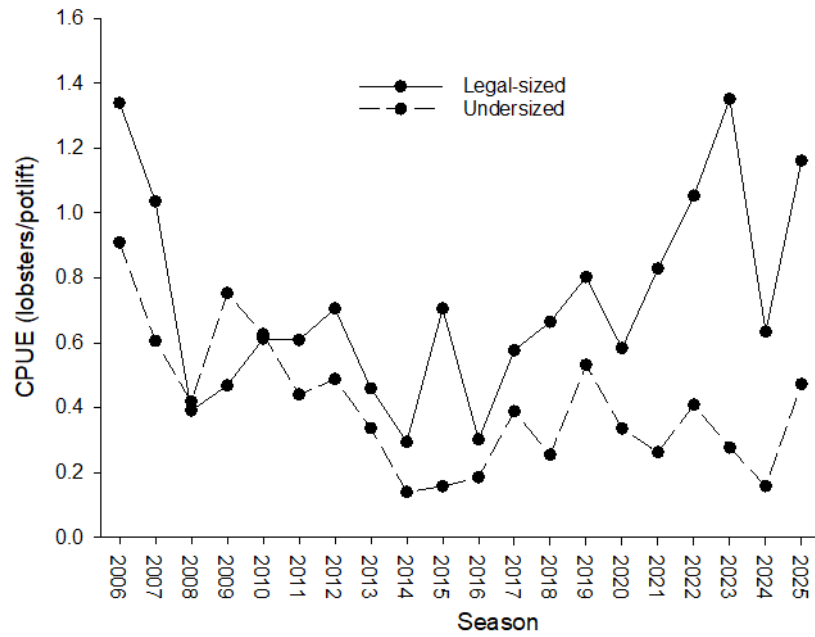


Figure A2. Catch rate of legal and undersized sized lobsters as estimated from Southern Zone fishery independent monitoring surveys (FIMS) from 2006 to 2024. Note: above data are presented as numbers of lobsters/potlift from August/September surveys. Year represents start-of-season year (e.g. 2025 = 2025/26).



Figure A3. FIS sites for abalone surveys at Comy Point, Hardwicke Bay, Port Victoria and Tiparra Reef (circled red) and dive site locations at Stansbury and Edithburgh (circled orange) on the East Yorke Peninsula.

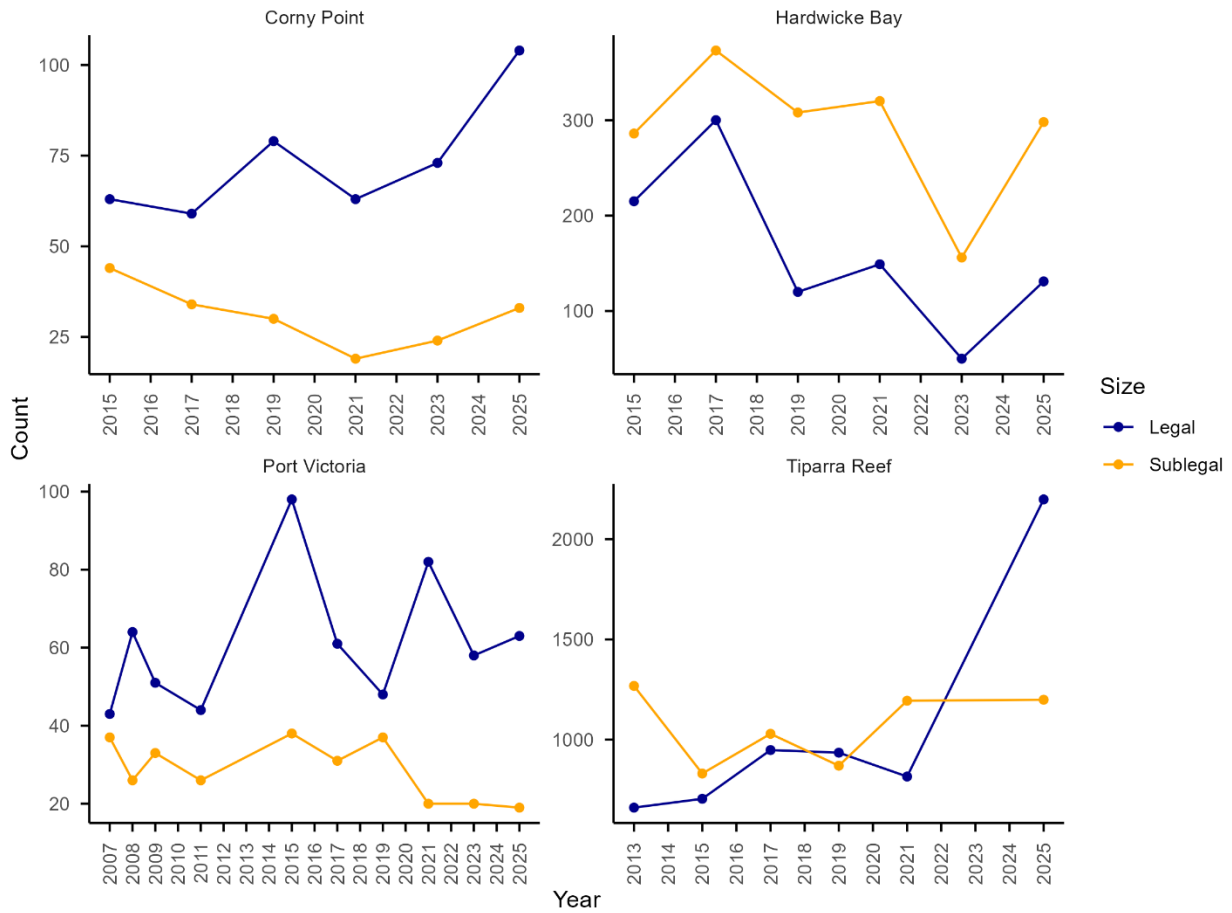


Figure A4. Total count of legal and sublegal Greenlip Abalone at Corny Point (n = 13 transects), Hardwicke Bay (n = 20 transects), Port Victoria (n = 11 transects) and Tiparra Reef (n = 55 transects) from fishery independent surveys (FIS) conducted between 2007 and 2025.

Table A1. Commercial fishery statistics for King George Whiting, Southern Calamari, Southern Garfish, Blue Crab and Western King Prawn in Gulf St Vincent/Kangaroo Island and Spencer Gulf fishing zones. Data is total catch (t) during the algal bloom period (March 2025 onwards) compared to the 3-year monthly average (February 2022 – February 2025). **Green** reflects change in catch by <50% of baseline (3-year average). **Orange** reflects a change in catch of 50-80% of baseline (3-year average). **Red** reflects change in catch of >80% of baseline (3-year average).











TOTAL CATCH													
Gulf St Vincent/Kangaroo Island		MONTH											
King George Whiting - GSVKI		Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
	Total catch (t) (3 year average)	2.02	1.42	2.10	2.61	2.70	2.94	2.82	2.68	2.06	1.82	1.99	2.02
	Total catch (t) (Algal bloom period)	1.56	1.41	1.39	3.39	2.97	2.79	1.53	1.43	0.02	0.03	0.02	0.10
	Percentage of baseline	-22.86	-1.03	-33.92	30.04	9.81	-5.25	-45.77	-46.61	-99.03	-98.35	-99.00	-95.05
Southern Calamari - GSVKI													
	Total catch (t) (3 year average)	6.86	12.10	13.78	7.44	6.63	9.95	11.25	13.16	15.81	9.66	9.32	7.52
	Total catch (t) (Algal bloom period)	8.25	21.53	21.83	4.90	0.02	0.10	0.00	0.01	0.00	0.00	0.00	0.00
	Percentage of baseline	20.20	77.88	58.47	-34.11	-99.70	-98.99	-100.00	-99.92	-100.00	-100.00	-100.00	-100.00
Southern Garfish - GSVKI													
	Total catch (t) (3 year average)	7.62	8.48	7.62	4.66	6.93	5.64	3.25	2.23	4.06	4.50	6.57	9.20
	Total catch (t) (Algal bloom period)	7.19	7.99	3.98	2.46	2.71	0.78	conf	conf	0.00	0.00	0.00	0.01
	Percentage of baseline	-5.60	-5.77	-47.76	-47.16	-60.90	-86.16			-100.00	-100.00	-100.00	-99.89
Blue Crab - GSV													
	Total catch (t) (3 year average)	conf	conf	conf	conf	conf	conf	conf	conf	conf	conf	conf	conf
	Total catch (t) (Algal bloom period)	conf	conf	conf	conf	conf	conf	conf	conf	NA	NA	NA	NA
	Percentage of baseline												
Prawn - GSV													
	Total catch (t) (3 year average)	19.01	25.60	28.33	24.69	3.63	conf	NA	conf	22.33	18.05	NA	NA
	Total catch (t) (Algal bloom period)	conf	conf	conf	30.82	conf	11.17	conf	conf	conf	conf	NA	NA
	Percentage of baseline				24.84								
Spencer Gulf		MONTH											
King George Whiting - SG		Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
	Total catch (t) (3 year average)	4.01	2.54	3.83	9.57	14.12	11.26	7.17	4.96	5.25	4.09	4.93	5.28
	Total catch (t) (Algal bloom period)	2.97	2.28	4.35	11.82	14.63	12.59	8.58	5.53	4.80	5.93	3.58	4.10
	Percentage of baseline	-25.98	-10.24	13.60	23.54	3.62	11.78	19.61	11.43	-8.62	44.86	-27.45	-22.36
Southern Calamari - SG													
	Total catch (t) (3 year average)	7.77	13.05	16.50	10.00	11.17	10.77	16.15	19.63	15.81	14.81	13.02	9.12
	Total catch (t) (Algal bloom period)	7.06	18.48	18.33	17.42	12.24	14.38	9.00	8.35	8.52	3.68	1.54	0.45
	Percentage of baseline	-9.15	41.63	11.09	74.25	9.55	33.51	-44.27	-57.45	-46.10	-75.15	-88.17	-95.06
Southern Garfish - SG													
	Total catch (t) (3 year average)	6.51	5.96	8.88	5.74	5.06	7.72	3.92	4.12	5.76	4.78	10.38	10.03
	Total catch (t) (Algal bloom period)	8.75	6.06	6.71	5.24	3.78	6.53	12.16	4.54	6.35	6.77	9.88	10.62
	Percentage of baseline	34.40	1.71	-24.43	-8.69	-25.30	-15.40	209.95	10.22	10.28	41.49	-4.78	5.84
Blue Crab - SG													
	Total catch (t) (3 year average)	conf	conf	conf	conf	conf	conf	conf	conf	conf	17.93	conf	39.50
	Total catch (t) (Algal bloom period)	36.70	conf	conf	conf	conf	63.59	70.81	52.11	34.06	23.70	conf	41.28
	Percentage of baseline										32.20		4.51
Prawn - SG													
	Total catch (t) (3 year average)	221.95	495.82	337.98	99.72	NA	NA	NA	72.61	215.80	186.41	NA	NA
	Total catch (t) (Algal bloom period)	563.96	553.72	385.74	66.17	NA	NA	NA	262.25	225.52	NA	NA	NA
	Percentage of baseline	154.09	11.68	14.13	-33.64				261.20	4.50			

Table A2. Commercial fishery statistics for King George Whiting, Southern Calamari, Southern Garfish, Blue Crab and Western King Prawn in Gulf St Vincent/Kangaroo Island and Spencer Gulf fishing zones. Data is targeted CPUE (kg/fisher-day) during the algal bloom period (March 2025 onwards) compared to the 3-year monthly average (February 2022 – February 2025). **Green** reflects change in CPUE by <50% of baseline (3-year average). **Orange** reflects a change in CPUE of 50-80% of baseline (3-year average). **Red** reflects change in CPUE of >80% of baseline (3-year average).



		Target CPUE											
Gulf St Vincent/Kangaroo Island		MONTH											
		Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
 King George Whiting - GSVKI	CPUE (kg/fisher-days) (3 year average)	15.74	11.44	14.88	20.21	20.05	20.72	22.46	22.93	19.64	19.83	17.75	22.28
	CPUE (kg/fisher-days) (Algal bloom period)	27.01	18.14	14.76	21.00	30.03	25.68	23.48	17.64	1.89	2.62	1.71	2.97
	Percentage of baseline	71.60	58.58	-0.83	3.92	49.76	23.96	4.53	-23.08	-90.38	-86.78	-90.37	-86.67
 Southern Calamari - GSVKI	CPUE (kg/fisher-days) (3 year average)	22.87	27.25	24.87	23.28	20.25	27.33	32.74	40.44	47.33	39.76	39.09	32.72
	CPUE (kg/fisher-days) (Algal bloom period)	31.34	49.65	50.85	34.64	0.03	0.00	0.13	0.17	0.00	0.00	0.00	0.05
	Percentage of baseline	37.04	82.21	104.46	48.81	-99.85	-100.00	-99.60	-99.58	-100.00	-100.00	-100.00	-99.85
 Southern Garfish - GSVKI	CPUE (kg/fisher-days) (3 year average)	55.14	76.38	81.07	97.04	113.30	81.14	60.44	36.95	45.85	56.85	71.97	68.81
	CPUE (kg/fisher-days) (Algal bloom period)	75.61	106.25	99.57	conf	55.69	conf	conf	conf	0.19	0.00	0.07	2.00
	Percentage of baseline	37.13	39.11	22.82		-50.85				-99.59	-100.00	-99.90	-97.09
 Blue Crab - GSVKI	CPUE (kg/pot) (3 year average)	conf	conf	conf	conf	conf	conf	conf	conf	conf	conf	conf	conf
	CPUE (kg/pot) (Algal bloom period)	conf	conf	conf	conf	conf	conf	conf	conf	NA	NA	NA	NA
	Percentage of baseline												
 Prawn - GSV	CPUE (kg/haul-hour) (3 year average)	41.30	43.64	41.21	39.65	24.59	conf	NA	conf	75.10	71.90	NA	NA
	CPUE (kg/haul-hour) (Algal bloom period)	conf	conf	conf	66.77	conf	49.87	conf	conf	conf	conf	NA	NA
	Percentage of baseline				68.40								
Spencer Gulf		MONTH											
		Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
 King George Whiting - SG	CPUE (kg/fisher-days) (3 year average)	17.86	13.84	18.25	29.18	29.22	26.93	23.45	24.28	26.77	23.39	21.57	23.23
	CPUE (kg/fisher-days) (Algal bloom period)	18.83	11.89	18.26	30.13	38.6	31.31	25.66	18.16	23.9	23.1	21.92	21.11
	Percentage of baseline	5.40	-14.08	0.04	3.26	32.11	16.28	9.43	-25.20	-10.73	-1.25	1.62	-9.13
 Southern Calamari - SG	CPUE (kg/fisher-days) (3 year average)	23.33	27.14	30.56	32.33	29.38	26.55	36.13	43.08	46.16	46.10	36.76	29.63
	CPUE (kg/fisher-days) (Algal bloom period)	25.23	35.05	34.67	47.93	40.27	35.26	30.12	24.8	32.24	20.31	13.34	8.29
	Percentage of baseline	8.13	29.13	13.45	48.24	37.05	32.81	-16.63	-42.43	-30.15	-55.94	-63.71	-72.02
 Southern Garfish - SG	CPUE (kg/fisher-days) (3 year average)	52.81	50.39	64.20	60.04	61.39	74.81	52.97	43.64	54.57	46.27	66.72	64.26
	CPUE (kg/fisher-days) (Algal bloom period)	58.95	58.75	59.85	83.32	43.55	60.87	150.74	46.44	42.44	40.93	55.32	53.05
	Percentage of baseline	11.64	16.58	-6.77	38.77	-29.06	-18.63	184.60	6.42	-22.23	-11.53	-17.08	-17.44
 Blue Crab - SG	CPUE (kg/pot) (3 year average)	conf	conf	conf	conf	conf	conf	conf	conf	conf	2.19	conf	4.53
	CPUE (kg/pot) (Algal bloom period)	3.13	conf	conf	conf	conf	4.11	4.38	3.43	2.60	2.29	conf	3.97
	Percentage of baseline									4.65			-12.43
 Prawn - SG	CPUE (kg/haul-hour) (3 year average)	78.38	119.14	84.67	59.29	NA	NA	NA	56.74	76.98	83.11	NA	NA
	CPUE (kg/haul-hour) (Algal bloom period)	148.14	135.84	110.91	55.94	NA	NA	NA	121.41	73.96	NA	NA	NA
	Percentage of baseline	89.00	14.02	30.99	-5.66				113.96	-3.92			

Table A3. Commercial fishery statistics for Southern Rock Lobster, Pipi and Sardine across various regions. Data is total catch (t) during the algal bloom period (March 2025 onwards) compared to the 3-year monthly average (February 2022 – February 2025). **Green** reflects change in catch by <50% of baseline (3-year average). **Orange** reflects a change in catch of 50-80% of baseline (3-year average). **Red** reflects change in catch of >80% of baseline (3-year average).








Northern & Southern zone		MONTH											
		Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
Rock Lobster - Northern Zone 	Total catch (t) (3 year average)	25.01	15.03	13.38	5.20	6.52	9.47	14.94	17.99	52.41	52.75	53.88	29.56
	Total catch (t) (Algal bloom period)	33.23	20.12	12.49	6.51	2.68	5.34	18.07	51.98	44.45	53.91	42.03	34.56
	Percentage of baseline	32.87	33.88	-6.64	25.11	-58.84	-43.67	20.95	188.87	-15.19	2.20	-21.98	16.92
Rock Lobster - Southern Zone 	Total catch (t) (3 year average)	88.88	45.34	19.80	NA	NA	NA	264.61	192.39	180.33	164.88	272.99	115.44
	Total catch (t) (Algal bloom period)	99.88	18.51	NA	NA	NA	NA	283.78	277.25	161.79	174.25	190.07	185.64
	Percentage of baseline	12.38	-59.18					7.25	44.11	-10.28	5.68	-30.38	60.81
Younghusband Peninsula		MONTH											
Pipi - Younghusband peninsula 	Total catch (t) (3 year average)	59.96	51.82	48.19	21.53	2.99	conf	17.98	41.55	44.84	48.54	54.75	54.94
	Total catch (t) (Algal bloom period)	69.46	61.01	42.34	31.11	NA	NA	NA	conf	conf	conf	16.79	37.75
	Percentage of baseline	15.83	17.74	-12.13	44.49								-69.34
Spencer Gulf & Gulf St Vincent		MONTH											
Sardine - SG 	Total catch (t) (3 year average)	7030.67	8104.33	5247.33	2529.00	conf	conf	conf	conf	201.67	207.67	1298.67	4138.33
	Total catch (t) (Algal bloom period)	4894.00	8766.00	4948.00	4277.00	381.00	conf	conf	conf	conf	321.00	1305.00	conf
	Percentage of baseline	-30.39	8.16	-5.70	69.12							54.57	0.49
Sardine - GSV 	Total catch (t) (3 year average)	1103.33	3085.33	1173.33	135.00	NA	NA	NA	NA	NA	NA	NA	conf
	Total catch (t) (Algal bloom period)	conf	conf	conf	conf	NA	NA	NA	NA	NA	NA	conf	conf
	Percentage of baseline												
Gulf St Vincent/Kangaroo Island & Spencer Gulf		MONTH											
CZ Greenlip Abalone - GSVKI 	Total catch (t) (3 year average)	0.90	0.86	1.37	0.76	1.57	conf	conf	conf	conf	conf	conf	0.67
	Total catch (t) (Algal bloom period)	conf	conf	conf	NA	NA	conf	NA	NA	NA	NA	NA	NA
	Percentage of baseline												
CZ Greenlip Abalone - SG 	Total catch (t) (3 year average)	1.34	conf	conf	conf	conf	conf	conf	conf	conf	conf	conf	2.29
	Total catch (t) (Algal bloom period)	conf	conf	conf	NA	NA	NA	NA	conf	conf	conf	conf	conf
	Percentage of baseline												

Table A4. Commercial fishery statistics for Southern Rock Lobster, Pipi and Sardine across various regions. Data is targeted CPUE (kg/fisher-day) during the algal bloom period (March 2025 onwards) compared to the 3-year monthly average (February 2022 – February 2025). **Green** reflects change in CPUE by <50% of baseline (3-year average). **Orange** reflects a change in CPUE of 50-80% of baseline (3-year average). **Red** reflects change in CPUE of >80% of baseline (3-year average).








Northern & Southern zone		MONTH											
Rock Lobster - Northern Zone		Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
	CPUE (kg/pot) (3 year average)	1.21	1.16	1.28	0.96	1.17	1.18	1.24	1.12	1.43	1.49	1.57	1.37
	CPUE (kg/pot) (Algal bloom period)	1.64	1.47	1.23	1.31	1.15	2.02	1.86	1.90	1.93	2.02	2.16	1.77
	Percentage of baseline	35.61	26.95	-3.77	37.16	-1.29	71.49	49.36	69.58	35.25	35.43	37.24	29.21
Rock Lobster - Southern Zone		Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
	CPUE (kg/pot) (3 year average)	2.24	1.92	1.77	NA	NA	NA	1.88	1.54	1.76	1.85	2.09	1.88
	CPUE (kg/pot) (Algal bloom period)	2.39	2.32	NA	NA	NA	NA	2.23	2.20	2.42	2.74	2.93	2.97
	Percentage of baseline	6.59	20.71					18.64	42.72	36.91	48.07	40.50	57.98
Younghusband Peninsula		MONTH											
Pipi - Younghusband peninsula		Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
	CPUE (kg/fisher-days) (3 year average)	212.42	210.44	197.69	158.09	165.36	conf	185.58	204.66	208.64	226.69	218.37	221.87
	CPUE (kg/fisher-days) (Algal bloom period)	260.13	255.28	219.37	204.64	NA	NA	NA	conf	conf	conf	390.36	317.24
	Percentage of baseline	22.46	21.31	10.97	29.45							78.76	42.99
Spencer Gulf & Gulf St Vincent		MONTH											
Sardine - SG		Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
	CPUE (t/set-net) (3 year average)	45.87	48.94	48.47	45.08	conf	conf	conf	conf	12.83	18.62	35.15	47.41
	CPUE (t/set-net) (Algal bloom period)	51.52	44.27	46.24	34.22	22.41	conf	conf	conf	conf	15.29	22.89	conf
	Percentage of baseline	12.31	-9.54	-4.59	-24.10						-17.92	-34.86	
Sardine - GSV		Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
	CPUE (t/set-net) (3 year average)	58.91	51.39	55.55	36.11	NA	NA	NA	NA	NA	NA	NA	conf
	CPUE (t/set-net) (Algal bloom period)	conf	conf	conf	conf	NA	NA	NA	NA	NA	NA	conf	conf
	Percentage of baseline												
Gulf St Vincent/Kangaroo Island & Spencer Gulf		MONTH											
CZ Greenlip Abalone - GSVKI		Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
	CPUE (kg/hour) (3 year average)	23.15	19.73	20.77	21.36	19.97	conf	conf	conf	conf	conf	conf	20.23
	CPUE (kg/hour) (Algal bloom period)	conf	conf	conf	NA	NA	conf	NA	NA	NA	NA	NA	NA
	Percentage of baseline												
CZ Greenlip Abalone - SG		Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
	CPUE (kg/hour) (3 year average)	19.00	conf	conf	conf	conf	conf	conf	conf	conf	conf	conf	20.30
	CPUE (kg/hour) (Algal bloom period)	conf	conf	conf	NA	NA	NA	NA	conf	conf	conf	conf	conf
	Percentage of baseline												

Table A5. Regional commercial fishery statistics for King George Whiting, Southern Calamari and Southern Garfish in the Gulf St Vincent/Kangaroo Island fishing zone. Data is total catch (t) during the algal bloom period (March 2025 onwards) compared to the 3-year monthly average (February 2022 – February 2025. **Green** reflects change in catch by <50% of baseline (3-year average). **Orange** reflects a change in catch of 50-80% of baseline (3-year average). **Red** reflects change in catch of >80% of baseline (3-year average).










TOTAL CATCH													
Northern Gulf St Vincent (34, 35, 36)		MONTH											
		Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
 King George Whiting - NGSV	Total catch (t) (3 year average)	0.51	0.32	0.53	0.64	0.76	0.74	0.75	0.67	0.65	0.43	0.46	0.42
	Total catch (t) (Algal bloom period)	0.20	0.22	1.33	3.19	2.30	1.98	<i>conf</i>	0.10	0.01	0.01	0.02	0.01
	Percentage of baseline	-61.01	-31.32	150.35	401.15	202.90	168.47		-85.02	-98.45	-97.67	-95.64	-97.64
 Southern Calamari - NGSV	Total catch (t) (3 year average)	4.95	10.79	11.67	6.43	5.25	7.57	5.37	2.44	1.98	0.91	0.85	1.30
	Total catch (t) (Algal bloom period)	4.84	19.61	21.72	4.90	0.02	0.10	NA	0.00	0.00	0.00	0.00	0.00
	Percentage of baseline	-2.31	81.68	86.15	-23.76	-99.62	-98.68		-100.00	-100.00	-100.00	-100.00	-100.00
 Southern Garfish - NGSV	Total catch (t) (3 year average)	7.24	8.07	7.36	4.60	6.88	5.53	3.10	2.00	3.80	4.27	6.50	8.98
	Total catch (t) (Algal bloom period)	7.02	7.97	3.98	2.46	2.71	0.78	<i>conf</i>	<i>conf</i>	0.00	0.00	0.00	0.00
	Percentage of baseline	-3.00	-1.28	-45.91	-46.58	-60.61	-85.89			-100.00	-100.00	-100.00	-100.00
Southern Gulf St Vincent (40, 43, 44A)		MONTH											
 King George Whiting - SGSV	Total catch (t) (3 year average)	0.34	0.19	0.52	0.85	0.94	0.90	0.96	0.50	<i>conf</i>	<i>conf</i>	<i>conf</i>	0.11
	Total catch (t) (Algal bloom period)	<i>conf</i>	<i>conf</i>	<i>conf</i>	<i>conf</i>	0.60	0.49	1.35	<i>conf</i>	0.01	0.00	NA	NA
	Percentage of baseline					-36.40	-45.52	40.45					
 Southern Calamari - SGSV	Total catch (t) (3 year average)	1.66	0.78	1.36	0.75	1.22	2.02	5.56	10.56	13.76	8.73	8.39	6.11
	Total catch (t) (Algal bloom period)	2.96	1.66	<i>conf</i>	<i>conf</i>	0.00	0.00	<i>conf</i>	0.00	0.00	0.00	0.00	0.00
	Percentage of baseline	78.63	112.76			-100.00	-100.00		-100.00	-100.00	-100.00	-100.00	-100.00
 Southern Garfish - SGSV	Total catch (t) (3 year average)	<i>conf</i>	<i>conf</i>	<i>conf</i>	<i>conf</i>	<i>conf</i>	<i>conf</i>	<i>conf</i>	<i>conf</i>	<i>conf</i>	<i>conf</i>	<i>conf</i>	<i>conf</i>
	Total catch (t) (Algal bloom period)	<i>conf</i>	NA	NA	NA	NA	NA	NA	NA	0.00	NA	NA	NA
	Percentage of baseline												
Kangaroo Island (39B, 41, 42)		MONTH											
 King George Whiting - KI	Total catch (t) (3 year average)	1.17	0.91	1.06	1.12	1.00	1.31	1.11	1.51	1.04	1.06	1.41	1.48
	Total catch (t) (Algal bloom period)	1.12	1.16	<i>conf</i>	<i>conf</i>	<i>conf</i>	<i>conf</i>	<i>conf</i>	0.27	0.00	0.02	NA	0.07
	Percentage of baseline	-4.33	27.10						-82.09	-100.00	-98.11		-95.28
 Southern Calamari - KI	Total catch (t) (3 year average)	0.25	0.53	0.75	0.26	0.16	0.36	0.33	0.16	0.07	<i>conf</i>	<i>conf</i>	0.11
	Total catch (t) (Algal bloom period)	<i>conf</i>	<i>conf</i>	<i>conf</i>	<i>conf</i>	<i>conf</i>	<i>conf</i>	<i>conf</i>	<i>conf</i>	NA	0.00	NA	0.00
	Percentage of baseline												-100.00
 Southern Garfish - KI	Total catch (t) (3 year average)	<i>conf</i>	<i>conf</i>	<i>conf</i>	<i>conf</i>	<i>conf</i>	<i>conf</i>	<i>conf</i>	<i>conf</i>	<i>conf</i>	<i>conf</i>	<i>conf</i>	<i>conf</i>
	Total catch (t) (Algal bloom period)	<i>conf</i>	<i>conf</i>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Percentage of baseline												

Table A6. Regional commercial fishery statistics for King George Whiting, Southern Calamari and Southern Garfish in the Gulf St Vincent/Kangaroo Island fishing zone. Data is targeted CPUE (kg/fisher-day) during the algal bloom period (March 2025 onwards) compared to the 3-year monthly average (February 2022 – February 2025). **Green** reflects change in CPUE by <50% of baseline (3-year average). **Orange** reflects a change in CPUE of 50-80% of baseline (3-year average). **Red** reflects change in CPUE of >80% of baseline (3-year average).










Target CPUE													
Northern Gulf St Vincent (34, 35, 36)		MONTH											
		Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
 King George Whiting - NGSV	CPUE (kg/fisher-days) (3 year average)	conf	8.21	8.45	10.88	13.46	11.68	13.43	14.47	16.46	17.45	conf	conf
	CPUE (kg/fisher-days) (Algal bloom period)	conf	conf	conf	29.01	conf	33.16	conf	4.39	0.88	1.55	2.19	0.63
	Percentage of baseline				166.67		183.98		-69.67	-94.65	-91.12		
 Southern Calamari - NGSV	CPUE (kg/fisher-days) (3 year average)	23.81	30.14	26.84	26.42	22.29	30.00	27.93	21.12	20.97	14.63	20.15	17.42
	CPUE (kg/fisher-days) (Algal bloom period)	30.82	51.03	51.08	37.12	conf	conf	NA	0.00	0.00	0.00	0.00	0.00
	Percentage of baseline	29.47	69.29	90.32	40.52				-100.00	-100.00	-100.00	-100.00	-100.00
 Southern Garfish - NGSV	CPUE (kg/fisher-days) (3 year average)	55.43	75.40	81.26	98.67	114.69	80.72	59.09	36.54	43.78	58.01	73.76	69.54
	CPUE (kg/fisher-days) (Algal bloom period)	74.74	106.25	99.57	conf	55.69	conf	conf	conf	0.17	0.00	0.10	0.67
	Percentage of baseline	34.83	40.92	22.53		-51.44				-99.61	-100.00	-99.86	-99.04
Southern Gulf St Vincent (40, 43, 44A)		MONTH											
		Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
 King George Whiting - SGSV	CPUE (kg/fisher-days) (3 year average)	25.87	24.75	27.41	36.13	29.01	28.10	41.85	56.01	conf	conf	conf	26.57
	CPUE (kg/fisher-days) (Algal bloom period)	conf	conf	conf	conf	conf	25.45	36.49	conf	6.80	2.90	NA	NA
	Percentage of baseline						-9.44	-12.80					
 Southern Calamari - SGSV	CPUE (kg/fisher-days) (3 year average)	23.40	18.01	20.09	16.78	17.62	24.59	40.78	51.40	58.58	48.10	46.17	41.47
	CPUE (kg/fisher-days) (Algal bloom period)	37.03	36.11	conf	conf	conf	0.00	conf	0.00	0.00	0.00	0.00	0.00
	Percentage of baseline	58.25	100.50				-100.00		-100.00	-100.00	-100.00	-100.00	-100.00
 Southern Garfish - SGSV	CPUE (kg/fisher-days) (3 year average)	conf	conf	conf	conf	conf	conf	conf	conf	conf	conf	conf	conf
	CPUE (kg/fisher-days) (Algal bloom period)	conf	NA	NA	NA	NA	NA	NA	NA	0.35	NA	NA	NA
	Percentage of baseline												
Kangaroo Island (39B, 41, 42)		MONTH											
		Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
 King George Whiting - KI	CPUE (kg/fisher-days) (3 year average)	14.69	10.82	13.22	16.79	17.56	19.66	17.43	23.31	17.33	17.36	16.85	24.89
	CPUE (kg/fisher-days) (Algal bloom period)	33.27	20.50	conf	conf	conf	conf	conf	7.06	2.45	3.12	NA	5.20
	Percentage of baseline	126.46	89.48						-69.72	-85.86	-82.03		-79.11
 Southern Calamari - KI	CPUE (kg/fisher-days) (3 year average)	10.53	11.70	15.26	8.25	conf	11.66	15.84	18.75	5.72	conf	conf	6.79
	CPUE (kg/fisher-days) (Algal bloom period)	conf	conf	NA	conf	conf	conf	conf	conf	NA	0.00	NA	0.00
	Percentage of baseline												-100.00
 Southern Garfish - KI	CPUE (kg/fisher-days) (3 year average)	conf	conf	conf	NA	conf	conf	conf	conf	conf	conf	conf	conf
	CPUE (kg/fisher-days) (Algal bloom period)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Percentage of baseline												

Table A7. Regional commercial fishery statistics for King George Whiting, Southern Calamari and Southern Garfish in the Spencer Gulf fishing zone. Data is total catch (t) during the algal bloom period (March 2025 onwards) compared to the 3-year monthly average (February 2022 – February 2025). **Green** reflects change in catch by <50% of baseline (3-year average). **Orange** reflects a change in catch of 50-80% of baseline (3-year average). **Red** reflects change in catch of >80% of baseline (3-year average).










		TOTAL CATCH											
Northern Spencer Gulf (11, 19, 20, 21, 22, 23)		MONTH											
		Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
 King George Whiting - NSG	Total catch (t) (3 year average)	0.43	0.91	1.09	4.02	6.35	3.68	1.37	0.62	0.38	0.22	0.19	0.33
	Total catch (t) (Algal bloom period)	0.21	0.75	1.36	4.18	5.12	5.00	1.75	0.75	0.15	0.19	0.19	0.16
	Percentage of baseline	-50.65	-17.61	24.33	4.07	-19.37	35.74	27.96	20.65	-60.90	-14.63	2.54	-52.02
 Southern Calamari - NSG	Total catch (t) (3 year average)	2.70	9.24	12.23	8.18	8.78	7.63	6.05	2.32	1.52	1.98	1.04	1.59
	Total catch (t) (Algal bloom period)	2.11	11.99	13.13	16.12	11.60	13.70	7.22	2.04	0.65	0.22	0.05	0.04
	Percentage of baseline	-21.85	29.72	7.33	97.06	32.08	79.51	19.43	-11.90	-57.31	-88.91	-95.21	-97.48
 Southern Garfish - NSG	Total catch (t) (3 year average)	5.91	5.29	7.86	4.99	4.78	7.49	3.85	3.91	5.27	4.15	8.92	9.17
	Total catch (t) (Algal bloom period)	8.35	5.09	6.59	4.67	3.63	6.45	12.04	4.29	5.77	5.12	8.77	9.48
	Percentage of baseline	41.21	-3.75	-16.20	-6.37	-24.12	-13.88	212.74	9.83	9.59	23.28	-1.68	3.33
Southern Spencer Gulf (29, 30, 31, 32, 33, 39A)		MONTH											
 King George Whiting - SSG	Total catch (t) (3 year average)	3.36	1.48	1.85	4.59	7.28	6.96	5.13	3.75	4.49	3.57	4.63	4.78
	Total catch (t) (Algal bloom period)	2.55	0.89	1.39	6.94	8.94	7.00	6.16	4.03	3.80	5.53	3.33	3.78
	Percentage of baseline	-24.20	-39.72	-24.87	51.28	22.74	0.56	20.20	7.33	-15.35	54.73	-28.10	-20.93
 Southern Calamari - SSG	Total catch (t) (3 year average)	5.07	3.80	4.26	1.80	2.38	3.14	10.09	17.28	14.28	12.83	11.98	7.52
	Total catch (t) (Algal bloom period)	4.94	6.50	5.16	1.29	0.63	0.67	1.76	6.28	7.82	3.46	1.49	0.42
	Percentage of baseline	-2.47	71.22	21.12	-28.50	-73.54	-78.65	-82.56	-63.67	-45.22	-73.02	-87.56	-94.42
 Southern Garfish - SSG	Total catch (t) (3 year average)	0.45	0.62	1.01	0.75	0.27	conf	0.07	0.21	0.49	0.63	1.46	0.86
	Total catch (t) (Algal bloom period)	0.41	0.97	conf	conf	conf	conf	conf	0.25	conf	1.64	1.11	1.14
	Percentage of baseline	-8.54	55.76						17.19		159.56	-23.78	32.55
Lower Eyre Peninsula (26, 27, 28, 37, 38, 47)		MONTH											
 King George Whiting - LEP	Total catch (t) (3 year average)	0.22	0.15	0.89	0.96	0.49	0.62	0.68	0.59	0.38	0.30	0.12	0.17
	Total catch (t) (Algal bloom period)	0.21	0.64	1.60	conf	0.58	conf	conf	conf	0.85	conf	conf	conf
	Percentage of baseline	-5.86	316.85	80.70		19.55				123.45			
 Southern Calamari - LEP	Total catch (t) (3 year average)	conf	conf	conf	conf	conf	conf	conf	conf	conf	conf	conf	conf
	Total catch (t) (Algal bloom period)	conf	conf	conf	conf	conf	conf	conf	conf	conf	conf	conf	NA
	Percentage of baseline												
 Southern Garfish - LEP	Total catch (t) (3 year average)	conf	conf	conf	conf	conf	NA	NA	NA	conf	NA	NA	NA
	Total catch (t) (Algal bloom period)	NA	conf	conf	NA	NA	conf	NA	NA	NA	conf	NA	NA
	Percentage of baseline												

Table A8. Regional commercial fishery statistics for King George Whiting, Southern Calamari and Southern Garfish in the Spencer Gulf fishing zone. Data is targeted CPUE (kg/fisher-day) during the algal bloom period (March 2025 onwards) compared to the 3-year monthly average (February 2022 – February 2025). **Green** reflects change in CPUE by <50% of baseline (3-year average). **Orange** reflects a change in CPUE of 50-80% of baseline (3-year average). **Red** reflects change in CPUE of >80% of baseline (3-year average).










		Target CPUE											
Northern Spencer Gulf (11, 19, 20, 21, 22, 23)		MONTH											
King George Whiting - NSG		Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
	CPUE (kg/fisher-days) (3 year average)	17.17	12.34	14.04	42.16	37.97	28.15	15.31	15.80	18.54	conf	14.92	17.32
	CPUE (kg/fisher-days) (Algal bloom period)	8.22	12.05	12.51	29.68	48.07	39.04	13.68	7.70	5.82	4.85	conf	8.38
	Percentage of baseline	-52.13	-2.33	-10.88	-29.61	26.61	38.70	-10.64	-51.26	-68.60			-51.63
Southern Calamari - NSG		Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
	CPUE (kg/fisher-days) (3 year average)	22.47	32.81	38.71	41.52	34.46	29.24	35.96	28.36	25.42	28.91	17.48	19.43
	CPUE (kg/fisher-days) (Algal bloom period)	16.70	35.50	36.89	57.95	47.59	41.79	39.02	18.99	15.62	5.73	conf	conf
	Percentage of baseline	-25.69	8.19	-4.70	39.58	38.09	42.92	8.51	-33.03	-38.56	-80.18		
Southern Garfish - NSG		Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
	CPUE (kg/fisher-days) (3 year average)	55.72	51.85	64.52	53.66	60.23	75.74	55.61	43.97	54.41	48.02	69.27	68.82
	CPUE (kg/fisher-days) (Algal bloom period)	60.65	56.89	62.43	81.51	44.38	62.67	155.54	48.40	43.78	38.02	56.75	53.12
	Percentage of baseline	8.84	9.72	-3.24	51.90	-26.32	-17.25	179.71	10.09	-19.54	-20.83	-18.08	-22.81
Southern Spencer Gulf (29, 30, 31, 32, 33, 39A)		MONTH											
King George Whiting - SSG		Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
	CPUE (kg/fisher-days) (3 year average)	18.26	14.52	17.48	24.67	26.63	26.54	24.89	26.41	28.94	23.91	22.48	23.98
	CPUE (kg/fisher-days) (Algal bloom period)	20.75	9.83	13.77	30.16	36.59	29.12	27.50	21.52	27.16	24.61	23.50	22.44
	Percentage of baseline	13.65	-32.30	-21.23	22.27	37.40	9.72	10.50	-18.51	-6.15	2.94	4.56	-6.41
Southern Calamari - SSG		Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
	CPUE (kg/fisher-days) (3 year average)	23.44	20.34	21.13	18.94	20.82	23.12	36.32	46.35	49.80	48.53	39.32	31.47
	CPUE (kg/fisher-days) (Algal bloom period)	28.63	34.62	33.35	17.89	14.07	10.88	17.93	28.90	37.93	22.50	15.10	9.43
	Percentage of baseline	22.16	70.22	57.84	-5.55	-32.43	-52.94	-50.63	-37.65	-23.83	-53.64	-61.60	-70.03
Southern Garfish - SSG		Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
	CPUE (kg/fisher-days) (3 year average)	31.59	52.63	69.95	84.56	71.19	conf	28.17	39.81	63.54	39.06	55.80	41.89
	CPUE (kg/fisher-days) (Algal bloom period)	40.44	64.44	conf	conf	conf	conf	conf	conf	conf	53.91	46.22	52.56
	Percentage of baseline	28.03	22.45								38.02	-17.17	25.46
Lower Eyre Peninsula (26, 27, 28, 37, 38, 47)		MONTH											
King George Whiting - LEP		Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
	CPUE (kg/fisher-days) (3 year average)	20.20	10.73	22.06	23.27	21.10	25.27	22.87	23.68	15.88	13.43	10.52	14.37
	CPUE (kg/fisher-days) (Algal bloom period)	11.65	16.49	29.71	conf	32.24	conf	conf	conf	20.35	conf	conf	conf
	Percentage of baseline	-42.34	53.71	34.68		52.79				28.19			
Southern Calamari - LEP		Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
	CPUE (kg/fisher-days) (3 year average)	conf	conf	conf	conf	conf	conf	conf	conf	conf	conf	conf	conf
	CPUE (kg/fisher-days) (Algal bloom period)	conf	conf	conf	conf	conf	conf	conf	conf	conf	NA	conf	NA
	Percentage of baseline												
Southern Garfish - LEP		Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
	CPUE (kg/fisher-days) (3 year average)	conf	conf	conf	NA	conf	NA	NA	NA	NA	NA	NA	NA
	CPUE (kg/fisher-days) (Algal bloom period)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Percentage of baseline												

Table A9. Catch rate (kg/30-minute shot) (estimated for 2 nets) of Western King Prawn, bycatch and byproduct sampled during prawn trawl surveys (32 shots) in Spencer Gulf. Percentage composition of key species and species groupings present is also shown in parentheses (). Data is preliminary. ¹consisted of Sand Crab, Australian herring. *Data collected on half of trawls (n = 16).

August survey	
Species	Catch rate (kg/shot) (% of total)
Prawn (kg/shot)	25.34
Prawn Recruits (20+)	4 (15.7%)
Bycatch sampling	
(n=32) (n=16)	
Bycatch and Byproduct	Catch Rate (kg/shot)(% of total)
Bycatch and Byproduct (CPUE)	49 kg/shot
<u>Byproduct</u>	
Southern Calamari	0.21 (0.4%)
Eastern Balmain Bug	0.15 (0.3%)
<u>Bycatch</u>	
Blue Swimmer Crab*	13 (13.3%)
Garfish*	0.0085 (0.01%)
King George Whiting*	0.03 (0.03%)
Snapper	0.002 (0.004%)
Secondary Commercial Spp. ^{1*}	0.007(0.02%)
Elasmobranchs	5.45 (11.1%)
Sponges/Bryozoans	7.5 (15.3%)
Other Mixed Bycatch ²	29.1 (59.5%)
Bycatch and byproduct (total kg)	1,571

Table A10. Mean \pm SE biomass (g ha⁻¹) of bycatch species sampled by SGPF in October/November stock assessment surveys from 2020 to 2025 (2024-2025 data is preliminary). Data is recorded for a subset of species at each location.

Year	2020	2021	2022	2023	2024	2025
Species	Oct/Nov	Oct/Nov	Oct/Nov	Oct/Nov	Oct/Nov	Oct/Nov
Blue Swimmer Crab	6029 \pm 1681	4233 \pm 509	3544 \pm 466	3962 \pm 447	4270 \pm 491	3757 \pm 588
Skipjack Trevally	928 \pm 210	1253 \pm 318	911 \pm 265	1431 \pm 303	1106 \pm 289	1546 \pm 340
Bluefin Leatherjacket	984 \pm 266	301 \pm 69	187 \pm 41	210 \pm 39	344 \pm 95	439 \pm 97
Port Jackson Shark	448 \pm 93	741 \pm 128	385 \pm 90	738 \pm 168	390 \pm 99	298 \pm 78
Rough Leatherjacket	273 \pm 41	373 \pm 85	196 \pm 40	1072 \pm 483	509 \pm 85	672 \pm 173
Toothbrush Leatherjacket	552 \pm 330	573 \pm 251	123 \pm 37	95 \pm 46	101 \pm 34	78 \pm 19
Southern Calamari	277 \pm 23	243 \pm 19	227 \pm 16	222 \pm 21	228 \pm 19	124 \pm 20
Bluespotted Goatfish	126 \pm 33	264 \pm 39	314 \pm 45	319 \pm 55	385 \pm 66	306 \pm 87
Eastern Balmain Bug	150 \pm 20	75 \pm 11	79 \pm 9	83 \pm 13	75 \pm 11	63 \pm 12
King George Whiting	48 \pm 24	43 \pm 10	26 \pm 10	43 \pm 13	76 \pm 23	41 \pm 19
Snapper	1 \pm 1	1 \pm 1	9 \pm 4	10 \pm 4	2 \pm 2	9 \pm 5

Table A11. Catch Per Unit Effort (kg/30-minute-shot) of Western King Prawn (WKP), bycatch and byproduct sampled during trawl surveys at HAB survey sites in GSV. The percentage composition of key species and species groupings is also shown in parentheses (.). Data is preliminary. ¹consisted of Sand Crab, Australian herring and Mulloway; ²consisted of finfish and non-fish spp, predominantly leatherjacket spp.

	August (n=24)	September (n=21)	October (n=21)	November (n=22)	December (n=20)
Species	Catch rate per shot (% of total)				
Western King Prawn (kg/shot)	13.8 kg/shot	11.8 kg/shot	5.5 kg/shot	5.2 kg/shot	3.8 kg/shot
WKP Recruits (20+ grade)	1.17 (8.5%)	2.5 (21%)	1.25 (24%)	0.7 (14%)	0.4 (22%)
	Catch rate per shot (% of total)				
Bycatch and Byproduct (catch rate - kg/shot)	303 kg/shot	221 kg/shot	389 kg/shot	256 kg/shot	195 kg/shot
<u>Byproduct</u>					
Southern Calamari	0	0	0	0	0
Eastern Balmain Bug	0.1 (0.03%)	0.1 (0.06%)	0.1 (0.03%)	0.6 (0.25%)	0.7 (0.37%)
<u>Bycatch</u>					
Blue Swimmer Crab	0.6 (0.20%)	0.8 (0.36%)	0.6 (0.16%)	0.8 (0.32%)	2.0 (1.02%)
Garfish	0	0	0	0	0.01 (0.01%)
King George Whiting	0.6 (0.20%)	0.2 (0.07%)	0	0	0
Snapper	0.03 (0.01%)	0.8(0.35%)	0.3 (0.07%)	0	0.06 (0.03%)
Secondary Commercial Spp. ¹	2.2 (0.72%)	0.9 (0.39%)	4.3 (1.09%)	3.2 (1.24%)	1.3 (0.65%)
Elasmobranchs	0	0	0	0	1 (0.51%)
Sponges/Bryozoans	17.0 (5.6%)	3.5 (1.6%)	6.1 (1.6%)	18 (7.1%)	1.5 (0.77%)
Other Mixed Bycatch ²	282 (93.2%)	215 (97.2%)	377 (97.1%)	233 (91.1%)	189 (96.6%)
	Total catch (kg)				
Bycatch and byproduct (total kg)	7,272	4,645	8,174	5,624	3,908

Table A12. Summary of legal-size and undersize crab catches (weight, number, pots, and catch per unit effort (CPUE) from Metropolitan and Yorke Peninsula (YP) regions across two trips, showing temporal (Trip 1 vs. Trip 2) and spatial (regional) differences, with grand totals provided. Trip 1: 31 August to 3 September 2025; Trip 2: 25 September to 1 October 2025,

Size	Metric	Trip 1 – Metro	Trip 1 – YP	Trip 1 Total	Trip 2 – Metro	Trip 2 – YP	Trip 2 Total	Grand Total
Legal-size	Weight (kg)	21	38	59	127	228	355	414
	Number	85	153	238	493	823	1,316	1,554
	Pots	176	252	428	180	252	432	860
	CPUE (kg/pot)	0.1	0.2	0.1	0.7	0.9	0.8	0.5
	CPUE (crabs/pot)	0.5	0.6	0.6	2.7	3.3	3	1.8
Undersize	Weight (kg)	21	38	59	127	228	355	414
	Number	19	20	39	54	36	90	129
	Pots	176	252	428	180	252	432	860
	CPUE (kg/pot)	0.1	0.2	0.1	0.7	0.9	0.8	0.5
	CPUE (crabs/pot)	0.1	0.1	0.1	0.3	0.1	0.2	0.2

Table A13. Location of EYP dive sites, Greenlip Abalone (GL) counts and diver observations during August and September 2025.

Site	Dive No.	Lat.	Long.	GL abalone count	GL per minute	Comments
Stansbury	1	-34.91897	137.854	2	0.3	Sick, dead and dying abalone of all species, epiphytic molluscs absent (scars visible). Scallops (~50%) and razor fish (100%, n = 10) also dead. Live crabs particularly spider crabs. No fish seen.
	2	-34.92895	137.85	9	0.6	Sick, dead and dying abalone of all species, epiphytic molluscs absent (scars visible). Scallops (100%, n = 10's) and razor fish (100%, n = ~50) also dead. Live crabs particularly spider crabs. Sponge dead. No fish seen.
	3	-34.92246	137.823	16	0.9	Sick, dead and dying abalone of all species, epiphytic molluscs absent (scars visible). Scallops and razor fish also dead. Live crabs particularly spider crabs. Sponge dead. No fish seen.
	4	-34.92188	137.814	56	2.5	Sick, dead and dying abalone of all species, epiphytic molluscs absent (scars visible). Some live scallops but also clean shells, 10's of dead hammer oysters (<i>Malleus meridianus</i>). One unwell polychaete worm. Live crabs particularly spider crabs. No fish seen.
Edithburgh	1	-35.14588	137.761	12	0.8	Reef looked healthy. Fish, weed, Abalone all ok but fish numbers low, live healthy spider crabs. Fish observed were 3 brown spotted wrasse (<i>Notolabrus parilus</i>), 3 sweep (<i>Scorpius aequipinnis</i>) and 4 bluethroated wrasse (<i>Notolabrus tetricus</i>). All sponges dead.
	2	-35.14545	137.767	22	1.4	Reef looked healthy. Fish, weed, Abalone all ok but fish numbers low, live healthy spider crabs. All sponges dead. Some abalone epiphytic molluscs absent (scars visible)
	3	-35.14555	137.79	25	1.5	Reef looked healthy. Fish, weed, Abalone (abundant) all ok but fish numbers low with only one wrasse seen. Live healthy spider crabs. All sponges dead and some dead or dying elephant snails (<i>Scutus antipodes</i>).
	4	-35.14985	137.814	13	0.7	Reef looked healthy. Fish, weed, Abalone all ok except for 1 unwell <i>H. cyclobates</i> . Fish numbers low with only ~6 sweep seen (<i>Scorpius aequipinnis</i>). Live healthy spider crabs and lots of live sea urchins. All sponges dead, and one dead elephant snails (<i>Scutus antipodes</i>) plus one live one.
	5	-35.15345	137.827	38	1.9	Green Lip Abalone all ok, one <i>scalaris</i> looked a bit sick and was able to be removed by hand quite easily. All of the sponges looked dead and many decomposing. Spider crabs prolific, healthy and active. Fish numbers low
	6	-35.11752	137.862	0	na	No Green Lip sighted. Many <i>H. scalaris</i> and <i>H. cyclobates</i> , all looked ok. 2 fresh dead cowries (<i>Zoila thersites</i>). Elephant shells (<i>Scutus antipodes</i>) at this location looked very sick (Meatsdiscoloured) and could easily be removed by hand without any force. No fish life.
	7	-35.10928	137.799	0	na	No abalone habitat on this dive that was on a seagrass bed with sand patches. Hundreds of dead razorfish, no live ones found. Sand crabs (<i>Ovalipes australiensis</i>) present were healthy and active. No fish life.
	8	-35.12235	137.763	0	na	Small strip of rock, no Greenlip Abalone present. Many <i>H. scalaris</i> and <i>H. cyclobates</i> , all live and healthy. Around 50 individual Phasian shells (<i>Phasianella australis</i>) alive and healthy. Some dead sea cucumbers (<10).