



Department of
**Primary Industries and
Regional Development**

Fisheries Research Report No. 278

Weight-length summaries for Western Australian fish species derived from surveys of recreational fishers at boat ramps

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October 2018

Correct citation:

Smallwood CB, Tate A, Ryan KL 2018. Weight-length summaries for Western Australian fish species derived from surveys of recreational fishers at boat ramps. Fisheries Research Report No. 278, Department of Primary Industries and Regional Development, Western Australia. 151pp.

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ISSN: 1035-4549 (Print) ISBN: 978-1-921258-10-7 (Print)
ISSN: 2202-5758 (Online) ISBN: 978-1-921258-11-4 (Online)

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1681/18

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Executive Summary

Estimates of recreational catch from boat-based recreational fishers have been generated in Western Australia since 2011/12 using an integrated survey comprising off-site Phone-Diary Surveys, on-site Boat Ramp Surveys and Remote Camera Surveys. The primary purpose of the Boat Ramp Surveys is to determine an average weight for key species to convert estimates of recreational catch by numbers (determined from the Phone-Diary Survey) to harvest weight for comparison with catches from the commercial sector. Obtaining accurate weight-length data for fish (and other aquatic organisms) are also essential for many aspects of fisheries management, and have been an important component of this integrated survey.

Boat Ramp Surveys were conducted in all four marine bioregions in Western Australia, by trained interviewers intercepting fishers as they returned from their fishing trips. Retained catches were measured and weighed using standardised techniques. The first survey in 2011/12 was a randomised design based on a fixed number of boat ramps. Subsequent surveys in 2013/14 and 2015/16 implemented a design that targeted high-use boat ramps in an effort to maximise the sample size for weight-length data. During the targeted design, interviewers travelled to selected high-use boat ramps in each Bioregion during periods of peak fishing activity (*i.e.*, day type, time of day). The selection of high-use ramps was supported by data obtained from concurrent Remote Camera Surveys.

The Boat Ramp Surveys provided a unique opportunity to collect weight-length data for a broad suite of species caught by boat-based recreational fishers in Western Australia. By collecting weight-length data concurrently with surveys of recreational fishing, it was not necessary to rely on external data sources (*e.g.*, charter and commercial fishing), which are obtained from different spatial and temporal sampling frames.

More than 27,000 fish (and other aquatic organisms) were measured and weighed during 8,000 interviews during the three Boat Ramp Surveys. Response rates were >97%. Average weight and weight-length relationships were obtained for >50 of the top species within each resource. Data obtained from Boat Ramp Surveys provides appropriate indicators for species belonging to inshore and offshore demersal resources, where boats are required to access the resource. However, data were also collected for a variety of other species caught by boat-based recreational fishers, including species belonging to nearshore and estuarine resources.

Weight-length data for some species were not obtained, or only obtained in small numbers, during the Boat Ramp Surveys, primarily due to aspects of the survey design (*i.e.*, shore-based fishing not included and species such as Western Australian Salmon are caught predominantly from this platform), species preferences (*i.e.*, Sea Mullet is only rarely caught using line fishing methods) and fisher preferences (*i.e.*, rarely retain or target some commercially important species). Expanding biological surveys to include shore-based fishing will address some of these issues. Further investigation of any differences in weight-length data will provide additional guidance on the survey design, spatial and temporal scope, and frequency of future Boat Ramp Surveys.

1 Introduction

1.1 Background

Accurate weight-length data for fish (and other aquatic organisms) are essential for many aspects of fisheries management, including stock assessment modelling, evaluating fish condition and health, geographic comparisons of life histories and morphometrics, and resource allocation (Department of Fisheries, 2013; Gonçalves et al., 1997; Lai and Helser, 2004; Mendes et al., 2004; Petrakis and Stergiou, 1995). The collection of length-length data (*i.e.*, total length versus fork length) is also important for fisheries management as a tool to standardise variations in data collection (Pol et al., 2011). Measurements of total length (TL), fork length (FL) and weight (W) are metrics that are not only important, but are also easy to understand, and require little training to collect in an accurate manner. However, in practicality, the collection of weight data can be difficult.

Difficulties in obtaining weight data from fishery dependent surveys of recreational fishing arise for several reasons including: time limitations (*i.e.*, recreational fishers are eager to depart a boat ramp); personal preference (*i.e.*, fishers reluctant to have fish removed from storage) (Morales-Nin et al., 2005); difficulty in setting up scales (*i.e.*, need to be on a level surface for accurate reading and sheltered from the wind); and, transporting equipment to remote locations to access fishers (*i.e.*, scales may be bulky and sensitive to knocks). However, for the commercial sector, it is often a mandatory requirement that fish are weighed on landing, and the collection of this information is built into standard practices (Marriott et al., 2012). If using fishery independent sampling techniques, such as underwater visual census, then direct weight information is impossible to obtain. Other fishery independent sampling programs may have the time and resources to obtain weight data, although many of these projects are focused on a small spatial area (*i.e.*, river or estuary) or small number of species (*i.e.*, those targeted by a specific fishery) (Brouwer and Buxton, 2002; Gray and Kennelly, 2003; Marriott et al., 2012; West and Gordon, 1994). Therefore, data may not always be reliably applied to broader spatial areas across species distributions.

Length information is often easier and less time-consuming to obtain, as a measuring tape or mat is lightweight, collapsible and therefore easily transportable. It is essential to conduct training with staff to ensure species are correctly identified and measurements are taken in a consistent manner. Self-reporting of fish lengths from retained catches by recreational fishers has occurred in some diary surveys, although the added respondent burden and potential biases associated with this method have been acknowledged (Giri and Hall, 2015). Therefore, investment in collecting concurrent fishery dependent weight-length data is valuable, especially for species caught predominantly by recreational fishers for which current information is often not available.

If data on average weight is not available for a particular species then this information may need to be acquired from alternative sources such as studies on related species, or the same species from different stock distributions or sectors (*i.e.*, recreational versus commercial) or an earlier sampling period (Giri and Hall, 2015; Green et al., 2012; Henry and Lyle, 2003; Lyle et al., 2005; Ryan et al., 2015; Smallwood et al., 2013). Such practices are likely to introduce

additional uncertainty to any estimates of recreational catch to which they are applied (Henry and Lyle, 2003; Lyle et al., 2009; Ryan et al., 2016).

The estimated 752,000 recreational fishers who participate in recreational fishing annually in Western Australia catch a wide array of species across four marine bioregions (Department of Fisheries, 2016). The distribution of these species ranges from state-wide (*i.e.*, Pink Snapper (*Chrysophrys auratus*)) to highly localised distributions (*i.e.*, Silver Cobbler (*Neoarius midgleyi*)). Recreational fishing activity occurs from boats (private and charter) throughout Western Australian state waters (to 3 nautical miles) and into adjacent Commonwealth waters. Such diversity of species and fishing behaviour further enhance the challenges of conducting recreational fishing surveys, including the collection of reliable weight-length data, for the recreational sector in Western Australia.

Prior to 2011/12, converting estimates of recreational catch by number to harvest weight has relied on average weights and weight-length relationships determined from unrelated biological surveys (where available). Measurements of total length obtained from regular on-site boat ramp surveys (used to calculate estimates of recreational catch) were collected by interviewers taking a random selection of measurements from retained catches, were used for this purpose in conjunction with self-reported length measurements recorded in Tour Operator Returns (charter logbooks). The introduction of a Recreational Boat Fishing Licence (RBFL) in March 2010 enabled the implementation of an integrated survey using to provide state-wide and Bioregion estimates of catch (by numbers) (Ryan et al., 2013; Ryan et al., 2015). To improve the level of certainty associated with converting estimates of recreational catch by numbers to harvest weight, on-site Boat Ramp Surveys were incorporated into this complementary design for the purpose of collecting weight-length data for recreational species.

Estimates of recreational catch are used alongside information provided from biological sampling, Tour Operator Returns and commercial logbooks to assess the status of resources (Department of Fisheries, 2012). Such estimates are often included in stock assessments and for assisting with resource allocation. Accurate, current and representative weight-length data for species caught by recreational fishers is therefore an important component for improving the accuracy of estimates of recreational catch in Western Australia for comparison with other sectors. The implementation of on-site Boat Ramp surveys for this purpose is a novel technique in Western Australia and will fill knowledge gaps, while also allowing comparisons with historical studies.

1.2 Objective

This objective of this report is to create a reference document containing summaries of average length, average weight, weight-length relationships, as well as fork length-total length relationships (where applicable) for key species caught by boat-based recreational fishers. These data were collected during on-site Boat Ramp Surveys, as part of an integrated survey alongside off-site Phone-Diary Surveys and Remote Camera Surveys. The analyses presented in this report are intended to complement the information already published on the findings of the integrated surveys (Ryan et al., 2013; Ryan et al., 2015; Blight and Smallwood 2015).

Weight-length data are presented at state-wide and Bioregion scales to facilitate comparisons for each species, and small sample sizes are also highlighted where they occur. Based on this information the reader can make an informed decision to utilise the data most relevant to their needs.

2 Survey Design and Analysis

2.1 Biological Surveys

On-site Boat Ramp Surveys have been conducted in 2011/12, 2013/14 and 2015/16 to obtain weight-length data for recreational species caught by private boat-based recreational fishers. The primary purpose of the Boat Ramp Surveys was to determine an average weight for key species to convert estimates of recreational catch by numbers to harvest weight.

Boat Ramp Surveys were conducted by staff trained in interview techniques, survey instruments and species identification. Face-to-face interviews were completed with boat-based recreational fishing parties as they returned to a boat ramp and, if consent was given for an interview, information was gathered on their current fishing trip (*i.e.*, length of fishing trip, number of fishers on boat, species caught and number) and their retained catch was measured and weighed. Fishers younger than five were identified during the interview and excluded from sample selection.

Interviews were completed with as many fishing parties (*i.e.*, all fishers aboard one vessel is considered to be a fishing party) as possible throughout each shift. Fishing parties with retained catches available for collecting weight-length data were given priority for interview. If multiple fishing parties were returning to the ramp simultaneously, then a fishing party was randomly selected for interview.

Species Identification Guides (Department of Fisheries, 2015) were developed for the integrated surveys to help identify common species, and enhance consistent and accurate species identification. Interviewers were trained in species identification and were provided with relevant taxonomic references (Hutchins and Swainston 1999, Jones and Morgan 2002, Allen 2009, Rome and Newman 2010).

The total length (in millimetres) of finfish was measured and, where appropriate, caudal fork length was also obtained. Caudal fork length was obtained by spreading the tail into a natural position, while total length was obtained by ‘pinching’ the tail of the fish (Figure 1). This ‘pinching’ technique was also used for finfish species with a truncated caudal fin. Total carapace length was recorded for invertebrates, and total shell width (at the widest point) for molluscs.

Individuals were then weighed using either electronic (QHW Compact) scales, which had capability to weigh up to 30 kg (± 0.001 kg), or handheld scales (up to 40 kg; ± 0.020 kg). Measurement errors were minimised by ensuring fluids were cleaned regularly from the scales, the scales were positioned in a sheltered location and ‘zeroed’ between interviews. The condition of the fish was also recorded (*i.e.*, whole, gilled and gutted).

An overview of the design and outputs from Boat Ramp Surveys in 2011/12 and 2013/14, and integration with the Phone-Diary Survey, are provided in Ryan et al. (2013) and Ryan et al. (2015) respectively. The report for the Phone-Diary Survey conducted in 2015/16 is due for release in late 2017. A more detailed description of the sampling design used in each of the Boat Ramps Surveys is provided below.

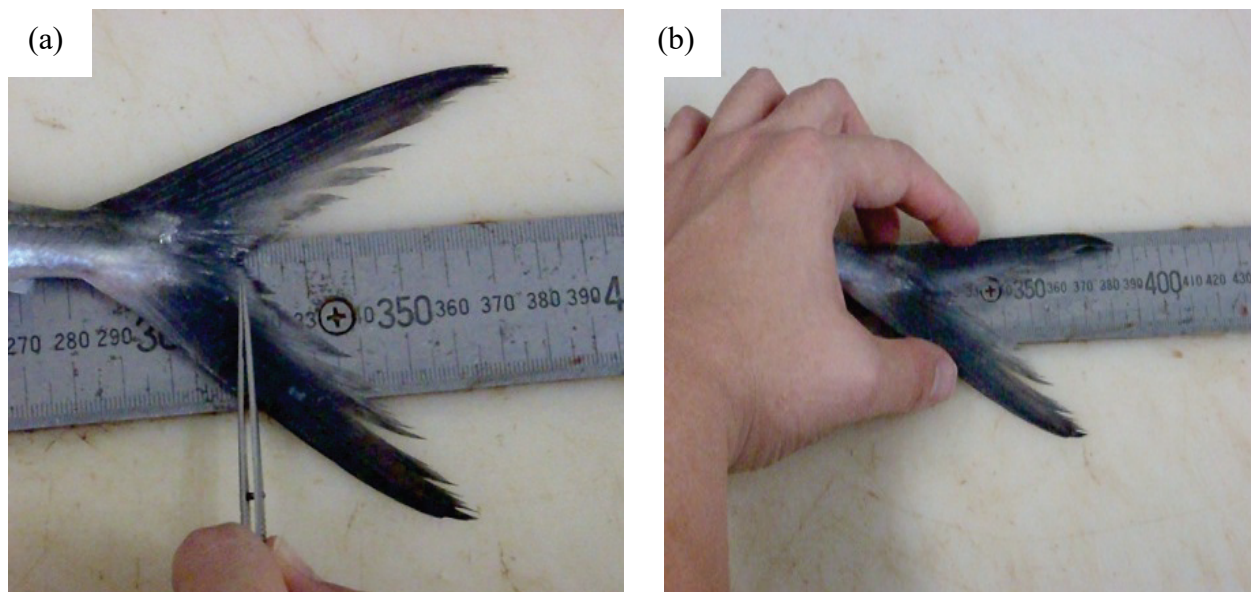


Figure 1. The correct way to measure a finfish using (a) caudal fork length (with caudal fin spread into a natural position) and (b) total length (with caudal fin upper and lower lobes ‘pinched’ to allow maximum measurement of total length).

2.1.1 2011/12

The 2011/12 survey was a randomised design of key boat ramps throughout Western Australia for which the targeted population included all boat-based recreational fishers as accessed with a spatial-temporal sampling frame. The primary sampling unit was sample day and the secondary sampling unit was fishing party, which could include both RFBL holders and non-licensed fishers. Unlicensed fishers are permitted to fish if at least one person on board has an RFBL, provided the total catch of the fishing party is within the bag limit for the RFBL holder, and the boat limit when two or more RFBL holders are on board.

Spatial stratification included marine Bioregion and zones within bioregions (Fletcher and Santoro, 2015). There were 65 ramps sampled state-wide in the Boat Ramp Survey, including: 14 ramps in the North Coast (6 in the Kimberley Zone and 8 ramps in the Pilbara Zone); 11 ramps in the Gascoyne Coast (6 ramps in the Shark Bay Zone and 5 ramps in the Ningaloo Zone); 26 ramps in the West Coast (7 ramps in the North Zone [including Kalbarri and Mid-West], 11 in the Metro Zone, 8 ramps in the South Zone); and 14 ramps in the South Coast (8 ramps in the Albany Zone and 6 ramps in the Esperance Zone) (Figure 2a).

The Boat Ramp Survey ran for a 12-month period from 1 March 2011 to 29 February 2012, with each Bioregion visited monthly in the peak season, and every second month in the off-peak season (Table 1). Zones within each Bioregion were sampled on alternative trips. Other temporal stratification included day type (weekends/weekday) and time of day (morning/afternoon). Sample days were confined to daylight hours only.

Table 1. Temporal stratification applied in each Bioregion and Zone during the 2011/12 Boat Ramp Surveys.

Bioregion	Zone	Peak season	Off-peak season
North Coast	Kimberley	April–October	November–March
	Pilbara		
Gascoyne Coast	Ningaloo	March–November	December–February
	Shark Bay		
West Coast	North	All year	NA
	Metropolitan		
	Southern		
South Coast	Albany	October–May	June–September
	Esperance		

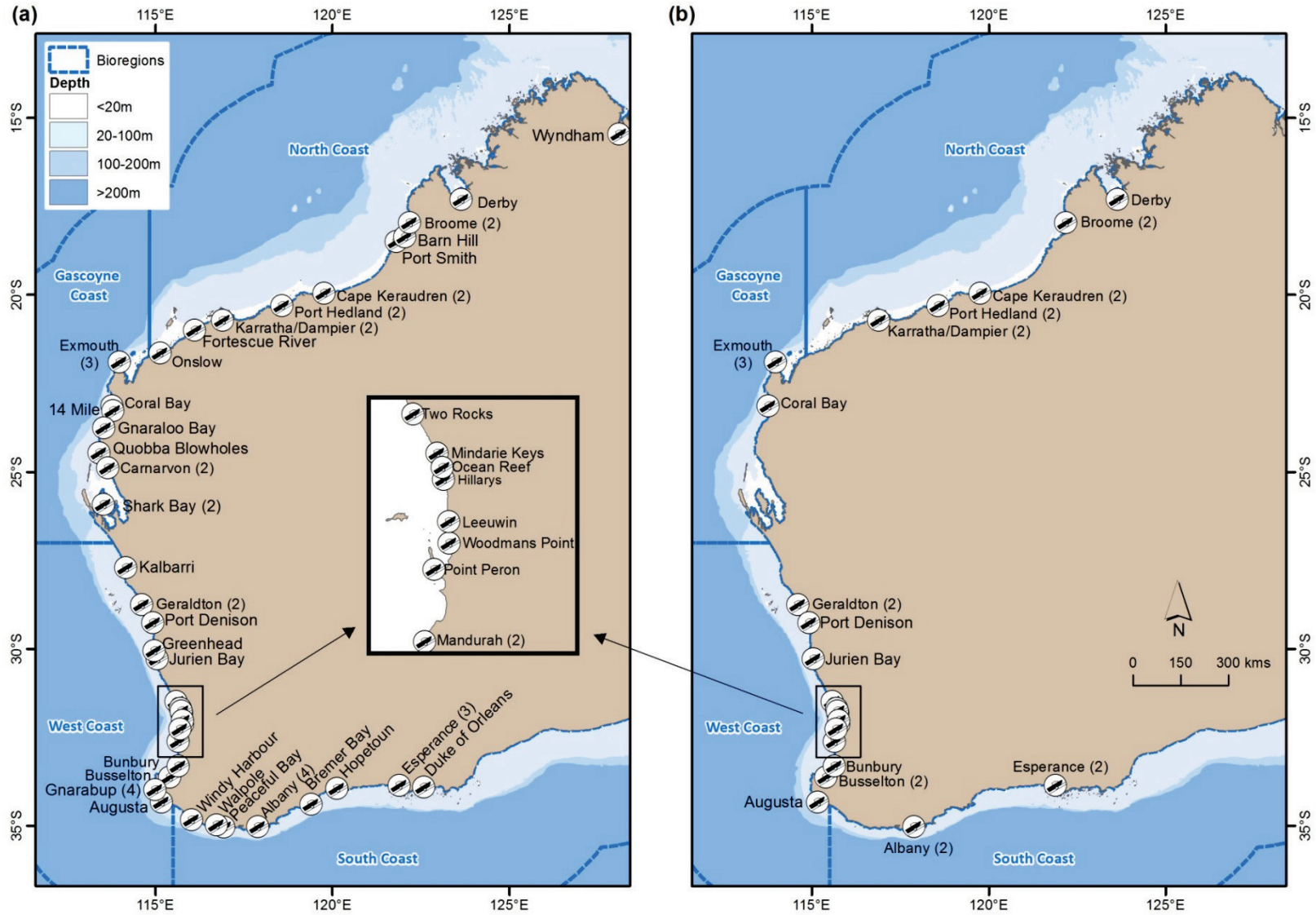


Figure 2. Bioregions, survey areas and number of boat ramps (in brackets) for the (a) 2011/12 and (b) 2013/14 and 2015/16 Boat Ramp Surveys.

2.1.2 2013/14

The 2013/14 survey was a targeted design informed by data collected during the Boat Ramp and Remote Camera Surveys completed in 2011/12 (Ryan et al. 2013). By targeting 32 key boat ramps at peak times of fishing activity (*i.e.*, season, day type and time of day) the survey aimed to maximise the collection of biological information from boat-based recreational fishers. As with the previous survey, the primary sampling unit was sample day and the secondary sampling unit was fishing party.

Spatial stratification for the Boat Ramp Survey in 2013/14 included marine bioregions and regions (or zones) within which 32 boat ramps were sampled, including: 9 ramps in the North Coast (4 in the Kimberley Zone and 5 ramps in the Pilbara Zone); 4 ramps in the Gascoyne Coast (all in the Ningaloo Zone); 16 ramps in the West Coast (4 ramps in the North Zone, 8 in the Metro Zone, 4 ramps in the South Zone); and 4 ramps in the South Coast (2 ramps in the Albany Zone and 2 ramps in the Esperance Zone) (Figure 2b).

While the state-wide Phone-Diary Survey ran for a 12-month period from 1 May 2013 to 30 April 2014, the Boat Ramp Survey in 2013/14 was limited to three and a half months coinciding with peak fishing for each Bioregion, depending on factors that are known to influence boating activity (Table 2). In the West Coast, the aim was to collect the same number of fish measurements as the previous 2011/12 Boat Ramp Survey and, as a result, 1–2 surveys per week were scheduled at each ramp during the peak season for fishing activity from mid-January to end of April 2014. In all other bioregions, the aim was to maximise the number of fish measured and weighed, and surveys were completed up to 5 days per week during the peak season for fishing activity from mid-June to end of September. In all bioregions, shifts were of approximately four hours duration and confined to daylight hours only.

Table 2. Temporal stratification applied in each Bioregion and Zone during the 2013/14 and 2015/16 Boat Ramp Surveys.

Bioregion	Zone	Season	Key factor/s determining shift time
North Coast	Kimberley	Mid-June to September	High tide
	Pilbara		High tide
Gascoyne Coast	Ningaloo		Time of day
West Coast	North	Mid-January to April	Day type Time of day (11:00–15:00)*
	Metropolitan		Day type Time of day (12:00–16:00)
	Southern		Day type Time of day (11:00–15:00)
South Coast	Albany		Time of day (11:00–15:00)
	Esperance		Time of day (11:00–15:00)

* Note: based on anecdotal evidence of vessel activity Port Denison Marina was surveyed from 09:00–13:00 in 2015/16 survey.

Within this spatial and temporal stratification, interviewers followed a decision making process at the commencement of each shift which aimed to maximise the amount of weight-length data

obtained (Figure 3). This process was based around the concept of a ‘shift threshold’, which was established for each boat ramp based on a minimum number of boat trailers and weather conditions (Table 3). By only commencing a shift if the threshold was deemed acceptable, it was hoped that the maximum number of interviews (and measurements) could be achieved. For ramps that were distant from the town site (*i.e.*, Tantabiddi) the interviewer was instructed to consider weather conditions prior to departure to the ramp. If strong (>20 knots) or gale wind warnings were in place, the shift was cancelled prior to travelling. If there were multiple ramps within a survey area, then ramps were ordered in terms of priority, with the most active ramp designated the primary survey location.

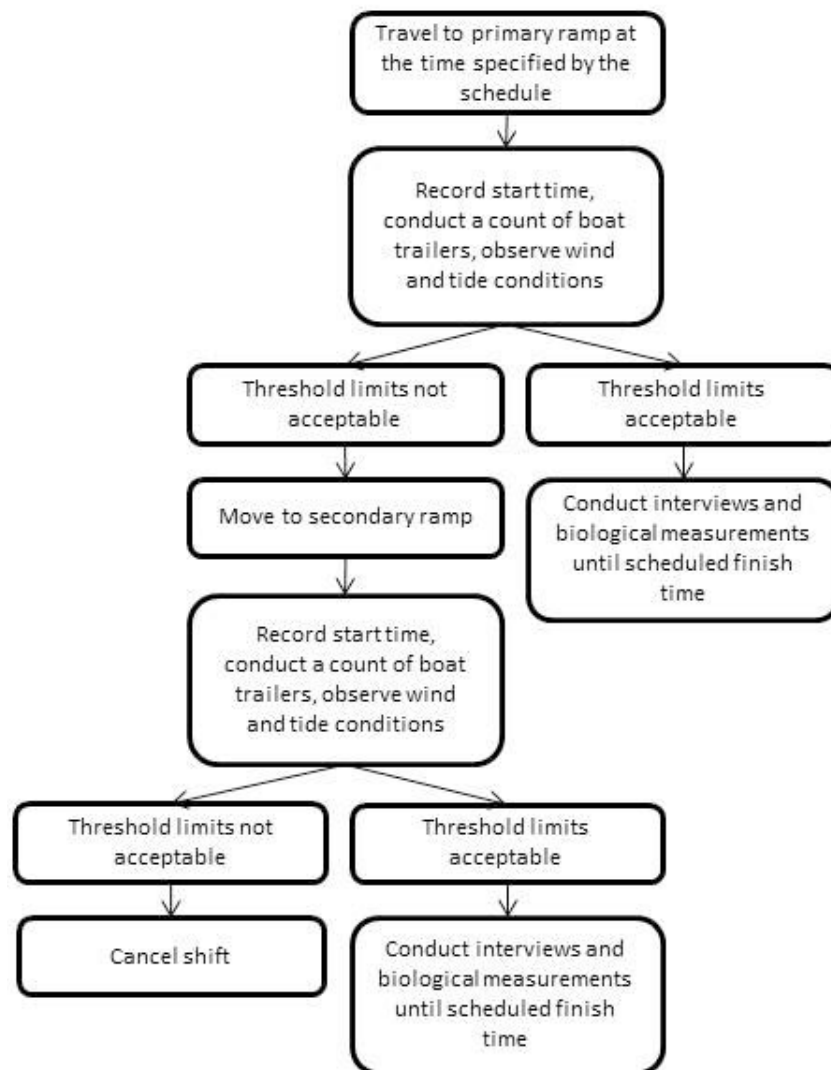


Figure 3. Flowchart of steps required for using the thresholds for selecting a ramp for each shift.

Table 3. Primary and secondary ramps surveyed in each location of the 2013/14 and 2015/16 Boat Ramp Surveys along with shift thresholds and associated actions. Note: strong winds >20 knots. Note: italics indicate ramp or threshold introduced during the Boat Ramp Survey in 2015/16.

Location	Ramp priority	Ramp	Shift thresholds			Action if threshold not achieved
			No. boat trailers	Wind speed & direction	Other	
North Coast [2013/14 only]						
Derby	1	Derby Wharf	3	Strong winds	Extremes of spring tides	Cancel shift
Broome	1	Entrance Point	5	Strong winds	Extremes of spring tides	Move to 2
	2	Gantheaume Point	5	Strong winds	Waves >1m, extremes of spring tides	Cancel shift
Cape Keraudren	1	Cape Keraudren Beach	NA	Strong winds		Move to 2 if more activity
	2	Cape Keraudren Creek	NA	Strong winds		Return to 1 - if not improved, cancel shift
Port Hedland	1	Town Ramp	2	Strong winds		Move to 2
	2	Finucane	2	NA		Return to 1 - if not improved, cancel shift
Karratha/Dampier	1	Dampier Public Ramp	NA	Strong winds	Check ramp 2 on way to ramp 1	Move to 2 and continue if more boat trailers and incoming tide, otherwise cancel shift
	2	Karratha Back Beach	NA	Strong winds	Outgoing tide	Cancel shift
Gascoyne Coast [2013/14 only]						
Exmouth	1	Tantabiddi	10	Strong onshore winds		Move to 2
	2	Bundegi	10	Strong onshore winds		Move to 3
	3	Exmouth Marina	10	Strong onshore winds		Cancel shift
Coral Bay	1	Coral Bay	10	Strong onshore winds		Cancel shift
West Coast						
Geraldton	1	Batavia Marina	5	Strong onshore winds		Move to 2
	2	Town Beach	5	Strong onshore winds		Cancel shift
Port Denison	1	Port Denison Marina	5	Strong onshore winds		Cancel shift
Jurien Bay	1	Boat Harbour	5	Strong onshore winds		Cancel shift
Two Rocks	1	Two Rocks	10	Strong onshore winds		Check Hillarys - if not acceptable, cancel shift
Mindarie Keys	1	Mindarie Keys	10	Strong onshore winds		Check Hillarys - if not acceptable, cancel shift

Location	Ramp priority	Ramp	Shift thresholds			Action if threshold not achieved
			No. boat trailers	Wind speed & direction	Other	
Ocean Reef	1	Ocean Reef	10	Strong onshore winds		Check Hillarys - if not acceptable, cancel shift
Hillarys	1	Hillarys	10	Strong onshore winds		Cancel shift
Leeuwin	1	Leeuwin	10	Strong onshore winds		Check Hillarys - if not acceptable, cancel shift
Woodman Point	1	Woodman Point	10	Strong onshore winds		Check Hillarys - if not acceptable, cancel shift
Rockingham	1	Point Peron	10	Strong onshore winds		Cancel shift
Mandurah North	1	Mary Street	5	Strong onshore winds		Check Pt Peron - if not acceptable, cancel shift
Mandurah South	1	Port Bouvard	5	Strong onshore winds		Check Pt Peron - if not acceptable, cancel shift
	1	<i>Dawesville</i>	5	<i>Strong onshore winds</i>		<i>Check Pt Peron - if not acceptable, cancel shift</i>
Bunbury	1	Power Boat Club	5	Strong onshore winds		Cancel shift
Busselton	1	Geographe Marina	5	Strong onshore winds		Move to 2
	2	Old Dunsborough	5	Strong onshore winds		Cancel shift
Augusta	1	<i>Augusta Boat Harbour</i>	5	<i>Strong onshore winds</i>		<i>Move to 2</i>
	2	Flinders Bay	5	Strong onshore winds		Cancel shift
South Coast						
Albany	1	Emu Point	10	Strong onshore winds		Move to 2
	2	Town Ramp	10	Strong onshore winds		Cancel shift
Esperance	1	Bandy Creek	3	Strong onshore winds		Move to 2
	2	Town Ramp	3	Strong onshore winds		Cancel shift

2.1.3 2015/16

While the Phone-Diary Survey ran for a 12-month period from 1 September 2015 to 31 August 2015, the Boat Ramp Survey in 2015–16 was limited to three and a half months to coincide with peak fishing from January to April 2016 in the West Coast and South Coast. This survey followed the targeted design implemented during the Boat Ramp Survey in 2013–14 (described in Section 2.1.2), with a few minor changes aimed at improving the targeting of the survey to coincide with peak times of fishing activity. For example, the survey time at Port Denison Marina was changed from 11:00–15:00 (in 2013–14) to 09:30–13:30 (in 2015–16) due to anecdotal evidence that boating activity at this ramp was busier during the earlier period (Table 2). A remote camera has subsequently been installed at this location to quantify the distribution of boating activity and inform future surveys (Blight and Smallwood 2015). Moreover, new survey locations were added where applicable (*i.e.* Boat Harbour at Augusta was opened in 2015 and the boat ramp at Dawesville was identified in the previous 2013/14 survey as having substantial fishing activity) (Table 3).

2.2 Analysis

Prior to undertaking analyses, data variables were visually inspected for errors to identify outliers. If an outlier could be identified as a recording error, they were corrected, while if they were attributed to measurement error (*i.e.*, incorrect use of handheld scales or measurement units not correctly assigned) they were excluded from analysis. It is indicated in the results for each species where a measurement error occurred. Any remaining variability in the dataset was considered to be the result of natural variation or measurement error (*i.e.*, windy fieldwork conditions which may have some affect on scale readings). Additional investigation was undertaken during linear regression using diagnostic tools such as residual versus leverage plots and associated Cook's distance, indicating these points were rarely influential on the regression line and they were not excluded from the analysis.

Fish (and other aquatic organisms) were assumed to be whole unless catch condition (*i.e.*, gilled, gutted) was recorded by the interviewer. Sex was also not recorded for finfish species. Although there is likely to be some effects of catch condition and sex on weight values, all measurements were pooled for analysis.

2.2.1 Weight-Length Relationships

Weight-length relationships are generally expressed as either a power or a (linear) logarithmic relationship. The power relationship is expressed as

$$W = aL^b$$

where W = the weight in grams (g); L = is either the total, fork or standard length in millimetres (mm); a and b are constants with b providing information on growth and is commonly referred to as the allometric coefficient (Ricker, 1973; 1975).

Weight-length relationships may also be expressed as a linear relationship between the natural logarithms of weight and length, *i.e.*

$$\ln W = \ln a + b \ln L$$

where W = the weight in grams (g); L = is either the total, fork or standard length in millimetres (mm); a is the y-intercept of the regression and b is the slope (Hayes et al., 1995). When using this linear relationship, the predicted values of weight are subsequently back transformed to derive an estimate for the actual weight, based on observed length. To account for bias associated with this back log-transformation, the resulting weight estimate is multiplied by a correction factor (Beauchamp and Olson, 1973), which is derived as follows

$$E_{corr} = E_{uncorr}e^{ms/2}$$

where E_{uncorr} is the back-transformed estimate for weight, e is the base of natural logarithm (2.71828) and ms is the mean of the squared residuals.

Estimated values for a and b are provided in Appendix 1 for all species where more than 10 length and weight measurements were collected. The standard errors are provided for each constant (*i.e.* square root of the root square mean residual) along with the coefficient of determination (R^2), which provides a measure of the goodness-of-fit for the linear regression model. Additional information is provided (in the results) relating to the correction factor, which can be applied to back-transformed predictions of weight.

2.2.2 Fork Length-Total Length Relationships

For species with a forked tail, fork length (FL) to total length (TL) relationships were calculated using linear regressions, expressed as

$$TL = bFL + a$$

where a is the y-intercept of the regression and b is the slope. Estimated values for a and b are provided in Appendix 2 for all species where more than 10 length and weight measurements were collected. The standard errors and R^2 are also provided.

2.2.3 Average Total Length

Total length summaries (average, standard error, minimum and maximum) are provided for data collected during the Boat Ramp Surveys. These data are aggregated across all survey years at state-wide and Bioregion levels. If less than 10 length measurements were collected then these values are highlighted to indicate small sample sizes.

2.2.4 Average Weight

Weight summaries (average, standard error, minimum and maximum) are provided for data collected during the Boat Ramp Surveys. These data are aggregated across all survey years at state-wide and Bioregion levels. If less than 10 weight measurements were collected then these values are highlighted to indicate small sample sizes.

3 Results

There was a high response rate from recreational fishers during the Boat Ramp Surveys, with <2.3% of fishing parties refusing to provide any information to interviewers (Table 4). Of the remaining fishing parties, 17–48% agreed to a full interview, including having their entire retained catch measured and weighed. ‘No time’ was cited as the most common reason for partial refusals (*i.e.* fisher refusal to have retained catch measured and weighed).

Table 4. Total number of interviews with groups fishing, total refusals (*i.e.*, no information provided) and groups who agreed to have all their catch measured from the Boat Ramp Surveys.

Survey	Number of interviews with groups fishing	Total refusals (<i>i.e.</i> , no information provided)	Complete interview (<i>i.e.</i> , all catch measured)
2011/12	1,639	13 (<1%)	645 (17.5%)
2013/14	4,005	83 (1.8%)	1,778 (48.3%)
2015/16*	2,690	73 (2.3%)	1,258 (34.0%)

* Note: only South Coast and West Coast bioregions surveyed.

More than 27,041 fish (and other aquatic organisms) were measured and/or weighed, comprising 315 different species or general categories. The majority was measured in the West Coast (53%; 14,234 individuals), followed by the South Coast (29%; 7,856 individuals). Finfish (92%; 289 species or general groupings) were the dominant taxa, followed by sharks and rays (3%; 11) and crustaceans (3%; 8). The percentage of retained catch measured and/or weighed increased from 51.2% (2011/12) to 64.4% (2015/16), while the proportion of fish (and other aquatic organisms) both measured and weighed was > 90% in all surveys.

Data were also considered with respect to the number of weight measurements obtained for species that have particular relevance to management. These can be categorised as follows;

- priority species (n=60) – based on abundance in reported catch and importance for management (Ryan et al., 2013; Ryan et al., 2015), and
- fish resource species (n=100) – based on presence in the top 10–15 species within each Bioregion and habitat grouping aligned with resource management (Ryan et al., 2013; Ryan et al., 2015) (Table 5).

These categories also combine measurements across some similar species, which are considered as a general group (*i.e.*, ‘garfish’ – two species, and ‘emperor’ in the West Coast Bioregion – five species).

Of the 315 species or general categories recorded in the Boat Ramp Surveys the majority (60.3–69.1%) had <10 weight measurements in each survey year (Table 5). This was lower when assessed using species in the priority and fish resource categories, where only 17.2–35.0% had <10 weight measurements.

Table 5. Number of weight measurements obtained for categories relevant for management (priority species and fish resource species), and compared with all species recorded in the Boat Ramp Surveys.

Survey	All species (n=315)			Priority species (n=54)^			Fish resource species (n=61)~		
	<10	10–100	>100	<10	10–100	>100	<10	10–100	>100
2011/12	121 (69.1%)	41 (23.4%)	13 (7.4%)	15 (31.9%)	20 (42.5%)	12 (25.5%)	17 (30.4%)	28 (50.0%)	11 (19.6%)
2013/14	155 (60.3%)	82 (31.9%)	20 (7.8%)	11 (21.6%)	21 (41.2%)	19 (37.2%)	10 (17.2%)	30 (51.7%)	18 (31.0%)
2015/16*	83 (61.0%)	37 (27.2%)	16 (11.8%)	11 (28.2%)	14 (35.9%)	14 (35.9%)	14 (35.0%)	13 (32.5%)	13 (32.5%)

* Note: only South Coast and West Coast bioregions surveyed.

^ Based on abundance in reported catch and importance for management [Ryan et al. (2013)].

~ Based on top 10–15 species found within each Bioregion and habitat [Ryan et al. (2013) – Chapter 9].

Similar to the reporting structure for estimates of recreational catch (Ryan et al., 2013; Ryan et al., 2015), detailed summaries of weight-length data are provided for priority species, noting that for some species such as Silver Cobbler, Billfish or King Threadfin, no information was collected during the Boat Ramp Surveys. Weight-length data for all species are provided in Appendix 1–Appendix 4.

3.1 Estuarine

3.1.1 Black Bream (*Acanthopagrus butcheri*)

Black Bream is found in the Gascoyne Coast, West Coast and South Coast, and is an estuarine indicator species in both these bioregions. Only a small sample of weight-length data was obtained for this species in these bioregions ($n = 51$) due primarily to the majority of boat ramps in the surveys being located away from estuarine environments where this species is more frequently located (Figure 4). The high R^2 value indicates a strong relationship between W-TL (0.96).

Weight-length parameters for Black Bream were calculated state-wide, and for the South Coast, using data from the Boat Ramp Surveys (Appendix 1). Insufficient data were collected in the West Coast and no data was obtained for the Gascoyne Coast. FL-TL conversion parameters were also calculated (Appendix 2). Data summaries on length and weight are provided for all bioregions in which the species was recorded (Appendix 3; Appendix 4).

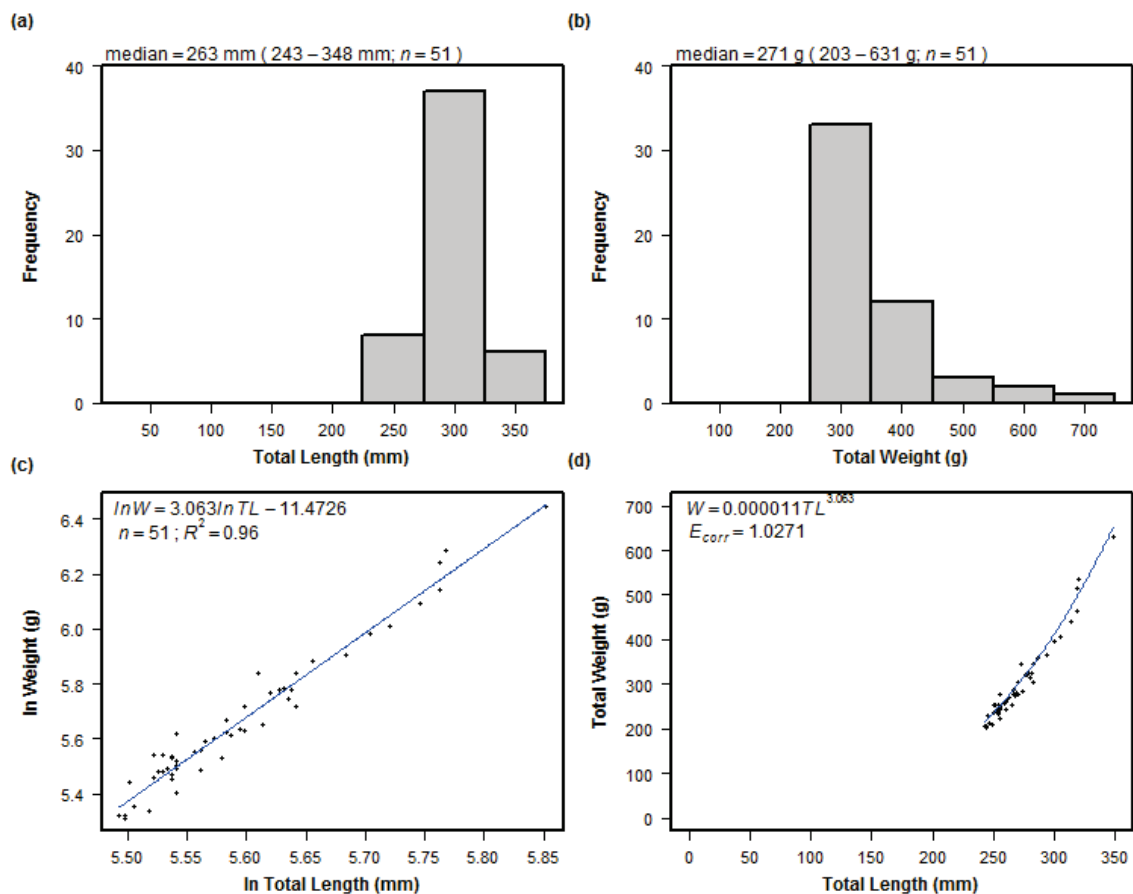


Figure 4. State-wide summary of weight-length data, aggregated across surveys, for Black Bream in Western Australia as derived from Boat Ramp surveys; showing (a) length frequency, (b) weight frequency, (c) weight-total length (ln) linear relationship (blue line) and, (d) bias-corrected weight-length (power) relationship (blue line) with correction factor.

3.1.2 Southern Bluespotted Flathead (*Platycephalus speculator*)

Southern Bluespotted Flathead is found in the West Coast and South Coast. Only a small sample of weight-length data was obtained during the Boat Ramp Surveys for this species in these bioregions ($n = 183$), with a median length of 438 mm and weight of 498 g (Figure 5). A high R^2 value of 0.98 indicates a strong relationship between W-TL.

Weight-length parameters for Southern Bluespotted Flathead were calculated state-wide, and for the West Coast and South Coast, using data from the Boat Ramp Surveys (Appendix 1). FL-TL conversions are not applicable for this species. Data summaries on length and weight are provided for all bioregions in which the species was recorded (Appendix 3–Appendix 4).

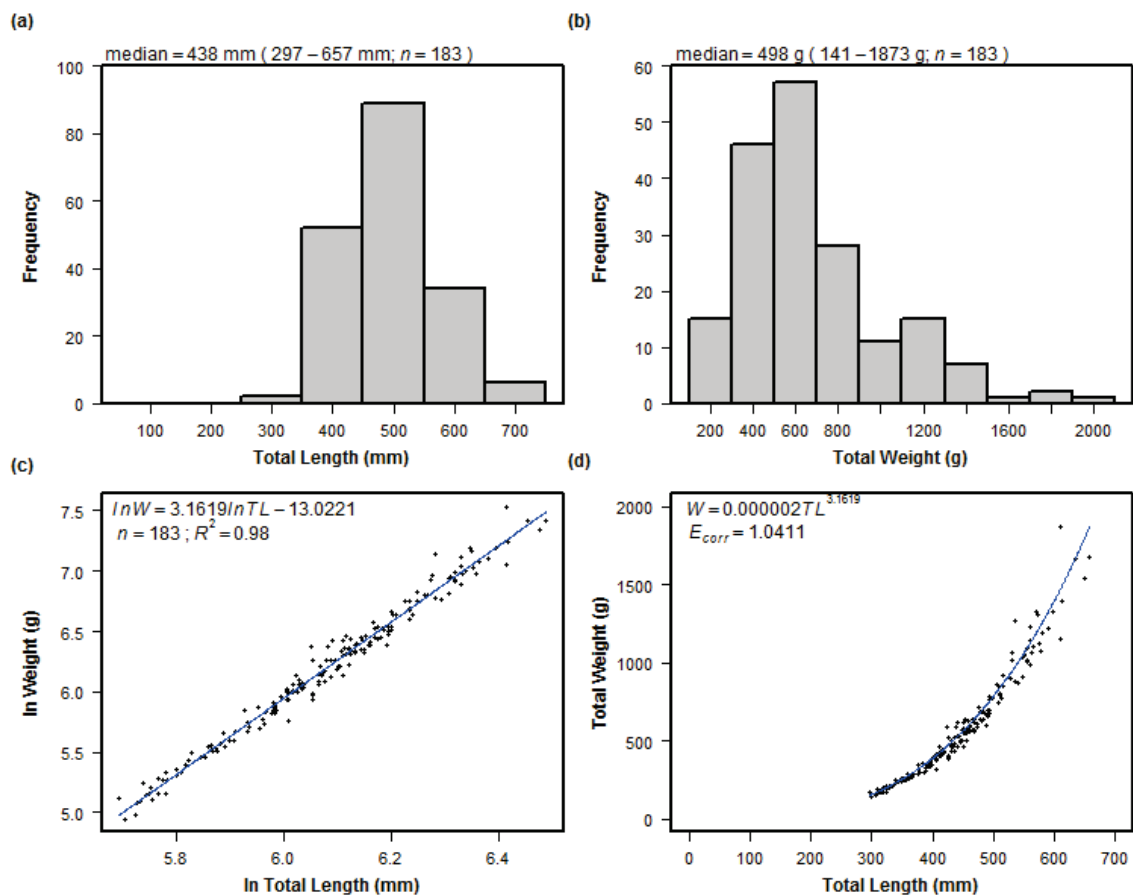


Figure 5. State-wide summary of weight-length data, aggregated across surveys, for Southern Bluespotted Flathead in Western Australia as derived from Boat Ramp surveys; showing (a) length frequency, (b) weight frequency, (c) weight-total length (\ln) linear relationship (blue line) and, (d) bias-corrected weight-length (power) relationship (blue line) with correction factor.

3.1.3 Yellowtail Flathead (*Platycephalus westraliae*)

Yellowtail Flathead is found in the Gascoyne Coast, West Coast and South Coast. Only 13 fish were measured during the Boat Ramp Surveys and this was insufficient to undertake a reliable regression analysis. However, data summaries (Appendix 3; Appendix 4) were provided for all bioregions in which measurements were obtained.

3.1.4 Barramundi (*Lates calcarifer*)

Barramundi is found in the North Coast, and is an estuarine indicator species in this Bioregion. Only one fish was measured during the Boat Ramp Surveys and this was insufficient to undertake regression analysis. However, a data summary (Appendix 3; Appendix 4) is provided for the North Coast.

3.1.5 Estuary Cobbler (*Cnidoglanis macrocephalus*)

Estuary Cobbler is found in the West Coast and South Coast, and is an estuarine indicator species in both these bioregions. Only one fish was measured during the Boat Ramp Surveys (in the West Coast) and this was insufficient to undertake regression analysis. However, a data summary (Appendix 3; Appendix 4) is provided for the West Coast.

3.2 Nearshore

3.2.1 Australian Herring (*Arripis georgianus*)

Australian Herring is found in the West Coast and South Coast, and is a nearshore indicator species in both of these bioregions. A large sample of weight-length data was collected in these bioregions during the Boat Ramp Surveys ($n = 2,881$), with a median length of 227 mm and weight of 124 g. A high R^2 value (0.86) indicated a strong relationship between W-TL (Figure 6). Data were pooled across both sexes, and this variable has been found previously to have no significant effect on the relationship between W-TL (Smith and Brown, 2014).

Weight-length parameters for Australian Herring were calculated state-wide, and for the West Coast and South Coast, using data from the Boat Ramp Surveys (Appendix 1). FL-TL conversion parameters were also calculated (Appendix 2). Data summaries on length and weight are provided for all bioregions in which the species was recorded (Appendix 3–Appendix 4). The average weight obtained for the South Coast (129 g) was not significantly different than for the West Coast (130 g).

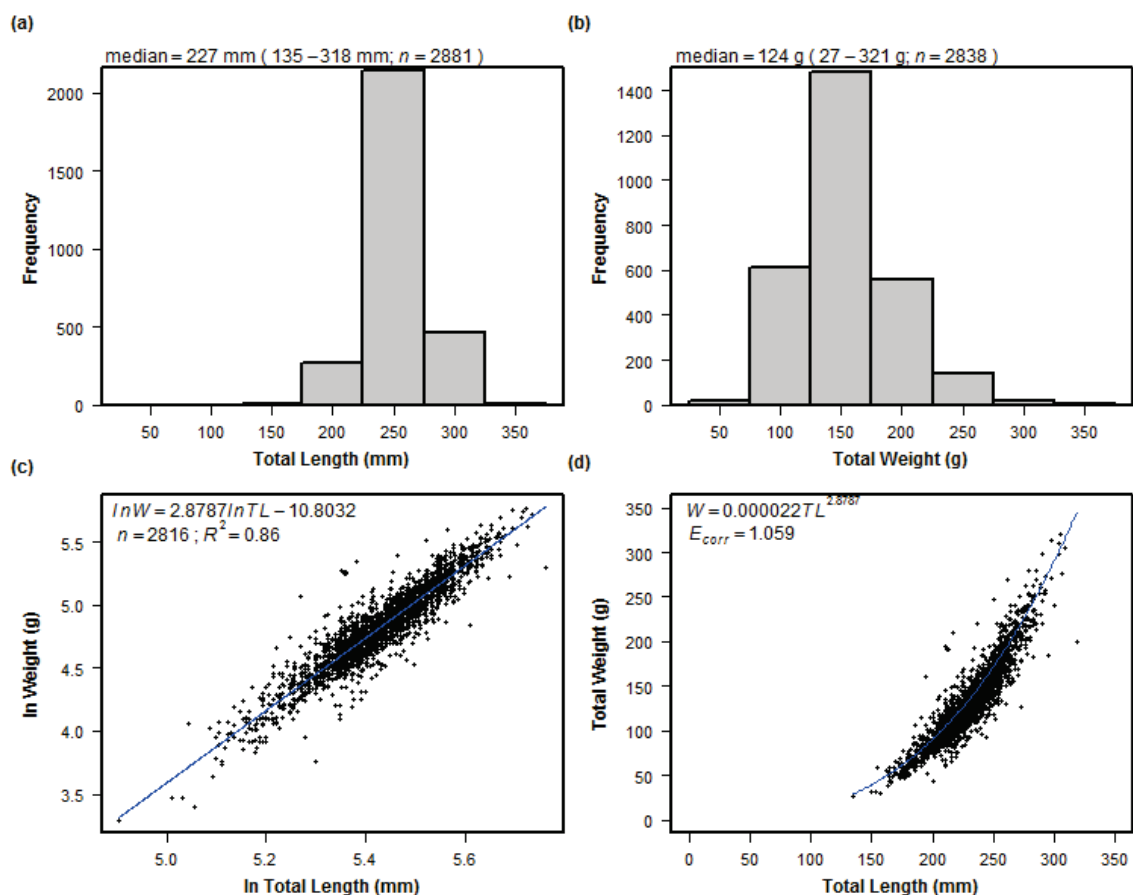


Figure 6. State-wide summary of weight-length data, aggregated across surveys, for Australian Herring from Boat Ramp surveys in Western Australia; showing (a) length frequency, (b) weight frequency (c) log transformed weight-length (linear) relationship and (d) bias-corrected weight-length (power) relationship.

3.2.2 Western Australian Salmon (*Arripis truttaceus*)

Western Australian Salmon is found in the West Coast and South Coast, and is a nearshore indicator species for the South Coast. This species was recorded in small numbers during the Boat Ramp Surveys ($n = 270$), with a median length of 733 mm and weight of 3,978 g. The high R^2 value indicates a strong relationship between W-TL (0.99) (Figure 7). There is a clear bimodal distribution in the length and weight, which is likely attributed to fishers retaining both juveniles and adults of this species. Size at maturity occurs for Western Australian Salmon at 600–650 mm (Cappo, 1987; Nicholls, 1973).

Weight-length parameters for Western Australian Salmon were calculated state-wide, and for the West Coast and South Coast, using data from the Boat Ramp Surveys (Appendix 1). FL-TL conversion parameters were also calculated (Appendix 2). Data summaries on length and weight are provided for all bioregions in which the species was recorded (Appendix 3–Appendix 4). The average weight obtained for the South Coast (2,318 g) was significantly smaller than for the West Coast (4,511 g) which may be an effect of the migration of this species along the coast of Western Australia (Lenanton et al., 1991).

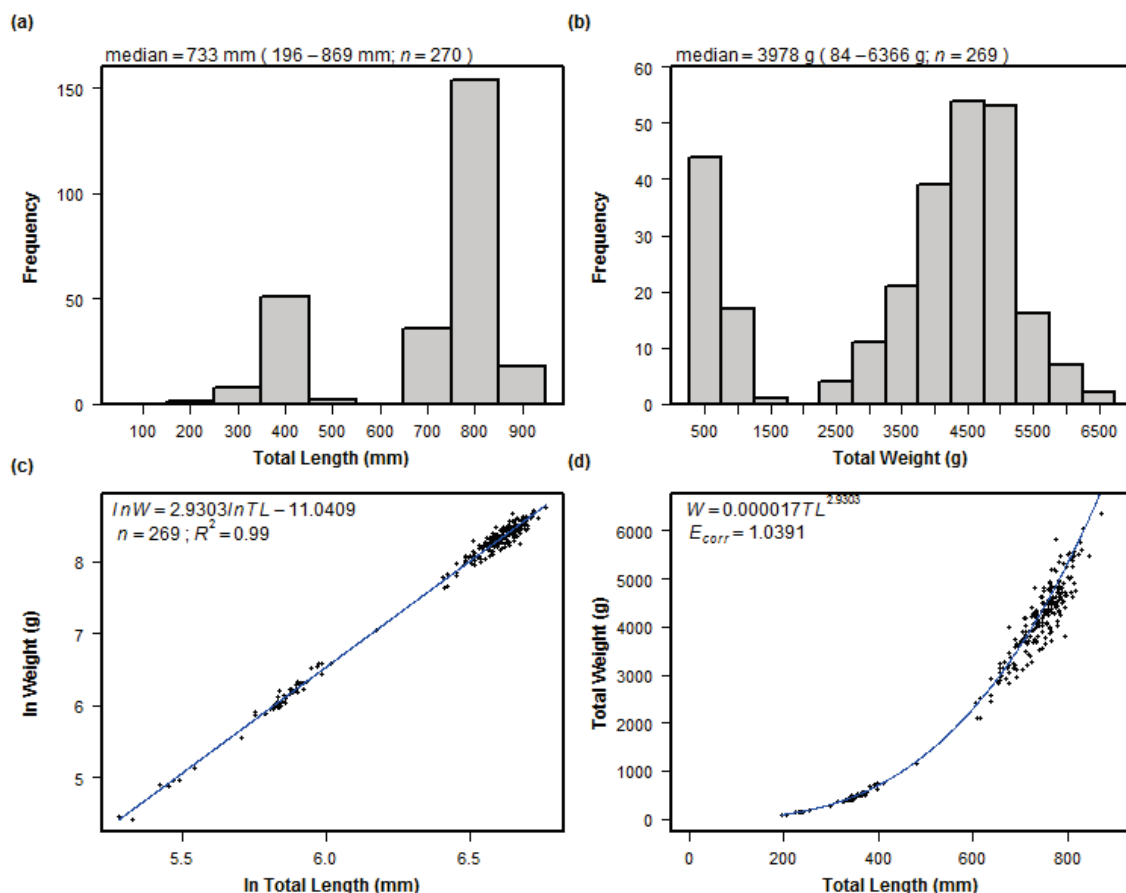


Figure 7. State-wide summary of weight-length data, aggregated across surveys, for Western Australian Salmon in Western Australia as derived from Boat Ramp surveys; showing (a) length frequency, (b) weight frequency, (c) weight-total length (ln) linear relationship (blue line) and, (d) bias-corrected weight-length (power) relationship (blue line) with correction factor.

3.2.3 Garfish (*Hyporhamphus melanochir* and *Hemiramphus robustus*)

The garfish grouping comprises two species, Southern Garfish and Three-by-Two Garfish. Southern Garfish are found in the West Coast and South Coast while Three-By-Two Garfish are found in the North Coast and Gascoyne Coast. These species were recorded in small numbers in these bioregions during the Boat Ramp Surveys ($n = 178$) with a median length of 338 mm and weight of 99 g. The R^2 value indicated a weak relationship between W-TL (0.80) (Figure 8). Inconsistencies with length measurements resulted in some data collected at specific locations within the West Coast being excluded from this analysis.

Weight-length parameters for Garfish were calculated state-wide, and for the West Coast and South Coast, using data from the Boat Ramp Surveys (Appendix 1). Although Three-By-Two Garfish comprised 10.4% of the measurements obtained during the Boat Ramps Surveys, this was insufficient to conduct weight-length analysis in the North Coast and Gascoyne Coast. Data summaries on length and weight are provided for all bioregions in which these species were recorded (Appendix 3–Appendix 4).

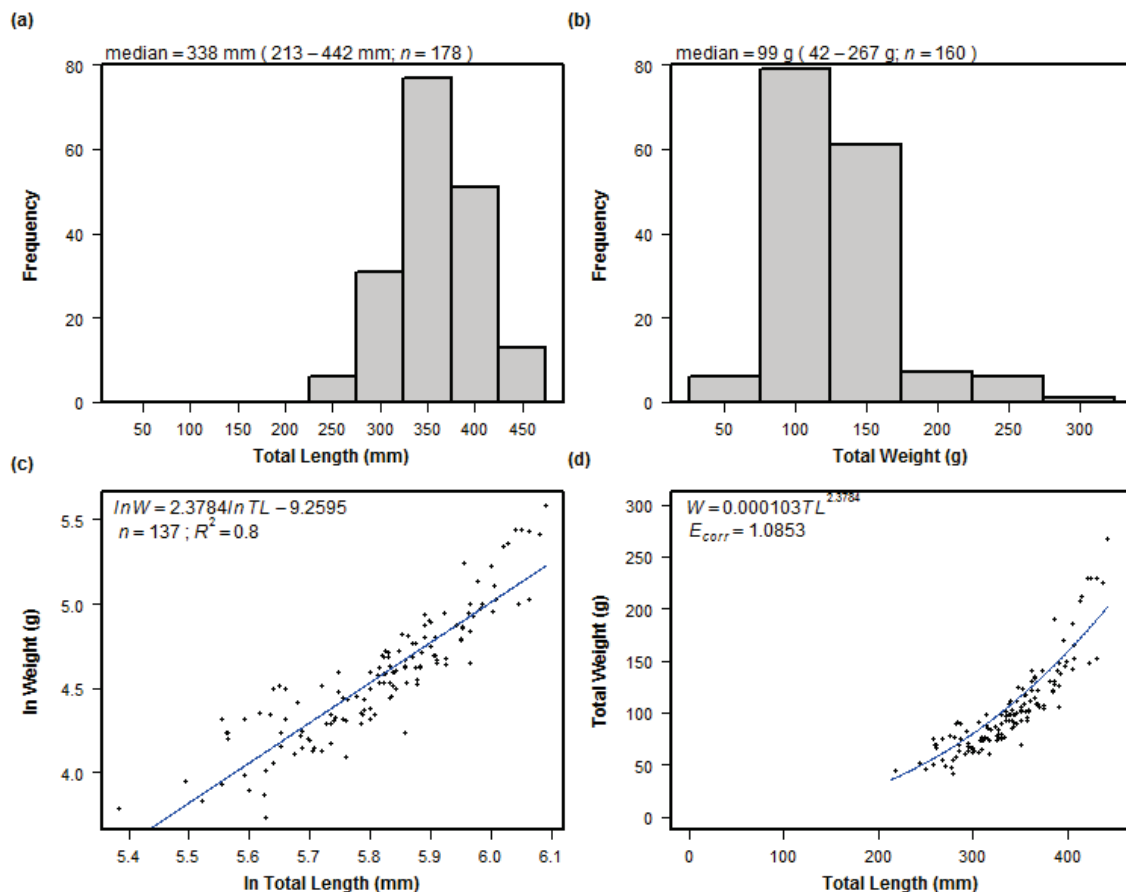


Figure 8. State-wide summary of weight-length data, aggregated across surveys, for Southern Garfish in Western Australia as derived from Boat Ramp surveys; showing (a) length frequency, (b) weight frequency, (c) weight-total length (ln) linear relationship (blue line) and, (d) bias-corrected weight-length (power) relationship (blue line) with correction factor.

3.2.4 Tailor (*Pomatomus saltatrix*)

Tailor is found in the Gascoyne Coast, West Coast and South Coast, and is a nearshore indicator species for the Gascoyne Coast and West Coast. Only a small sample of weight-length data was obtained for this species during the Boat Ramp Surveys ($n = 110$) with a median length of 399 mm and weight 590 g. The R^2 value showed a strong relationship between W-TL (0.98) (Figure 9).

Weight-length parameters for Tailor were calculated state-wide, and for the West Coast and Gascoyne Coast, using data from the Boat Ramp Surveys (Appendix 1). Insufficient data were collected in the South Coast Bioregion. FL-TL conversion parameters were also calculated (Appendix 2). Data summaries on length and weight are provided for all bioregions in which the species was recorded (Appendix 3–Appendix 4).

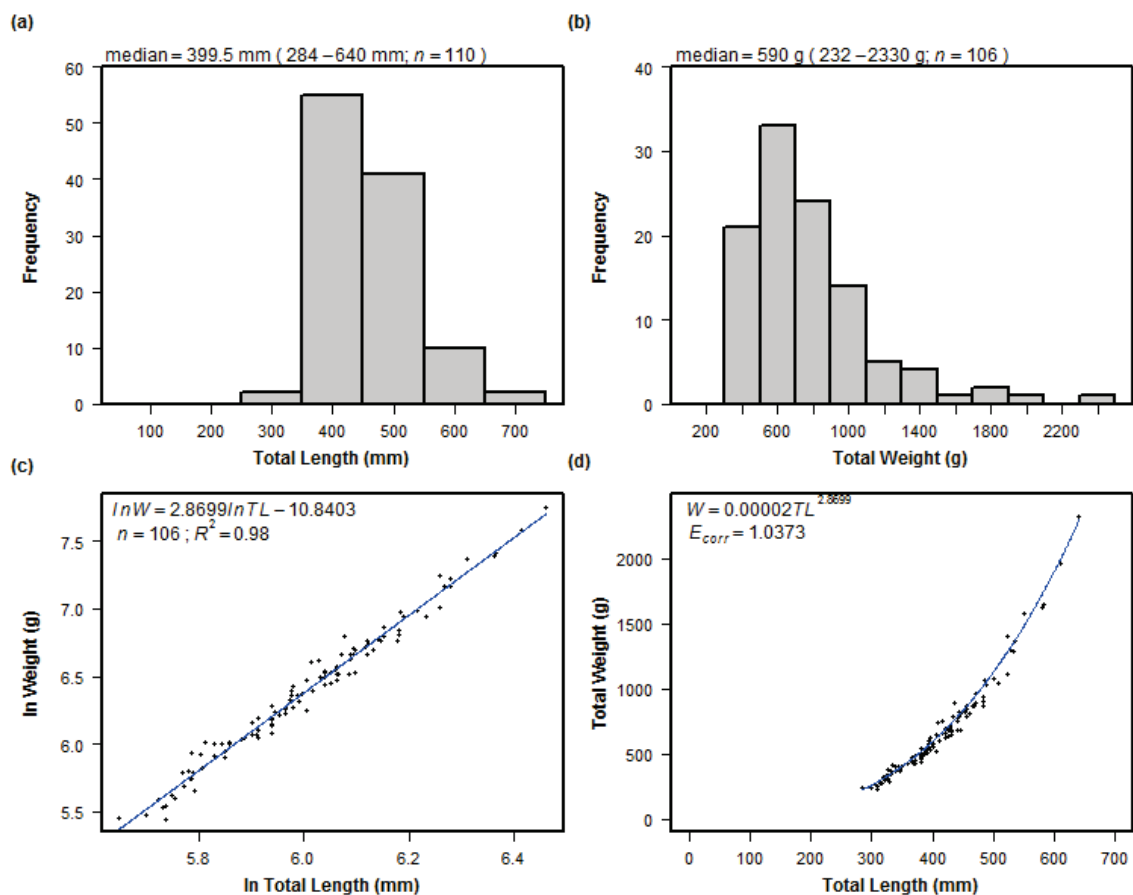


Figure 9. State-wide summary of weight-length data, aggregated across surveys, for Tailor in Western Australia as derived from Boat Ramp surveys; showing (a) length frequency, (b) weight frequency, (c) weight-total length (ln) linear relationship (blue line) and, (d) bias-corrected weight-length (power) relationship (blue line) with correction factor.

3.2.5 Blue Threadfin (*Eleutheronema tetradactylum*)

Blue Threadfin is found in the North Coast and Gascoyne Coast, and is a nearshore indicator species for the North Coast. Only a small sample of weight-length data was obtained for this species during the Boat Ramp Surveys ($n = 21$), with a median length of 473 mm and weight 952 g, while the R^2 value indicated a moderate relationship between W-TL (0.93) (Figure 10). Due to inconsistencies with the handheld scale type used to weigh some of the samples of this species, some data collected in the North Coast was excluded from this analysis.

Weight-length parameters for Blue Threadfin were calculated state-wide, and for the North Coast, using data from the Boat Ramp Surveys (Appendix 1). Insufficient data were collected in the Gascoyne Coast. FL-TL conversion parameters were also calculated (Appendix 2). Data summaries on length and weight are provided for all bioregions in which the species was recorded (Appendix 3–Appendix 4).

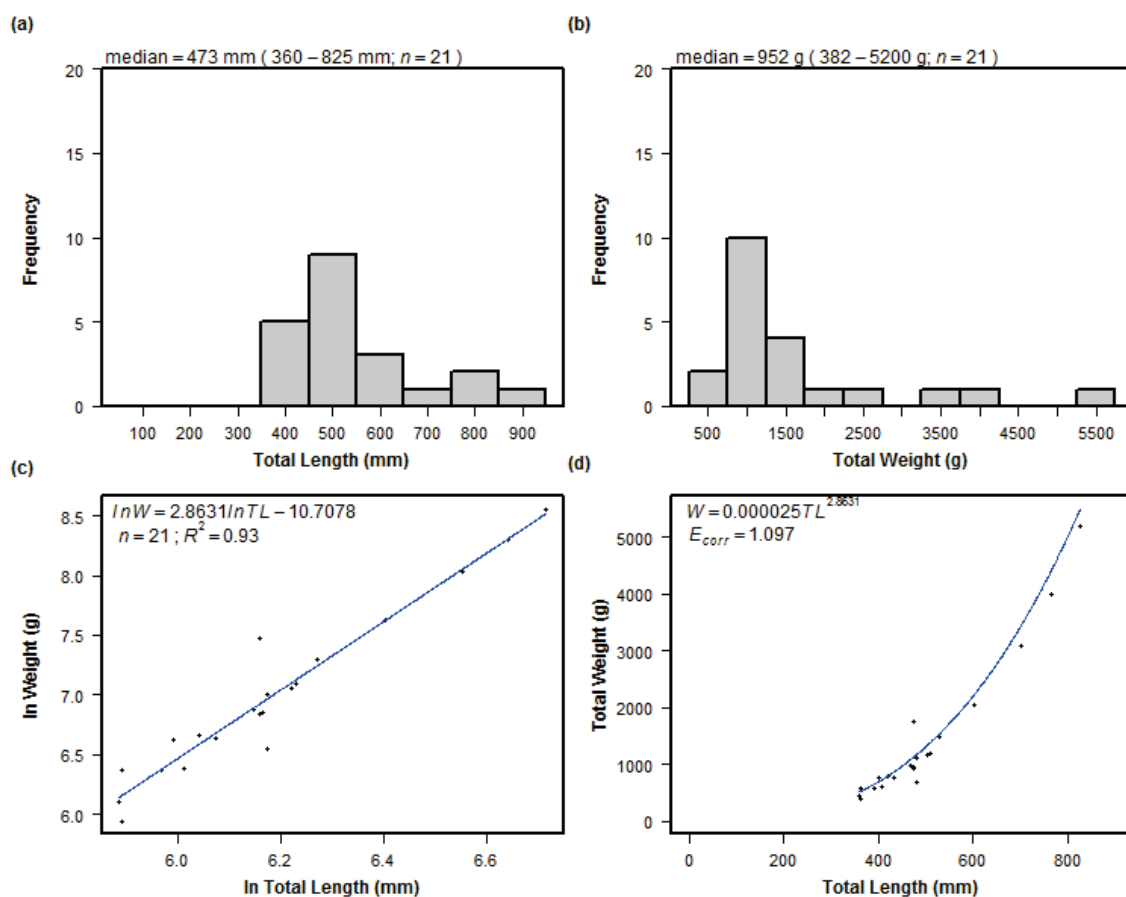


Figure 10. State-wide summary of weight-length data, aggregated across surveys, for Blue Threadfin in Western Australia as derived from Boat Ramp surveys; showing (a) length frequency, (b) weight frequency, (c) weight-total length (ln) linear relationship (blue line) and, (d) bias-corrected weight-length (power) relationship (blue line) with correction factor.

3.2.6 King George Whiting (*Sillaginodes punctata*)

King George Whiting is found in the West Coast and South Coast, and is a nearshore indicator species in both of these bioregions. This species was recorded in large numbers ($n = 2,699$) during the Boat Ramp Surveys, with a median length of 323 mm and weight of 184 g. The high R^2 value indicates a strong relationship between W-TL (0.96) (Figure 11).

Weight-length parameters for King George Whiting were calculated state-wide, and for the West Coast and South Coast, using data from the Boat Ramp Surveys (Appendix 1). FL-TL conversion parameters were also calculated (Appendix 2). Data summaries on length and weight are provided for all bioregions in which the species was recorded (Appendix 3–Appendix 4).

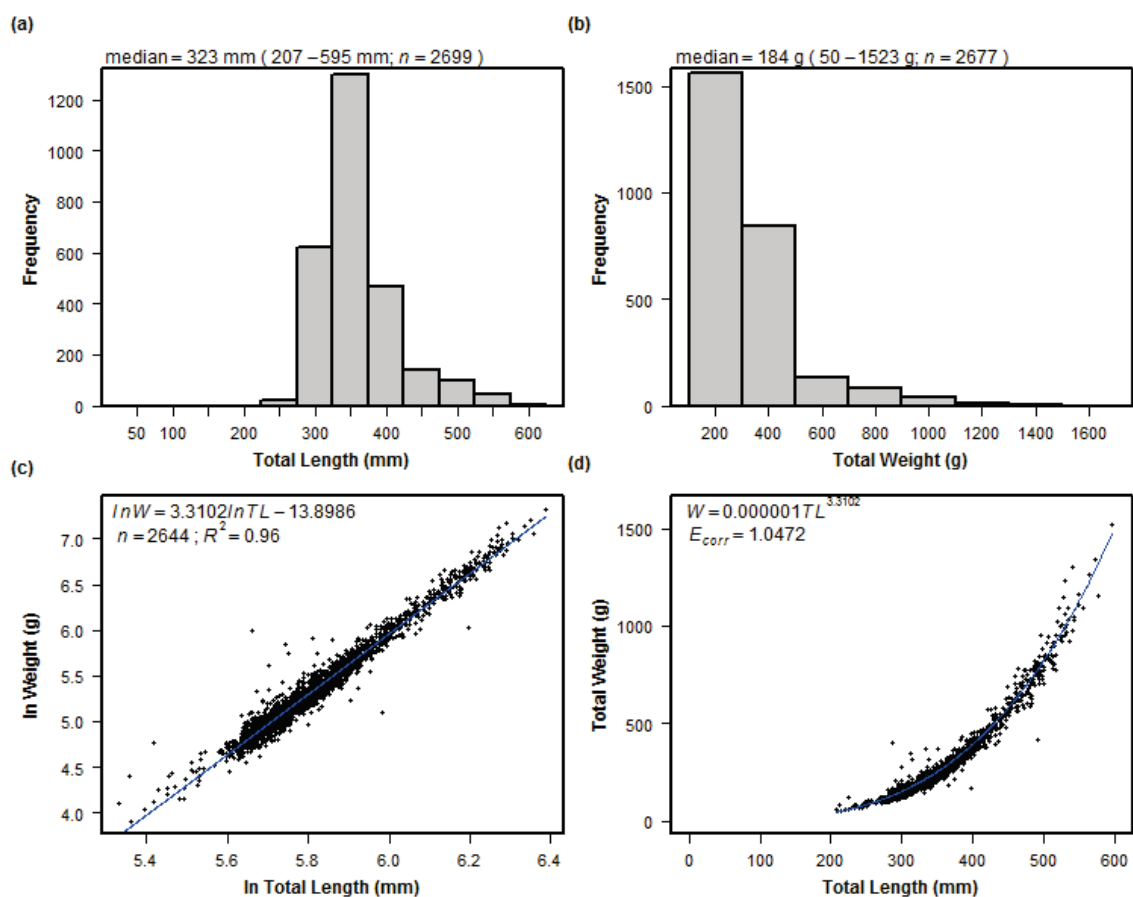


Figure 11. State-wide summary of weight-length data, aggregated across surveys, for King George Whiting in Western Australia as derived from Boat Ramp surveys; showing (a) length frequency, (b) weight frequency, (c) weight-total length (\ln) linear relationship (blue line) and, (d) bias-corrected weight-length (power) relationship (blue line) with correction factor.

3.2.7 School Whiting (*Sillago bassensis*, *vittata* and *schomburgkii*)

Whiting species, including School, Western and Yellowfin Whiting, are distributed in the Gascoyne Coast, West Coast and South Coast, and are nearshore indicator species in all of these bioregions. These species were recorded in large numbers ($n = 3,408$) during the Boat Ramp Surveys, with a median length of 224 mm and weight of 90 g. The high R^2 value indicates a strong relationship between W-TL (0.92) (Figure 12).

Weight-length parameters for School Whiting were calculated state-wide, and for the West Coast and South Coast, using data from the Boat Ramp Surveys (Appendix 1). Insufficient data were collected in the Gascoyne Coast. FL-TL conversion parameters were also calculated (Appendix 2). Data summaries on length and weight are provided for all bioregions in which the species was recorded (Appendix 3–Appendix 4).

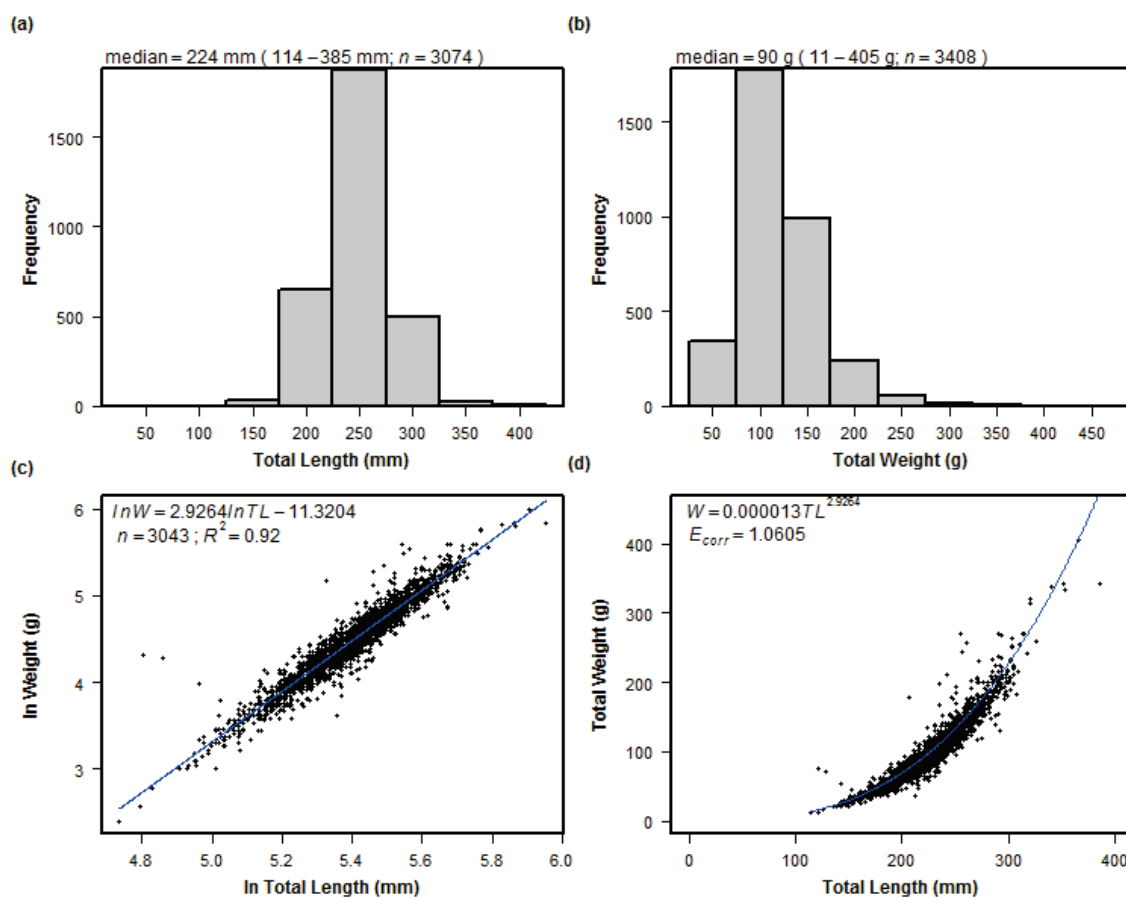


Figure 12. State-wide summary of weight-length data, aggregated across surveys, for School Whiting in Western Australia as derived from Boat Ramp surveys; showing (a) length frequency, (b) weight frequency, (c) weight-total length (\ln) linear relationship (blue line) and, (d) bias-corrected weight-length (power) relationship (blue line) with correction factor.

3.2.8 Western Trumpeter Whiting (*Sillago berrus*)

Western Trumpeter Whiting are distributed in the North Coast Gascoyne Coast and West Coast. This species was recorded in small numbers ($n = 10$) during the Boat Ramp Surveys, with a median length of 186 mm and weight of 61 g. The high R^2 value indicates a strong relationship between W-TL (0.93) (Figure 13).

Weight-length parameters for School Whiting were calculated state-wide, and for the West Coast, using data from the Boat Ramp Surveys (Appendix 1). Insufficient data were collected in the North Coast and Gascoyne Coast. FL-TL conversions are not applicable for this species. Data summaries on length and weight are provided for all bioregions in which the species was recorded (Appendix 3–Appendix 4).

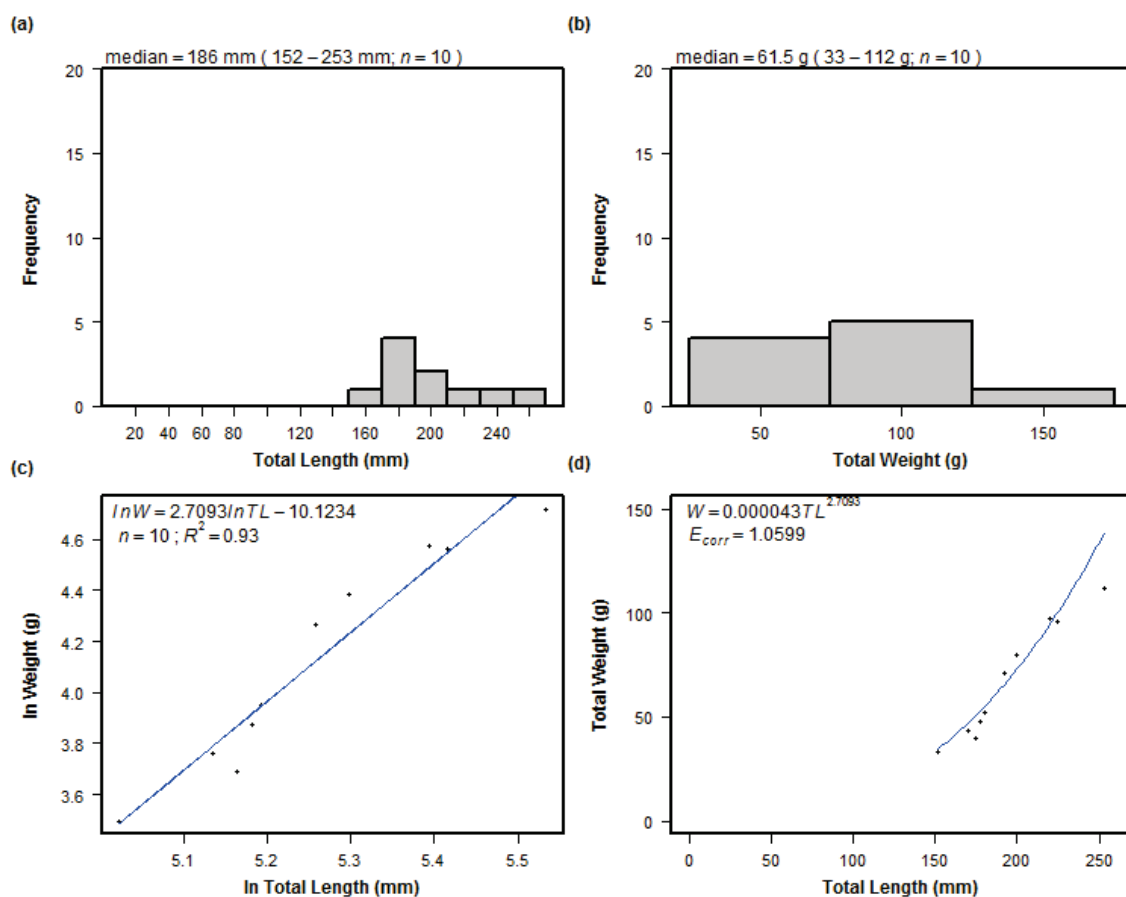


Figure 13. State-wide summary of weight-length data, aggregated across surveys, for Western Trumpeter Whiting in Western Australia as derived from Boat Ramp surveys; showing (a) length frequency, (b) weight frequency, (c) weight-total length (ln) linear relationship (blue line) and, (d) bias-corrected weight-length (power) relationship (blue line) with correction factor.

3.2.9 Mangrove Jack (*Lutjanus argentimaculatus*)

Mangrove Jack is found in the North Coast, Gascoyne Coast and West Coast, and is a nearshore indicator species in the North Coast. A small sample of weight-length data for Mangrove Jack was collected during the Boat Ramp Surveys ($n = 76$) encompassing a large range of length (305–532 mm) and weight (335–2,075 g) values. The R^2 value (0.92) indicated a strong relationship between W-TL (Figure 14).

Weight-length parameters for Mangrove Jack were calculated state-wide, and for the North Coast, using data from the Boat Ramp Surveys (Appendix 1). Insufficient data were collected in the other bioregions. FL-TL conversions are not applicable for this species. Data summaries on length and weight are provided for all bioregions in which the species was recorded (Appendix 3–Appendix 4).

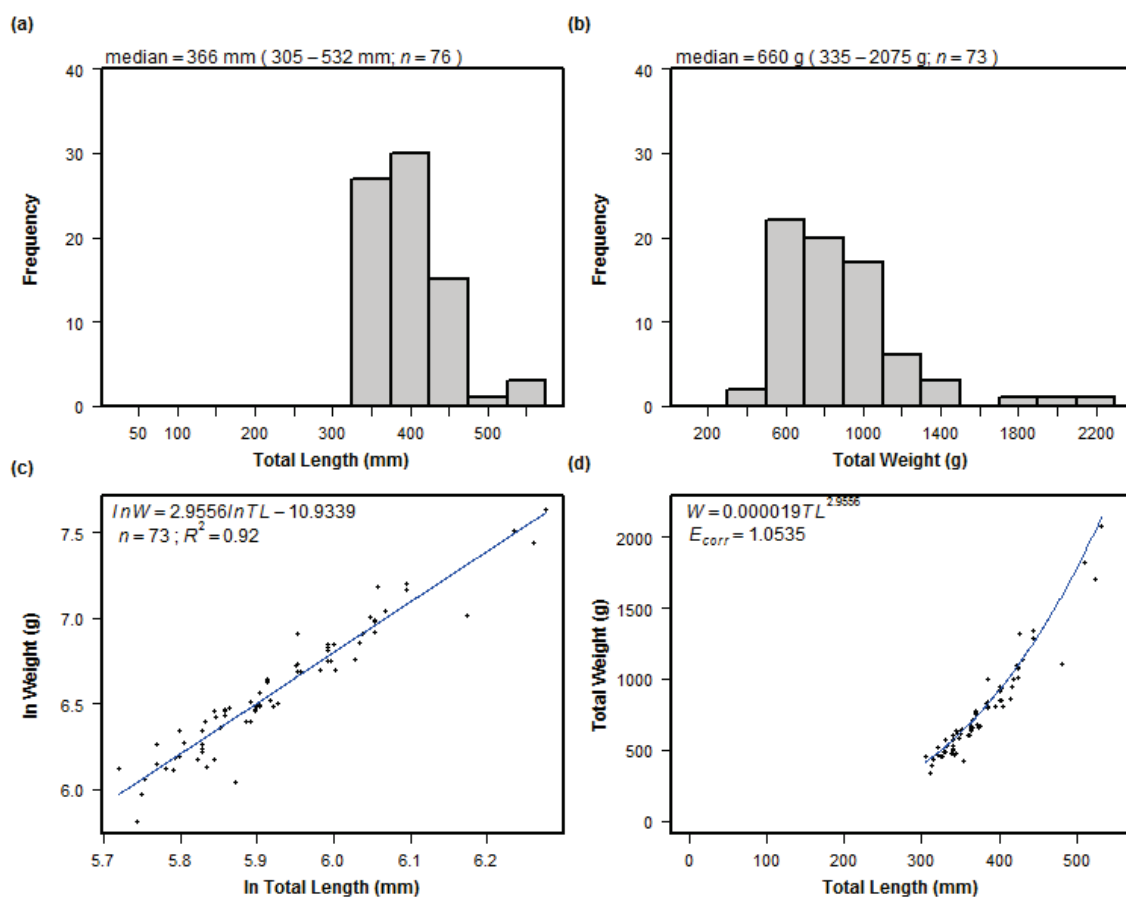


Figure 14. State-wide summary of weight-length data, aggregated across surveys, for Mangrove Jack in Western Australia as derived from Boat Ramp surveys; showing (a) length frequency, (b) weight frequency, (c) weight-total length (ln) linear relationship (blue line) and, (d) bias-corrected weight-length (power) relationship (blue line) with correction factor.

3.2.10 Silver Trevally (*Pseudocaranx dentex* and *P. wrighti*)

Silver Trevally, a general grouping of similar *Pseudocaranx* species, is found in the Gascoyne Coast, West Coast and South Coast. A large sample of weight-length data were obtained for this species group during the Boat Ramp Surveys ($n = 1,312$), encompassing a large range of length (184–910 mm) and weight (77–6,460 g) values. The R^2 value (0.96) indicated a strong relationship between W-TL (Figure 15).

Weight-length parameters for Silver Trevally were calculated state-wide, and for the West Coast and South Coast, using data from the Boat Ramp Surveys (Appendix 1). No data was collected in the Gascoyne Coast. FL-TL conversion parameters were also calculated (Appendix 2). Data summaries on length and weight are provided for all bioregions in which the species was recorded (Appendix 3–Appendix 4).

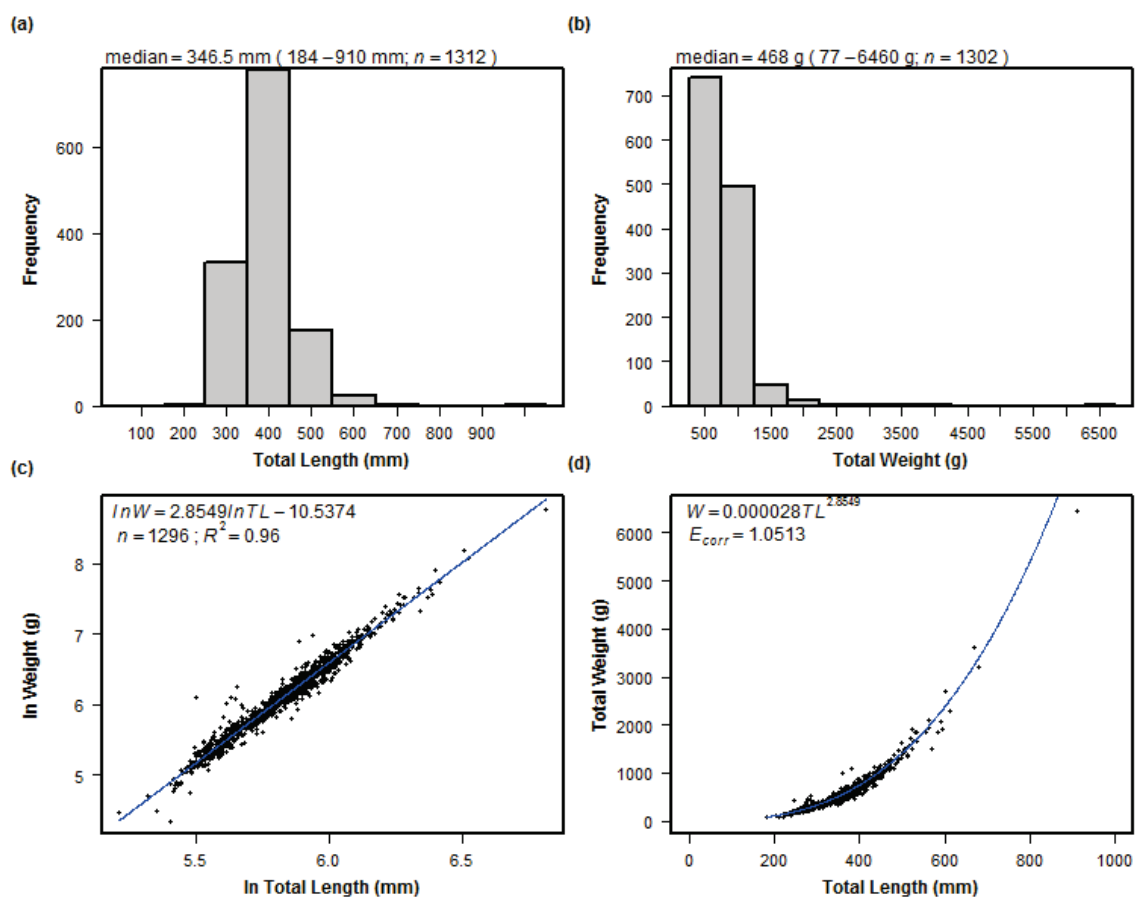


Figure 15. State-wide summary of weight-length data, aggregated across surveys, for Silver Trevally in Western Australia as derived from Boat Ramp surveys; showing (a) length frequency, (b) weight frequency, (c) weight-total length (ln) linear relationship (blue line) and, (d) bias-corrected weight-length (power) relationship (blue line) with correction factor.

3.2.11 Western Butterfish (*Pentapodus vitta*)

Western Butterfish is primarily found in the nearshore environments of the Gascoyne Coast and West Coast. Only a small sample of weight-length data were obtained for this species during the Boat Ramp Surveys ($n = 207$), with a median length of 240 mm and weight of 181 g. The R^2 value (0.89) indicated a strong relationship between W-TL (Figure 16).

Weight-length parameters for Western Butterfish were calculated state-wide, and for the West Coast, using data from the Boat Ramp Surveys (Appendix 1). Insufficient data were collected in the Gascoyne Coast. FL-TL conversion parameters were also calculated (Appendix 2). Data summaries on length and weight are provided for all bioregions in which the species was recorded (Appendix 3–Appendix 4).

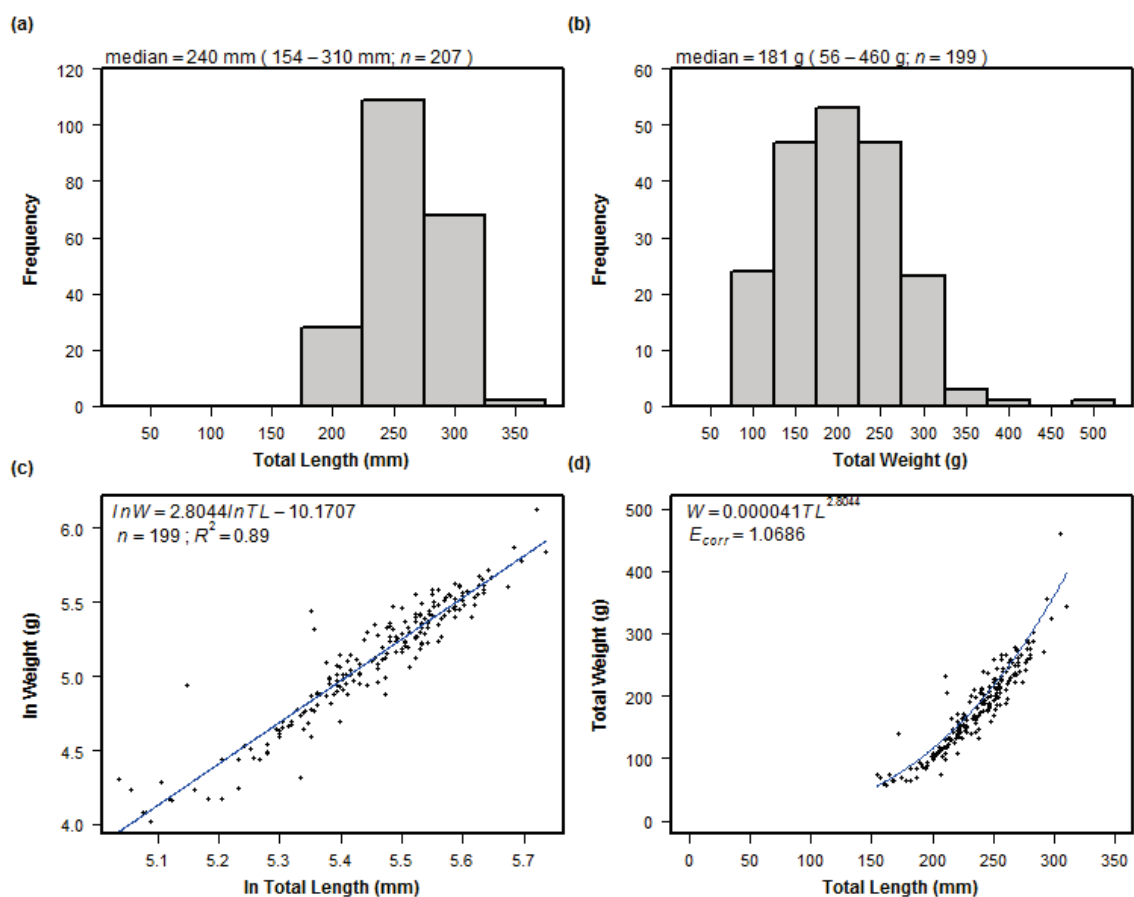


Figure 16. State-wide summary of weight-length data, aggregated across surveys, for Western Butterfish in Western Australia as derived from Boat Ramp surveys; showing (a) length frequency, (b) weight frequency, (c) weight-total length (ln) linear relationship (blue line) and, (d) bias-corrected weight-length (power) relationship (blue line) with correction factor.

3.2.12 Western Yellowfin Bream (*Acanthopagrus morrisoni*)

Western Yellowfin Bream is found in the North Coast and Gascoyne Coast. Only a small sample of weight-length data were recorded for this species during the Boat Ramp Surveys ($n = 29$), with a median length of 307 mm and weight 510 g. The R^2 value (0.91) indicated a strong relationship between W-TL (Figure 17).

Weight-length parameters for Western Yellowfin Bream were calculated state-wide, and for the North Coast, using data from the Boat Ramp Surveys (Appendix 1). Insufficient data were collected in the Gascoyne Coast. FL-TL conversion parameters were also calculated (Appendix 2). Data summaries on length and weight are provided for all bioregions in which the species was recorded (Appendix 3–Appendix 4).

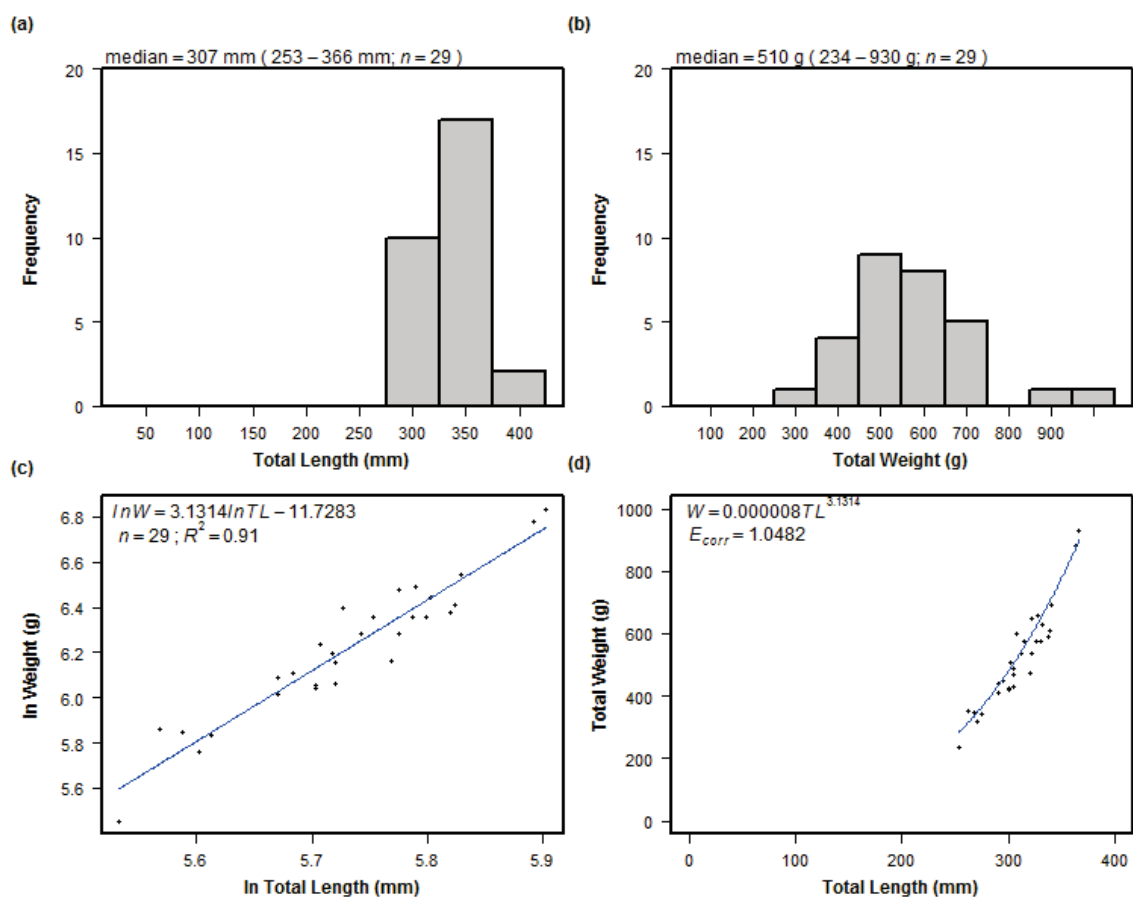


Figure 17. State-wide summary of weight-length data, aggregated across surveys, for Western Yellowfin Bream in Western Australia as derived from Boat Ramp surveys; showing (a) length frequency, (b) weight frequency, (c) weight-total length (ln) linear relationship (blue line) and, (d) bias-corrected weight-length (power) relationship (blue line) with correction factor.

3.2.13 Western King Wrasse (*Coris auricularis*)

Western King Wrasse is found in the Gascoyne Coast, West Coast and South Coast. Only a small sample of weight-length data was collected for this species during the Boat Ramp Surveys ($n = 395$), with a median length of 305 mm and weight of 307 g. The high R^2 value (0.95) indicated a strong relationship between W-TL (Figure 18).

Weight-length parameters for Western King Wrasse were calculated state-wide, and for the West Coast and South Coast, using data from the Boat Ramp Surveys (Appendix 1). No data was collected in the Gascoyne Coast. FL-TL conversions are not applicable for this species. Data summaries on length and weight are provided for all bioregions in which the species was recorded (Appendix 3: Appendix 4).

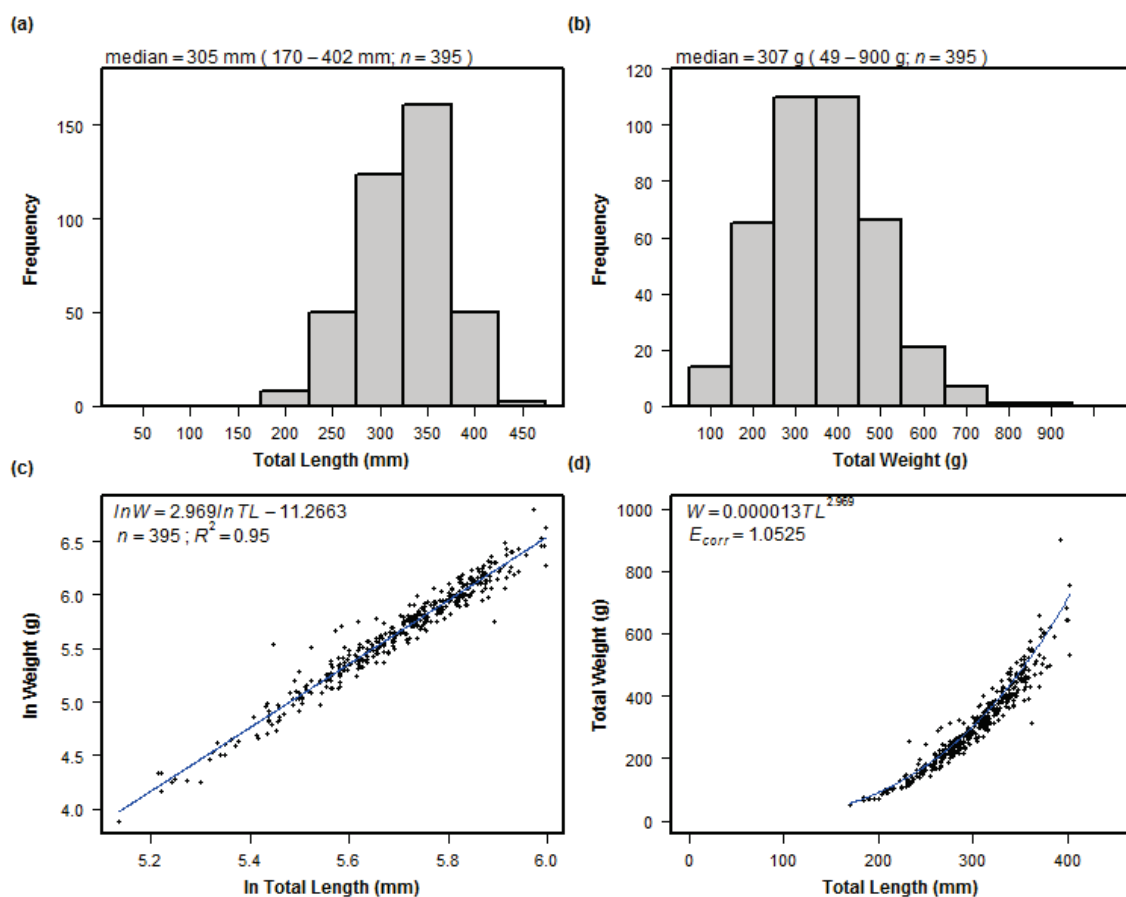


Figure 18. State-wide summary of weight-length data, aggregated across surveys, for Western King Wrasse in Western Australia as derived from Boat Ramp surveys; showing (a) length frequency, (b) weight frequency, (c) weight-total length (ln) linear relationship (blue line) and, (d) bias-corrected weight-length (power) relationship (blue line) with correction factor.

3.2.14 Brownspotted Wrasse (*Notolabrus parilus*)

Brownspotted Wrasse is found in the nearshore environment of the Gascoyne Coast, West Coast and South Coast. A small sample of weight-length data were obtained for this species during the Boat Ramp Surveys ($n = 345$), encompassing a large range of length (143–447 mm) and weight (47–1,145 g) values. The high R^2 value (0.97) indicated a strong relationship between W-TL (Figure 19).

Weight-length parameters for Brownspotted Wrasse were calculated state-wide, and for the West Coast and South Coast, using data from the Boat Ramp Surveys (Appendix 1). No data was collected in the Gascoyne Coast. FL-TL conversions are not applicable for this species. Data summaries on length and weight are provided for all bioregions in which the species was recorded (Appendix 3; Appendix 4).

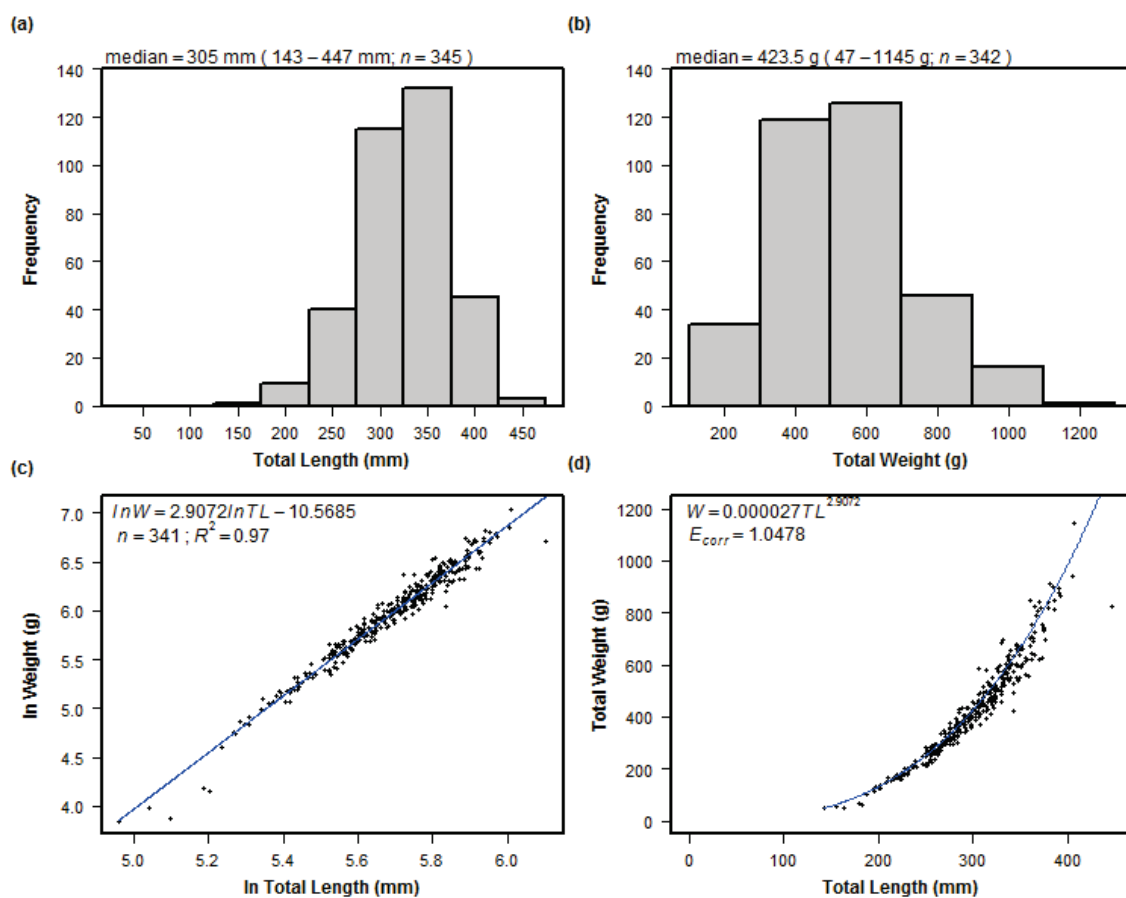


Figure 19. State-wide summary of weight-length data, aggregated across surveys, for Brownspotted Wrasse in Western Australia as derived from Boat Ramp surveys; showing (a) length frequency, (b) weight frequency, (c) weight-total length (ln) linear relationship (blue line) and, (d) bias-corrected weight-length (power) relationship (blue line) with correction factor.

3.3 Inshore Demersal

3.3.1 Baldchin Groper (*Choerodon rubescens*)

Baldchin Groper is found in the Gascoyne Coast and West Coast, and is an inshore demersal indicator species in the West Coast. A large sample of weight-length data were obtained for this species during the Boat Ramp Surveys ($n = 664$), encompassing a large range of length (303–800 mm) and weight (618–7,860 g) values. The R^2 value (0.94) indicated a strong relationship between W-TL (Figure 20).

Weight-length parameters for Baldchin Groper were calculated state-wide, and for the Gascoyne Coast and West Coast, using data from the Boat Ramp Surveys (Appendix 1). FL-TL conversions are not applicable for this species. Data summaries on length and weight are provided for all bioregions in which the species was recorded (Appendix 3; Appendix 4).

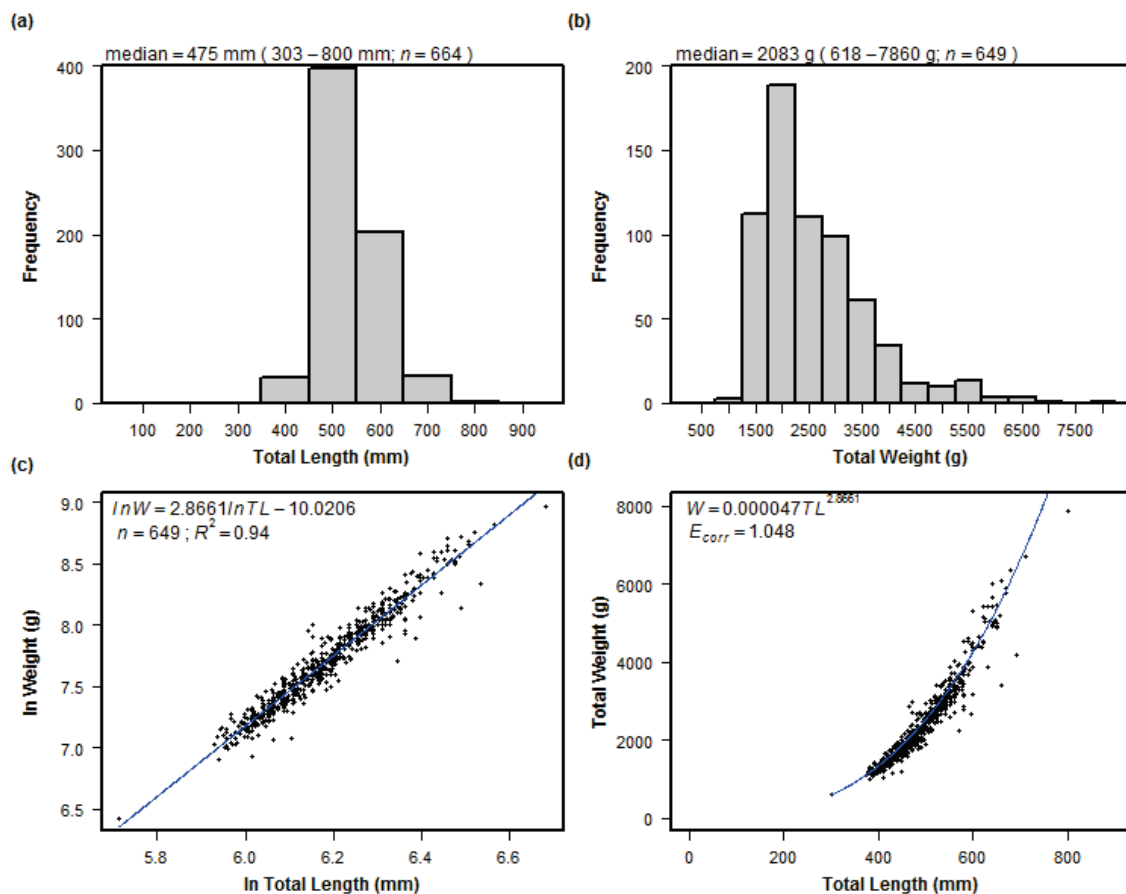


Figure 20. State-wide summary of weight-length data, aggregated across surveys, for Baldchin Groper in Western Australia as derived from Boat Ramp surveys; showing (a) length frequency, (b) weight frequency, (c) weight-total length (\ln) linear relationship (blue line) and, (d) bias-corrected weight-length (power) relationship (blue line) with correction factor.

3.3.2 Bight Redfish (*Centroberyx gerrardi*)

Bight Redfish is found in the West Coast and South Coast, and is an inshore demersal indicator species in both of these bioregions. A small sample of weight-length data were obtained for this species during the Boat Ramp Surveys ($n = 481$), with a median length of 410 mm and weight of 998 g. The high R^2 value (0.97) indicated a strong relationship between W-TL (Figure 21).

Weight-length parameters for Bight Redfish were calculated state-wide, and for the West Coast and South Coast, using data from the Boat Ramp Surveys (Appendix 1). FL-TL conversion parameters were also calculated (Appendix 2). Data summaries on length and weight are provided for all bioregions in which the species was recorded (Appendix 3; Appendix 4).

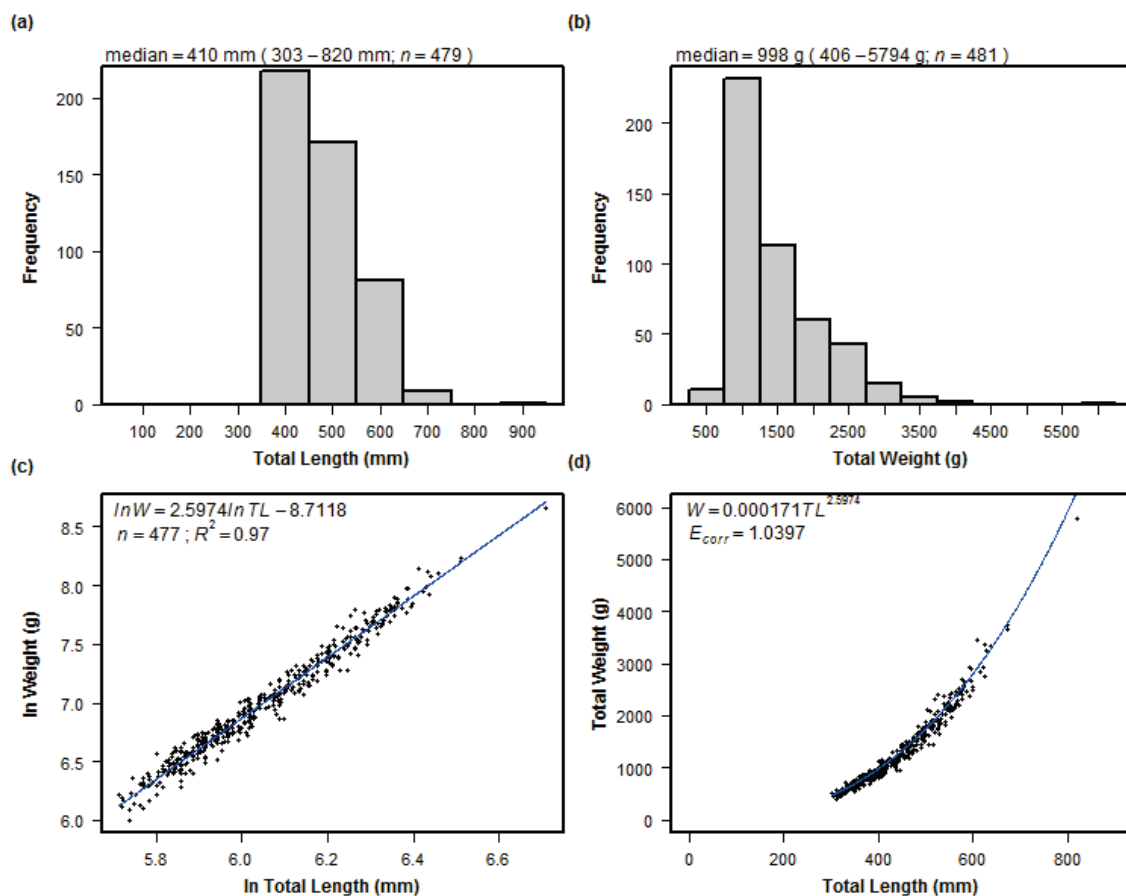


Figure 21. State-wide summary of weight-length data, aggregated across surveys, for Bight Redfish in Western Australia as derived from Boat Ramp surveys; showing (a) length frequency, (b) weight frequency, (c) weight-total length (ln) linear relationship (blue line) and, (d) bias-corrected weight-length (power) relationship (blue line) with correction factor.

3.3.3 Blue Morwong (*Nemadactylus valenciennesi*)

Blue Morwong is found in the West Coast and South Coast, and is an inshore demersal indicator species in the West Coast. A small sample of weight-length data were obtained for this species during the Boat Ramp Surveys ($n = 298$), encompassing a large range of length (378–875 mm) and weight (724–7,779 g) values. The high R^2 value (0.95) indicated a strong relationship between W-TL (Figure 22).

Weight-length parameters for Blue Morwong were calculated state-wide, and for the West Coast and South Coast, using data from the Boat Ramp Surveys (Appendix 1). FL-TL conversion parameters were also calculated (Appendix 2). Data summaries on length and weight are provided for all bioregions in which the species was recorded (Appendix 3; Appendix 4).

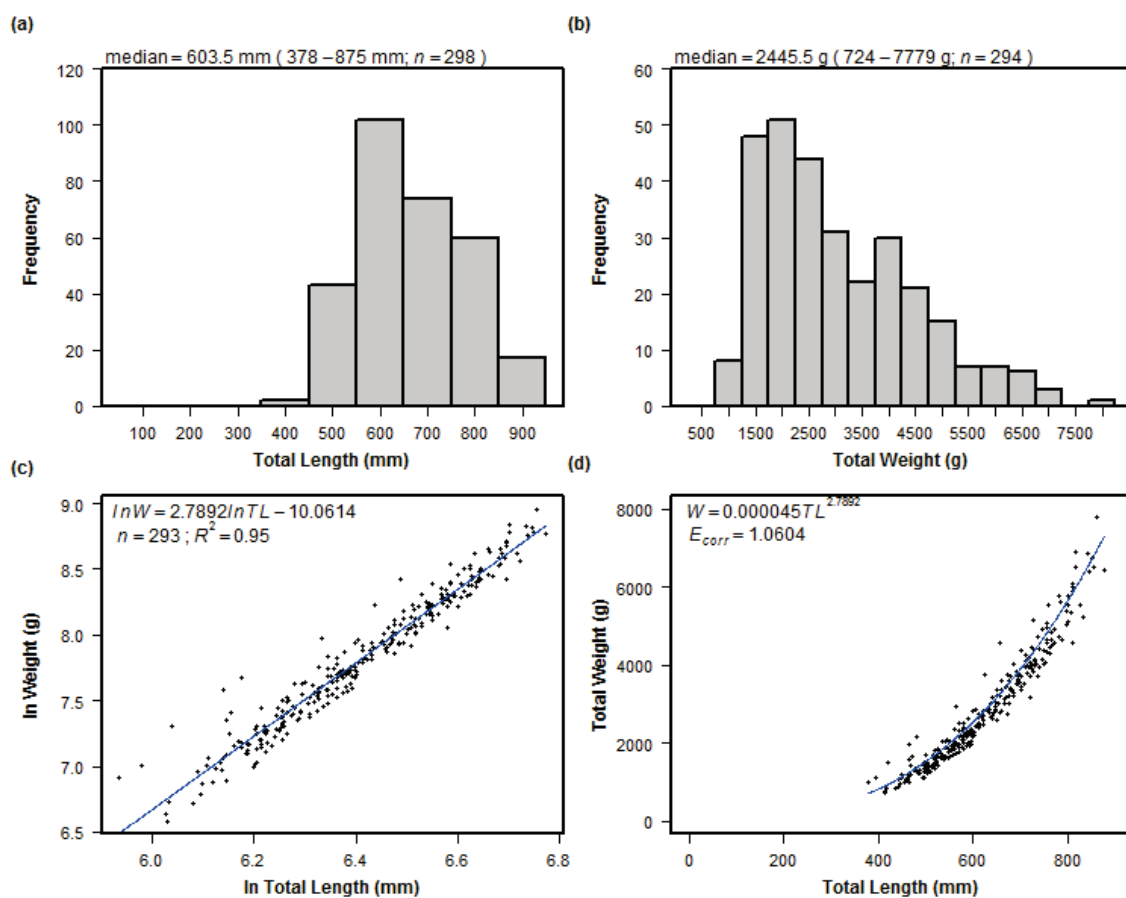


Figure 22. State-wide summary of weight-length data, aggregated across surveys, for Blue Morwong in Western Australia as derived from Boat Ramp surveys; showing (a) length frequency, (b) weight frequency, (c) weight-total length (ln) linear relationship (blue line) and, (d) bias-corrected weight-length (power) relationship (blue line) with correction factor.

3.3.4 Bluespotted Emperor (*Lethrinus punctulatus*)

Bluespotted Emperor is found in the North Coast and Gascoyne Coast, and is an inshore demersal indicator species in the North Coast. Only 13 fish were measured during the Boat Ramp Surveys and this was insufficient to undertake a reliable regression analysis. However, data summaries (Appendix 3; Appendix 4) were provided for all bioregions in which measurements were obtained.

3.3.5 Brownstripe Snapper (*Lutjanus vitta*)

Brownstripe Snapper is found in the North Coast and Gascoyne Coast, and is an inshore demersal indicator species in the North Coast. Only seven fish were measured during the Boat Ramp Surveys (none in the Gascoyne Coast) and this was insufficient to undertake regression analysis. However, data summaries (Appendix 3; Appendix 4) were provided for the North Coast.

3.3.6 Goldband Snapper (*Pristipomoides multidens*)

Goldband Snapper is found in the North Coast and Gascoyne Coast, and is an inshore demersal indicator species in both of these bioregions. A small sample of weight-length data were obtained for this species during the Boat Ramp Surveys ($n = 199$), encompassing a large range of length (366–800 mm) and weight (528–6,442 g) values. The high R^2 value (0.96) indicated a strong relationship between W-TL (Figure 23).

Weight-length parameters for Goldband Snapper were calculated state-wide, and for the Gascoyne Coast, using data from the Boat Ramp Surveys (Appendix 1). Insufficient data were collected in the North Coast. FL-TL conversion parameters were also calculated (Appendix 2). Data summaries on length and weight are provided for all bioregions in which the species was recorded (Appendix 3; Appendix 4).

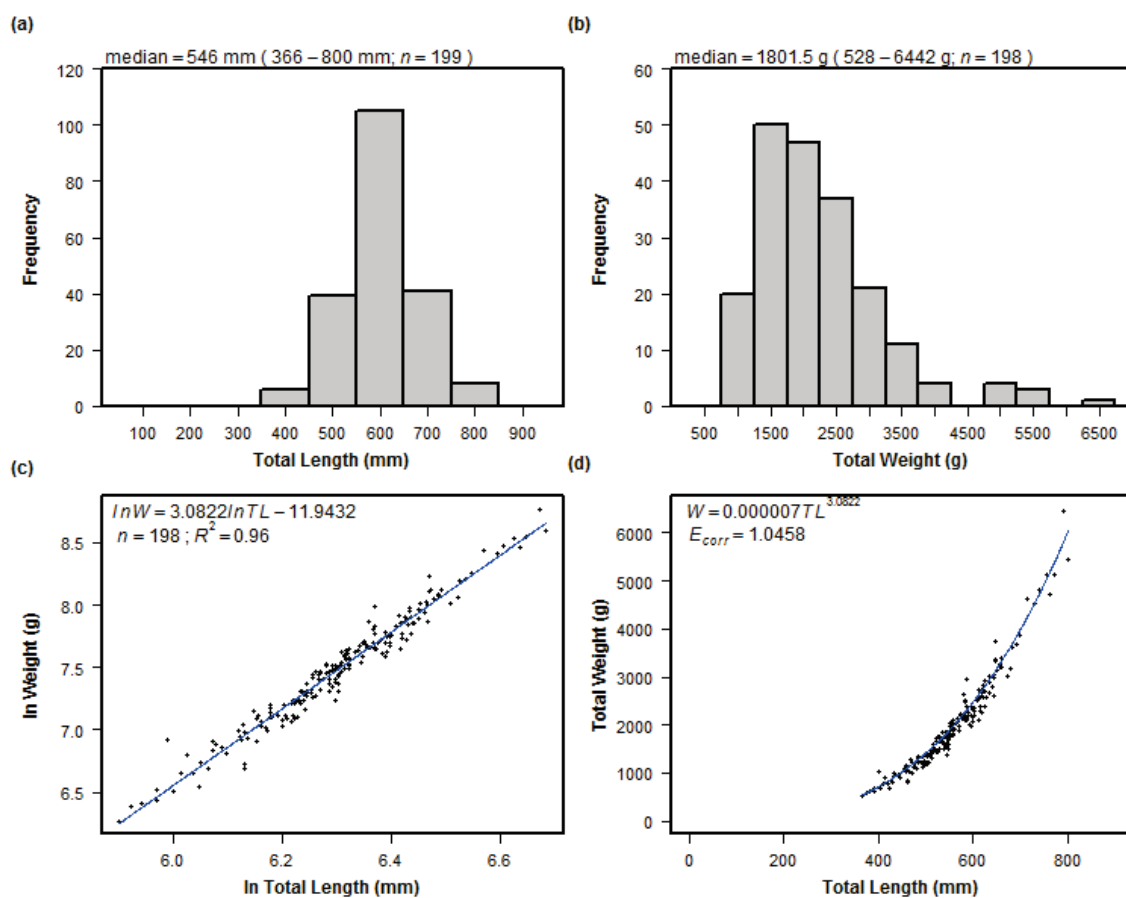


Figure 23. State-wide summary of weight-length data, aggregated across surveys, for Goldband Snapper in Western Australia as derived from Boat Ramp surveys; showing (a) length frequency, (b) weight frequency, (c) weight-total length (ln) linear relationship (blue line) and, (d) bias-corrected weight-length (power) relationship (blue line) with correction factor.

3.3.7 Pink Snapper (*Chrysophrys auratus*)

Pink Snapper, previously known as *Pagrus auratus*, but now classified as *Chrysophrys auratus*, is harvested state-wide. Pink Snapper is an inshore demersal indicator species in the Gascoyne Coast, West Coast and South Coast, and is a nearshore indicator species in the Gascoyne Coast. A small sample of weight-length data were obtained for this species during the Boat Ramp Surveys ($n = 470$), encompassing a large range of length (180–1,009 mm) and weight (100–11,086 g) values. The high R^2 value (0.97) indicated a strong relationship between W-TL (Figure 24).

Weight-length parameters for Pink Snapper were calculated state-wide, and for the Gascoyne Coast, West Coast and South Coast, using data from the Boat Ramp Surveys (Appendix 1). No data was collected in the North Coast. FL-TL conversion parameters were also calculated (Appendix 2). Data summaries on length and weight are provided for all bioregions in which the species was recorded (Appendix 3; Appendix 4).

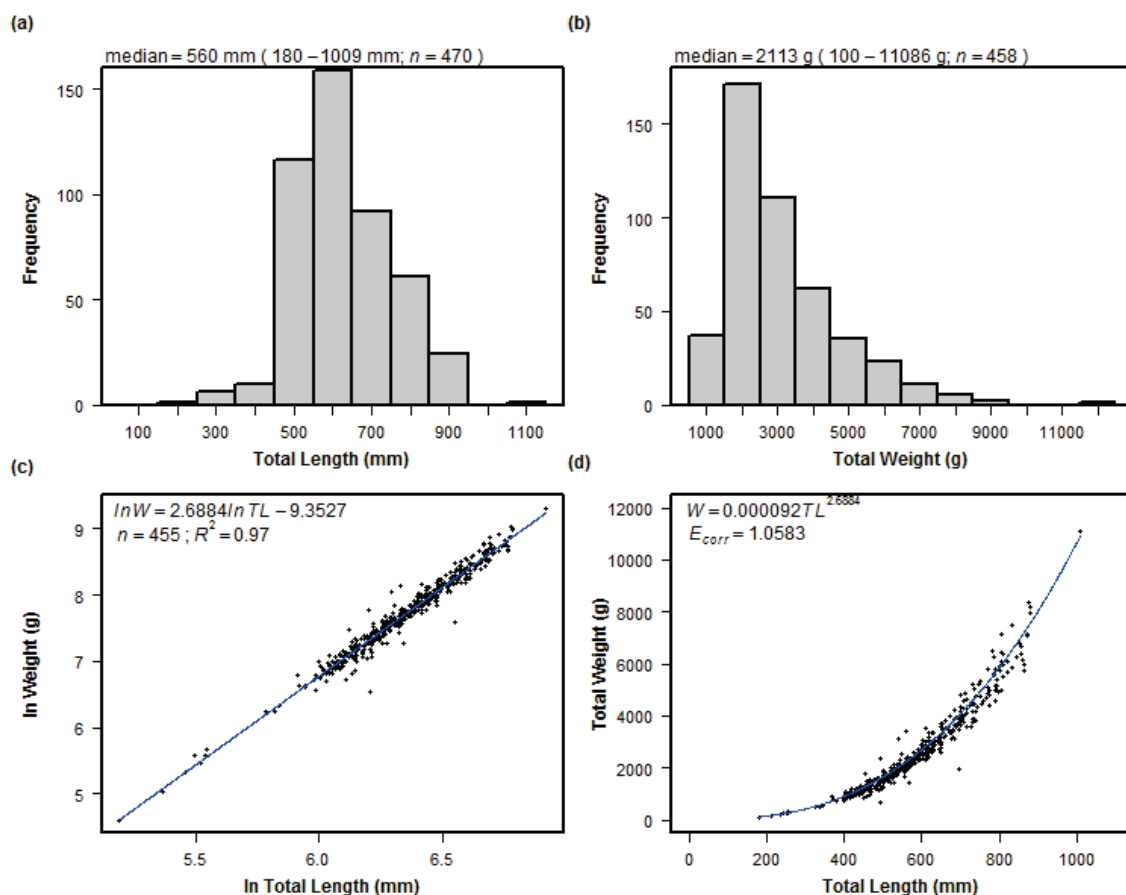


Figure 24. State-wide summary of weight-length data, aggregated across surveys, for Pink Snapper in Western Australia as derived from Boat Ramp surveys; showing (a) length frequency, (b) weight frequency, (c) weight-total length (ln) linear relationship (blue line) and, (d) bias-corrected weight-length (power) relationship (blue line) with correction factor.

3.3.8 Rankin Cod (*Epinephelus multinotatus*)

Rankin Cod is found in the North Coast and Gascoyne Coast, and is an inshore demersal indicator species in the North Coast. A small sample of weight-length data were obtained for this species during the Boat Ramp Surveys ($n = 137$), encompassing a large range of length (304–880 mm) and weight (481–10,237 g) values. The R^2 value (0.97) indicated a strong relationship between W-TL (Figure 25).

Weight-length parameters for Rankin Cod were calculated state-wide, and for the North Coast and Gascoyne Coast, using data from the Boat Ramp Surveys (Appendix 1). FL-TL conversions are not applicable for this species. Data summaries on length and weight are provided for all bioregions in which the species was recorded (Appendix 3; Appendix 4).

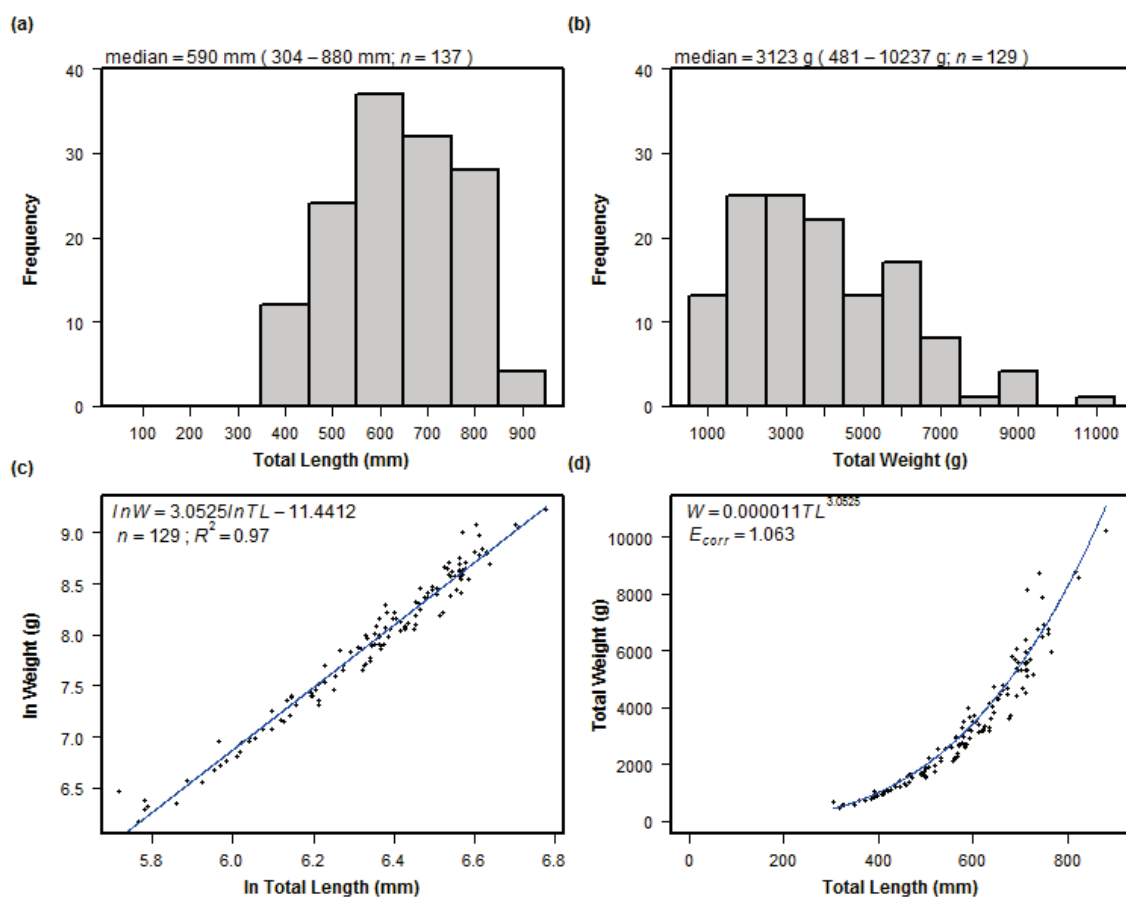


Figure 25. State-wide summary of weight-length data, aggregated across surveys, for Rankin Cod in Western Australia as derived from Boat Ramp surveys; showing (a) length frequency, (b) weight frequency, (c) weight-total length (ln) linear relationship (blue line) and, (d) bias-corrected weight-length (power) relationship (blue line) with correction factor.

3.3.9 Red Emperor (*Lutjanus sebae*)

Red Emperor is found in the North Coast and Gascoyne Coast, and is an inshore demersal indicator species in both of these bioregions. Its distribution is now extending into the West Coast and was recorded as far south as Jurien Bay in the Boat Ramp Surveys. A small number of fish were measured during the Boat Ramp Surveys ($n = 184$), with a median length of 550 mm and weight of 2,937 g. The high R^2 value (0.96) indicated a strong relationship between W-TL (Figure 26).

Weight-length parameters for Red Emperor were calculated state-wide, and for the North Coast and Gascoyne Coast, using data from the Boat Ramp Surveys (Appendix 1). Insufficient data were collected in the West Coast. FL-TL conversion parameters were also calculated (Appendix 2). Data summaries on length and weight are provided for all bioregions in which the species was recorded (Appendix 3; Appendix 4).

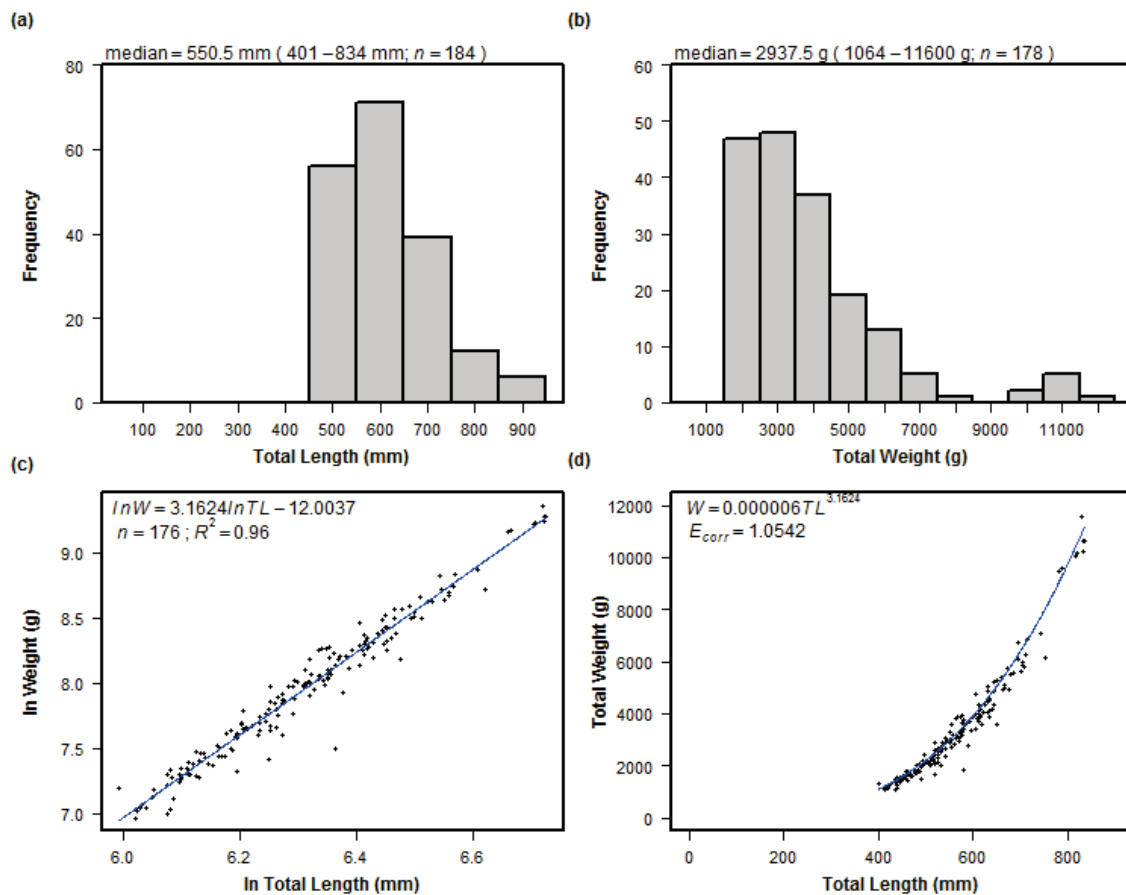


Figure 26. State-wide summary of weight-length data, aggregated across surveys, for Red Emperor in Western Australia as derived from Boat Ramp surveys; showing (a) length frequency, (b) weight frequency, (c) weight-total length (ln) linear relationship (blue line) and, (d) bias-corrected weight-length (power) relationship (blue line) with correction factor.

3.3.10 Spangled Emperor (*Lethrinus nebulosus*)

Spangled Emperor is found in the North Coast, Gascoyne Coast and West Coast, and is an inshore demersal indicator species in the Gascoyne Coast. This species was recorded as far south as the Perth Metropolitan area which is beyond its usual established range. A small number of fish were measured during the Boat Ramp Surveys ($n = 388$), with a median length of 518 mm and weight of 1,799 g. The high R^2 value (0.95) indicated a strong relationship between W-TL (Figure 27).

Weight-length parameters for Spangled Emperor were calculated state-wide, and for the North Coast, Gascoyne Coast and West Coast, using data from the Boat Ramp Surveys (Appendix 1). FL-TL conversion parameters were also calculated (Appendix 2). Data summaries on length and weight are provided for all bioregions in which the species was recorded (Appendix 3; Appendix 4).

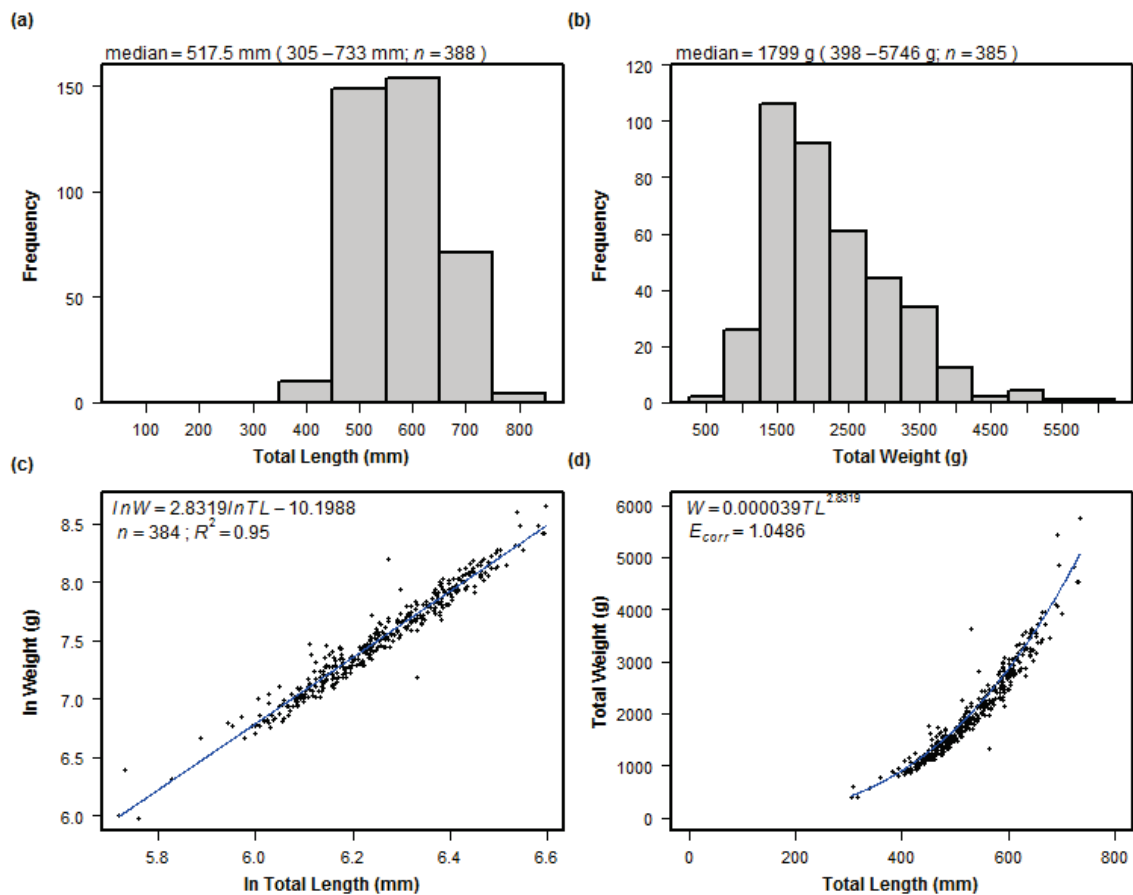


Figure 27. State-wide summary of weight-length data, aggregated across surveys, for Spangled Emperor in Western Australia as derived from Boat Ramp surveys; showing (a) length frequency, (b) weight frequency, (c) weight-total length (ln) linear relationship (blue line) and, (d) bias-corrected weight-length (power) relationship (blue line) with correction factor.

3.3.11 West Australian Dhufish (*Glaucosoma hebraicum*)

West Australian Dhufish is found in the West Coast and South Coast, and is an inshore demersal indicator species in the West Coast. A large number of fish were measured during the Boat Ramp Surveys ($n = 805$), with a median length of 625 mm and weight of 4,031 g. The high R^2 value (0.96) indicated a strong relationship between W-TL, although length and weight frequencies were skewed towards smaller fish (Figure 28).

Weight-length parameters for West Australian Dhufish were calculated state-wide, and for the West Coast and South Coast, using data from the Boat Ramp Surveys (Appendix 1). FL-TL conversions are not applicable for this species. Data summaries on length and weight are provided for all bioregions in which the species was recorded (Appendix 3; Appendix 4).

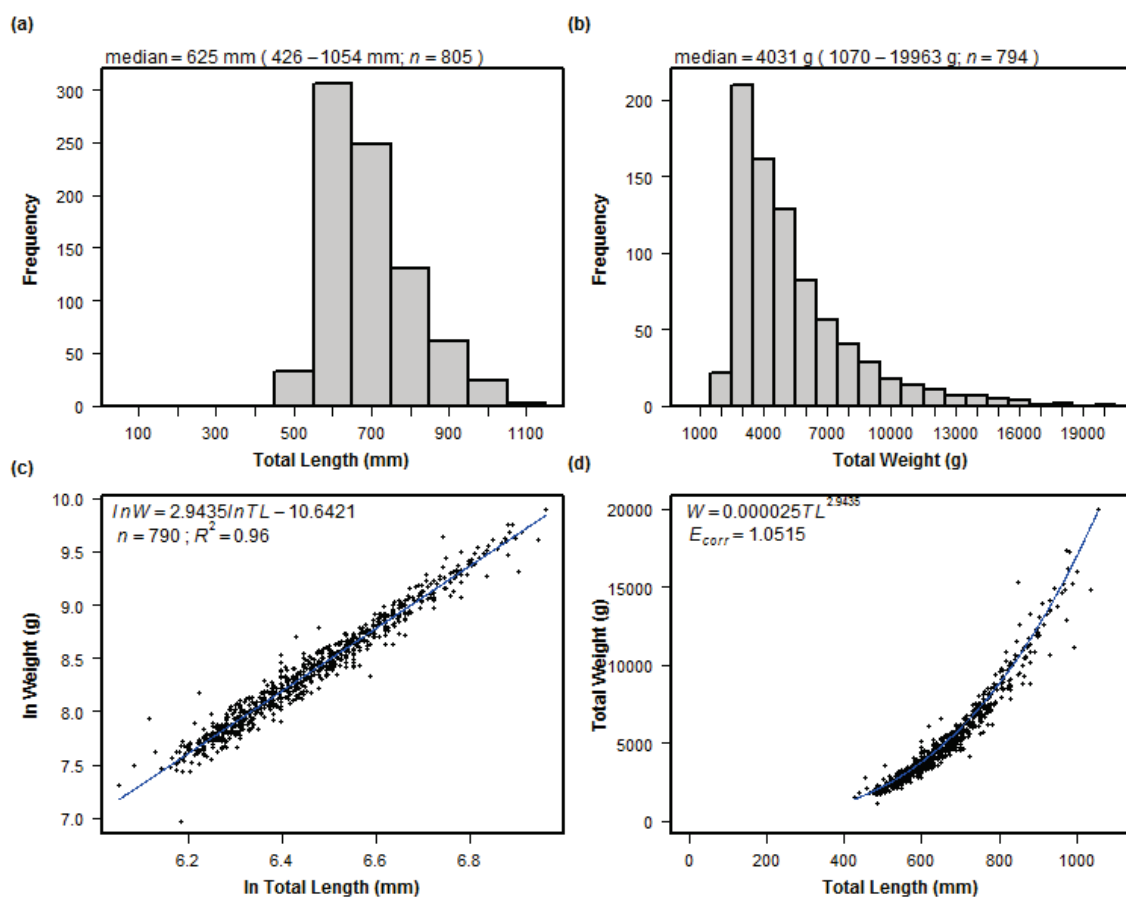


Figure 28. State-wide summary of weight-length data, aggregated across surveys, for West Australian Dhufish in Western Australia as derived from Boat Ramp surveys; showing (a) length frequency, (b) weight frequency, (c) weight-total length (\ln) linear relationship (blue line) and, (d) bias-corrected weight-length (power) relationship (blue line) with correction factor.

3.3.12 Barcheek Coral Trout (*Plectropomus maculatus*)

Barcheek Coral Trout is found in the North Coast, Gascoyne Coast and West Coast. A small number of fish were measured during the Boat Ramp Surveys ($n = 138$), with a median length of 532 mm and weight of 1,915 g. The high R^2 value (0.94) indicated a strong relationship between W-TL (Figure 29).

Weight-length parameters for Barcheek Coral Trout were calculated state-wide, and for the North Coast and Gascoyne Coast, using data from the Boat Ramp Surveys (Appendix 1). Insufficient data were collected in the West Coast. FL-TL conversions are not applicable for this species. Data summaries on length and weight are provided for all bioregions in which the species was recorded (Appendix 3; Appendix 4).

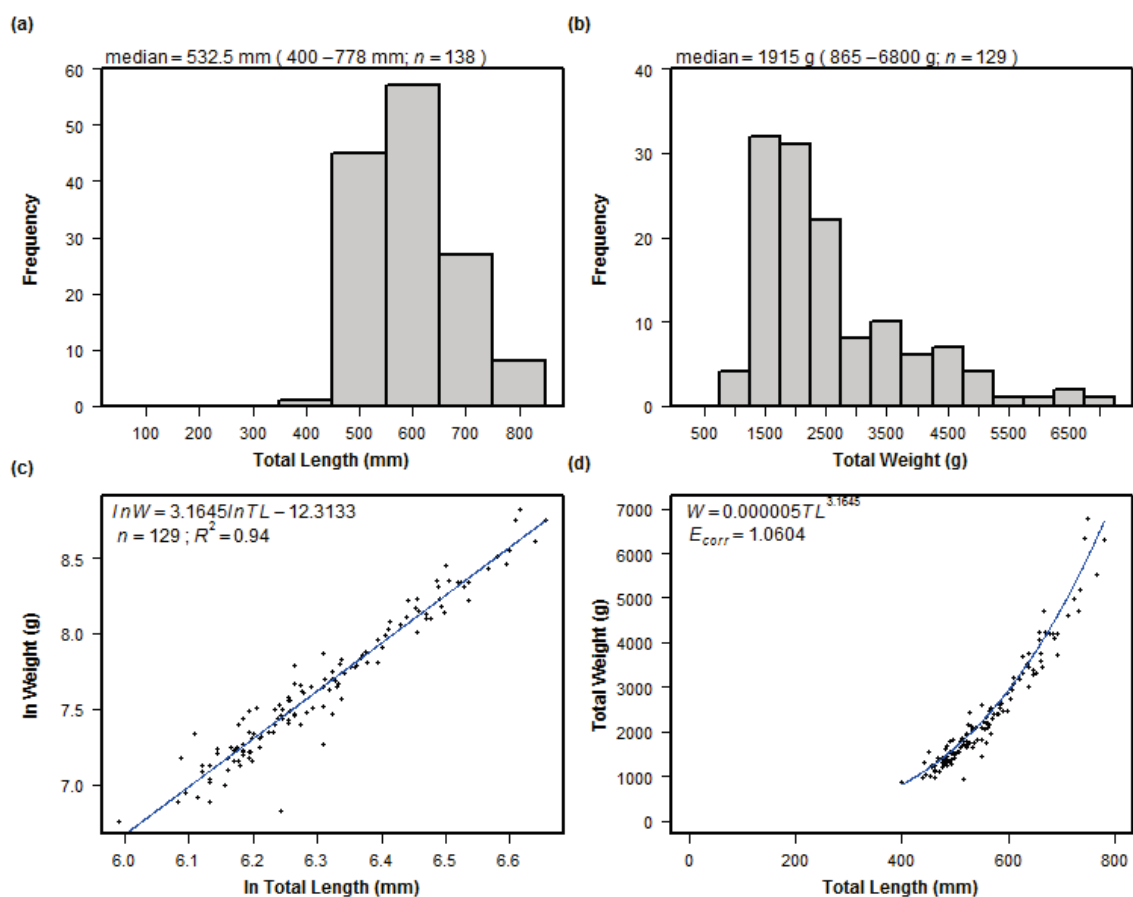


Figure 29. State-wide summary of weight-length data, aggregated across surveys, for Barcheek Coral Trout in Western Australia as derived from Boat Ramp surveys; showing (a) length frequency, (b) weight frequency, (c) weight-total length (ln) linear relationship (blue line) and, (d) bias-corrected weight-length (power) relationship (blue line) with correction factor.

3.3.13 Common Coral Trout (*Plectropomus leopardus*)

Common Coral Trout is found in the North Coast, Gascoyne Coast and West Coast. A small number of fish were measured during the Boat Ramp Surveys ($n = 32$), with a median length of 520 mm and weight of 1,730 g. The high R^2 value (0.89) indicated a moderate relationship between W-TL (Figure 30).

Weight-length parameters for Common Coral Trout were calculated state-wide, and for the West Coast, using data from the Boat Ramp Surveys; insufficient data were collected in the Gascoyne Coast while no data was obtained from the North Coast (Appendix 1). FL-TL conversions are not applicable for this species. Data summaries on length and weight are provided for all bioregions in which the species was recorded (Appendix 3; Appendix 4).

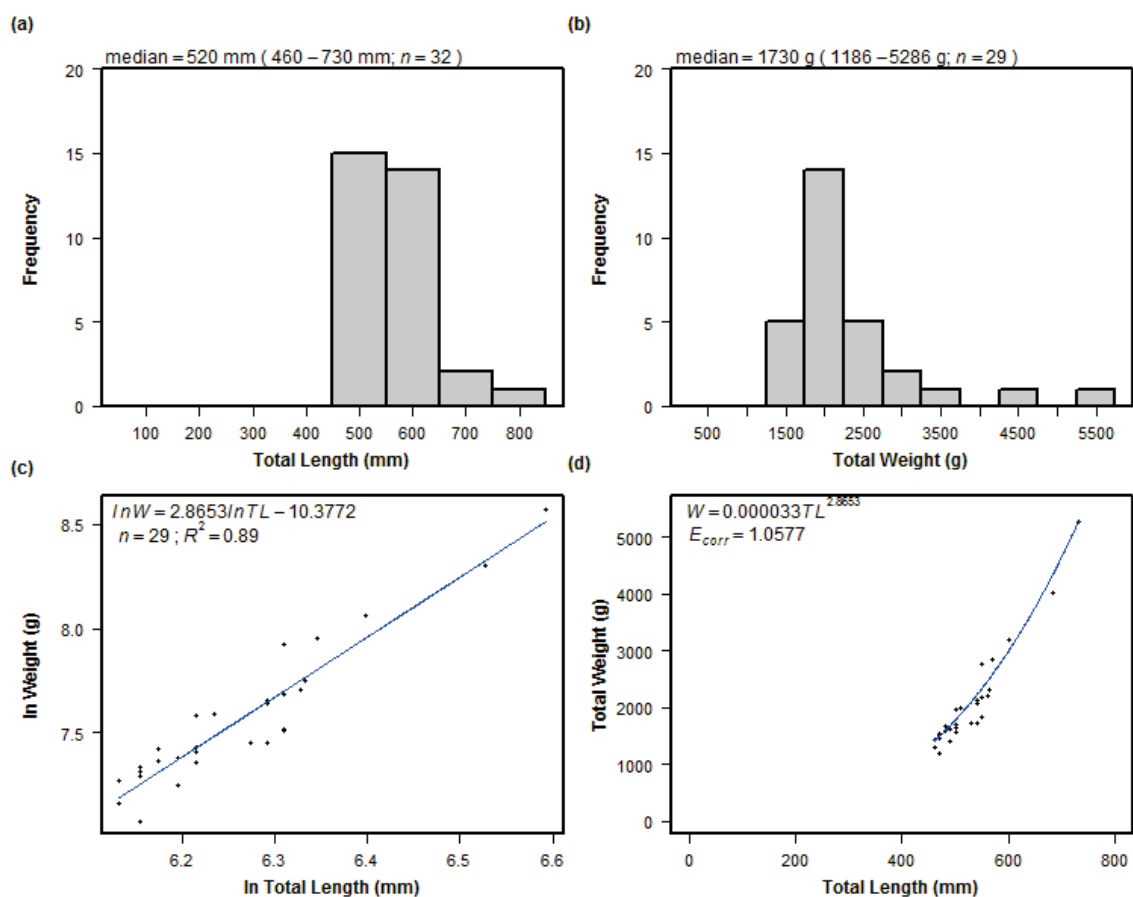


Figure 30. State-wide summary of weight-length data, aggregated across surveys, for Common Coral Trout in Western Australia as derived from Boat Ramp surveys; showing (a) length frequency, (b) weight frequency, (c) weight-total length (ln) linear relationship (blue line) and, (d) bias-corrected weight-length (power) relationship (blue line) with correction factor.

3.3.14 Breaksea Cod (*Epinephelides armatus*)

Breaksea Cod is found in the West Coast and South Coast. A large number of this species were measured during the Boat Ramp Surveys ($n = 864$), with a median length of 375 mm and weight of 860 g. The high R^2 value (0.94) indicated a strong relationship between W-TL (Figure 31).

Weight-length parameters for Baldchin Groper were calculated state-wide, and for the West Coast and South Coast, using data from the Boat Ramp Surveys (Appendix 1). FL-TL conversions are not applicable for this species. Data summaries on length and weight are provided for all bioregions in which the species was recorded (Appendix 3; Appendix 4).

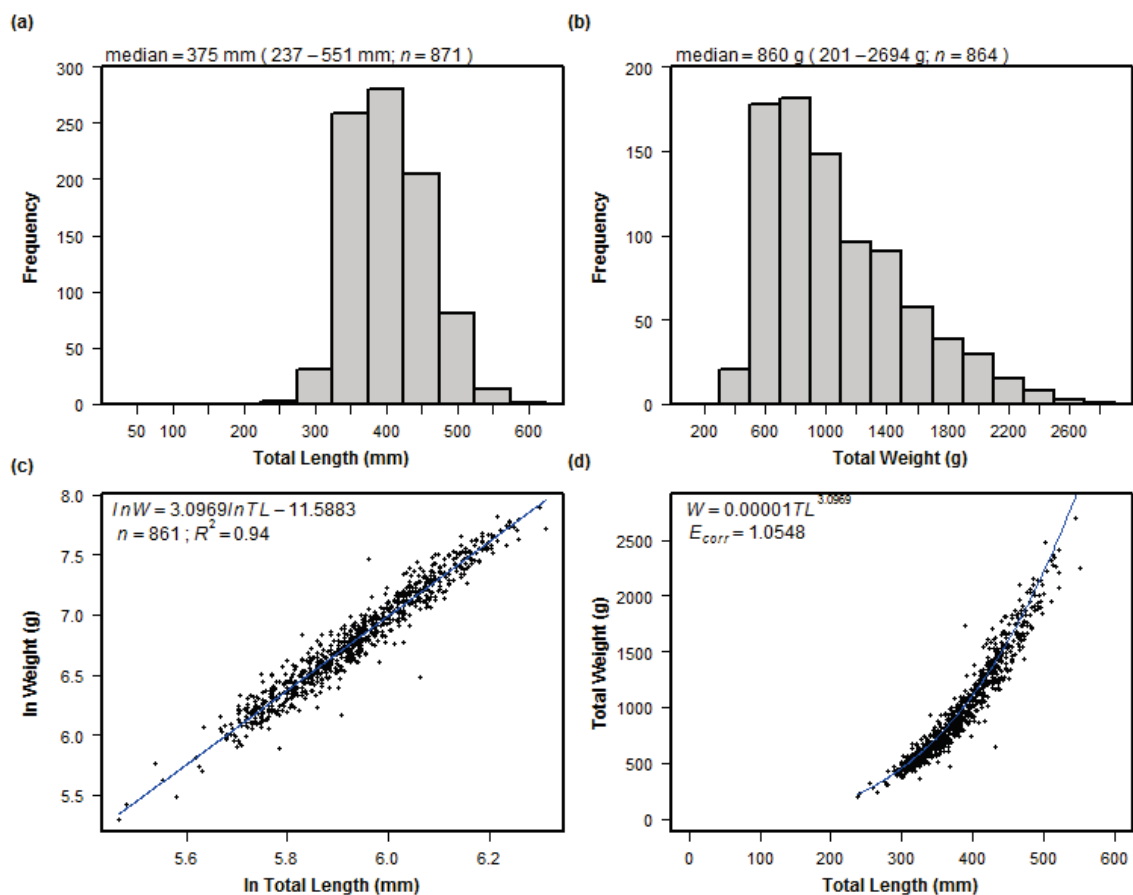


Figure 31. State-wide summary of weight-length data, aggregated across surveys, for Breaksea Cod in Western Australia as derived from Boat Ramp surveys; showing (a) length frequency, (b) weight frequency (c) weight-total length relationship (d) log weight-length relationship with coefficients.

3.3.15 Grass Emperor (*Lethrinus laticaudis*)

Grass Emperor is found in the North Coast, Gascoyne Coast and West Coast. A small number of this species were measured during the Boat Ramp Surveys ($n = 424$), with a median length of 412 mm and weight of 1,100 g. The R^2 value of 0.95 indicated a strong relationship between W-TL (Figure 32). Due to inconsistencies with the handheld scale type used to weigh some of the samples of this species, some data collected in the North Coast was excluded from this analysis.

Weight-length parameters for Grass Emperor were calculated state-wide, and for the North Coast and Gascoyne Coast, using data from the Boat Ramp Surveys (Appendix 1). Insufficient data were collected in the West Coast. FL-TL conversion parameters were also calculated (Appendix 2). Data summaries on length and weight are provided for all bioregions in which the species was recorded (Appendix 3; Appendix 4).

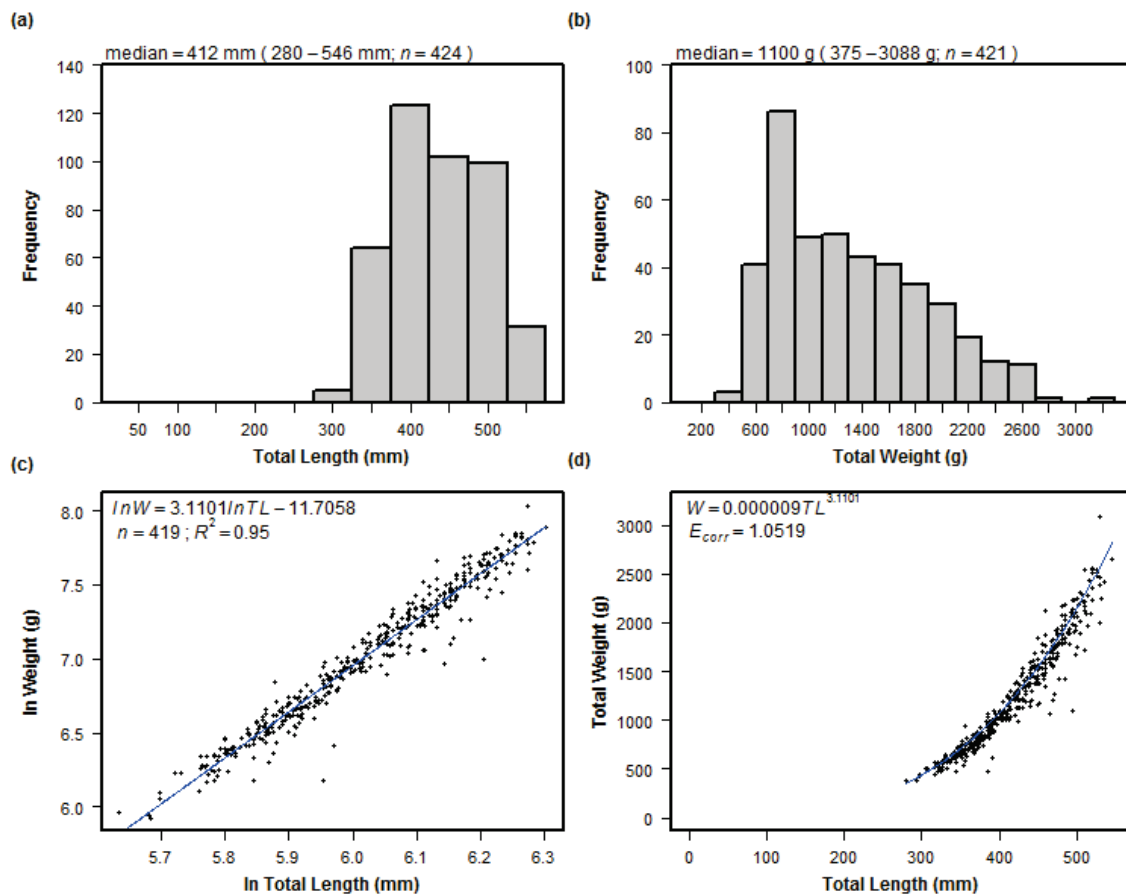


Figure 32. State-wide summary of weight-length data, aggregated across surveys, for Grass Emperor in Western Australia as derived from Boat Ramp surveys; showing (a) length frequency, (b) weight frequency, (c) weight-total length (ln) linear relationship (blue line) and, (d) bias-corrected weight-length (power) relationship (blue line) with correction factor.

3.3.16 Redthroat Emperor (*Lethrinus miniatus*)

Redthroat Emperor is found in the North Coast, Gascoyne Coast and West Coast, and is an inshore demersal indicator in the West Coast. This species was recorded as far south as Rockingham which is beyond its usual established range. A small number of this species were measured during the Boat Ramp Surveys ($n = 200$), with a median length of 369 mm and weight of 774 g. The high R^2 value (0.97) indicated a strong relationship between W-TL (Figure 33).

Weight-length parameters for Redthroat Emperor were calculated state-wide, and for the Gascoyne Coast and West Coast, using data from the Boat Ramp Surveys (Appendix 1). Insufficient data were collected in the North Coast. FL-TL conversion parameters were also calculated (Appendix 2). Data summaries on length and weight are provided for all bioregions in which the species was recorded (Appendix 3; Appendix 4).

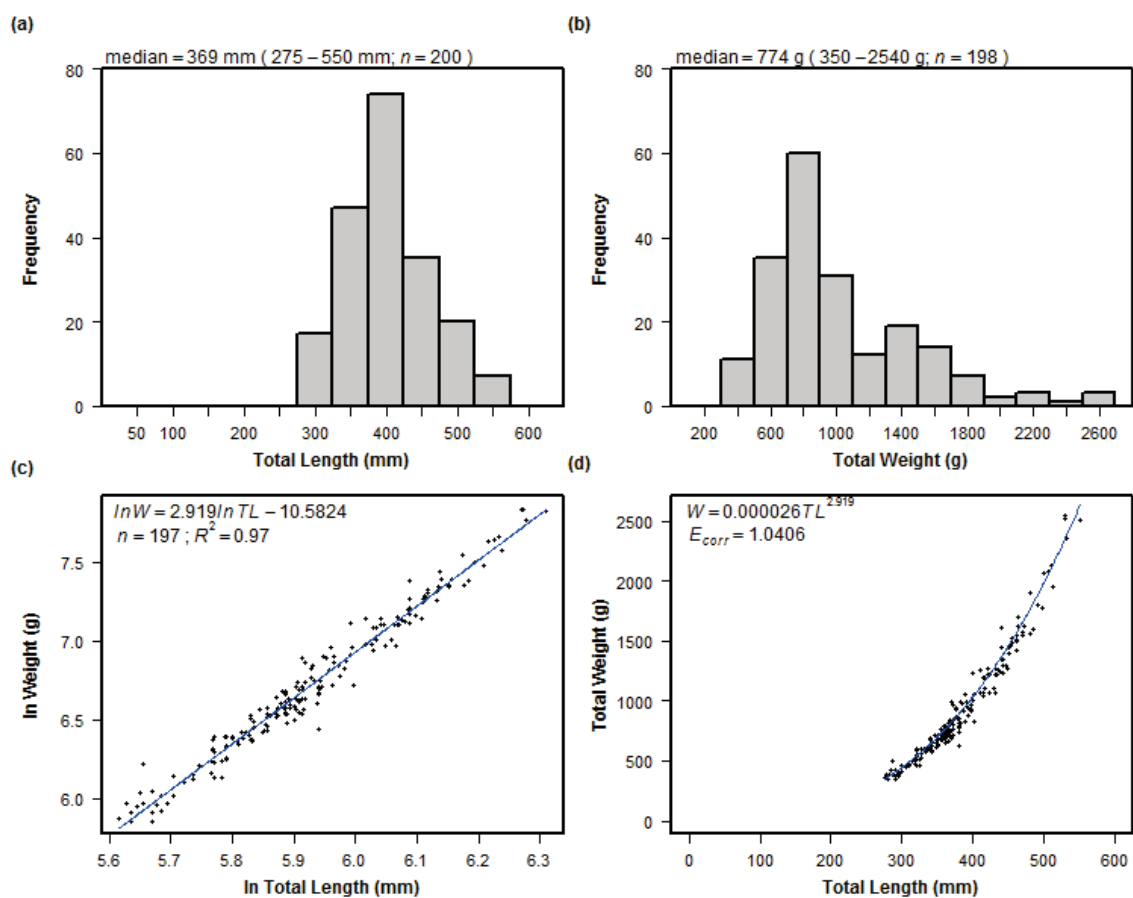


Figure 33. State-wide summary of weight-length data, aggregated across surveys, for Redthroat Emperor in Western Australia as derived from Boat Ramp surveys; showing (a) length frequency, (b) weight frequency, (c) weight-total length (\ln) linear relationship (blue line) and, (d) bias-corrected weight-length (power) relationship (blue line) with correction factor.

3.3.17 Strikey Snapper (*Lutjanus carponotatus*)

Strikey Snapper is found in the North Coast and Gascoyne Coast. A small number of this species were measured during the Boat Ramp Surveys ($n = 134$), with a median length of 341 mm and weight of 575 g. The R^2 value of 0.88 indicated a moderate relationship between W-TL (Figure 34). However, it should be noted that due to inconsistencies with the handheld scale type used to weigh some of the samples of this species, some data collected in the North Coast was excluded from this analysis.

Weight-length parameters for Strikey Snapper were calculated state-wide, and for the North Coast and Gascoyne Coast, using data from the Boat Ramp Surveys (Appendix 1). FL-TL conversion parameters were also calculated (Appendix 2). Data summaries on length and weight are provided for all bioregions in which the species was recorded (Appendix 3; Appendix 4).

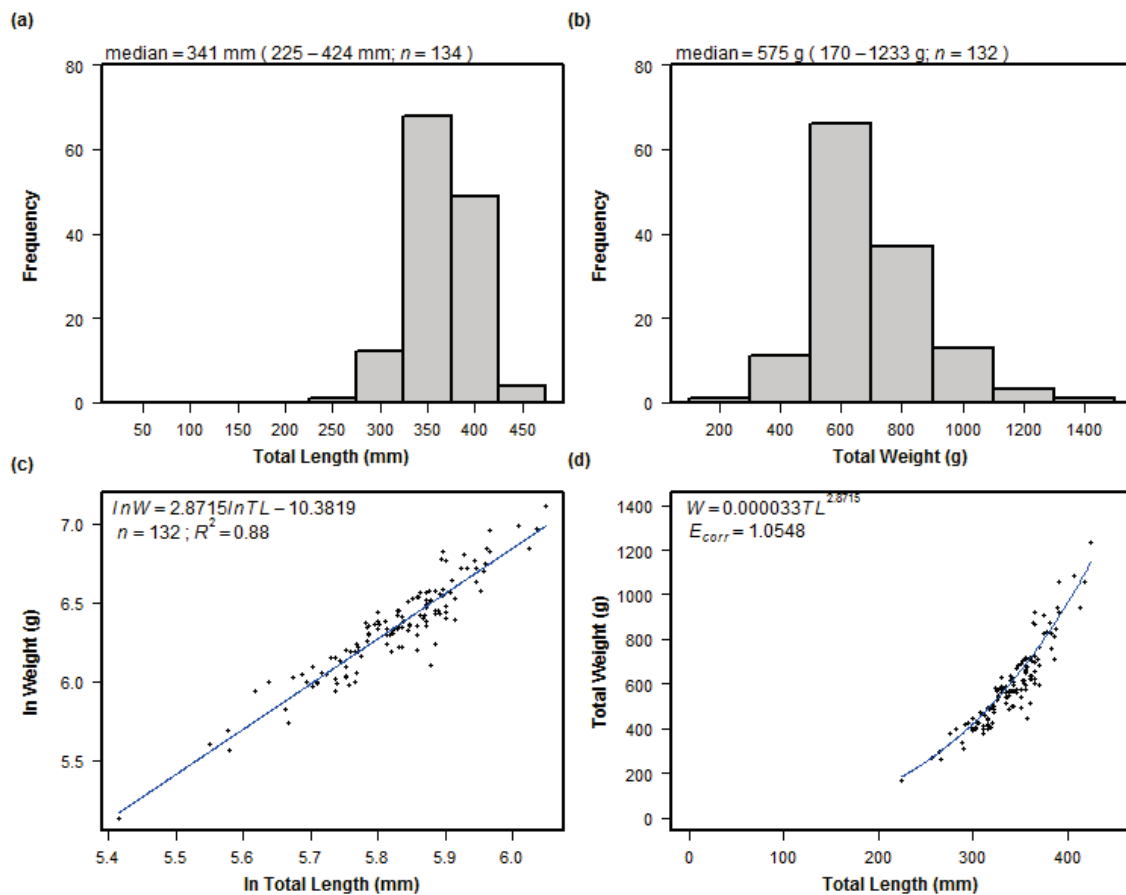


Figure 34. State-wide summary of weight-length data, aggregated across surveys, for Strikey Snapper in Western Australia as derived from Boat Ramp surveys; showing (a) length frequency, (b) weight frequency, (c) weight-total length (ln) linear relationship (blue line) and, (d) bias-corrected weight-length (power) relationship (blue line) with correction factor.

3.4 Offshore Demersal

3.4.1 Eightbar Grouper (*Hyporthodus octofasciatus*)

Eightbar Grouper, previously known as *Epinephelus octofasciatus* but now classified as *Hyporthodus octofasciatus*, has a state-wide distribution, and is an offshore demersal indicator species in all bioregions. A small number of this species were measured during the Boat Ramp Surveys ($n = 16$), with a median length of 608 mm and weight of 3,935 g. The high R^2 value (>0.99) indicates a strong relationship between W-TL (Figure 35).

Weight-length parameters for Eightbar Grouper were calculated state-wide, and for the Gascoyne Coast, using data from the Boat Ramp Surveys (Appendix 1). Insufficient data were collected in the South Coast and West Coast while no data was collected in the North Coast. FL-TL conversions are not applicable for this species. Data summaries on length and weight are provided for all bioregions in which the species was recorded (Appendix 3; Appendix 4).

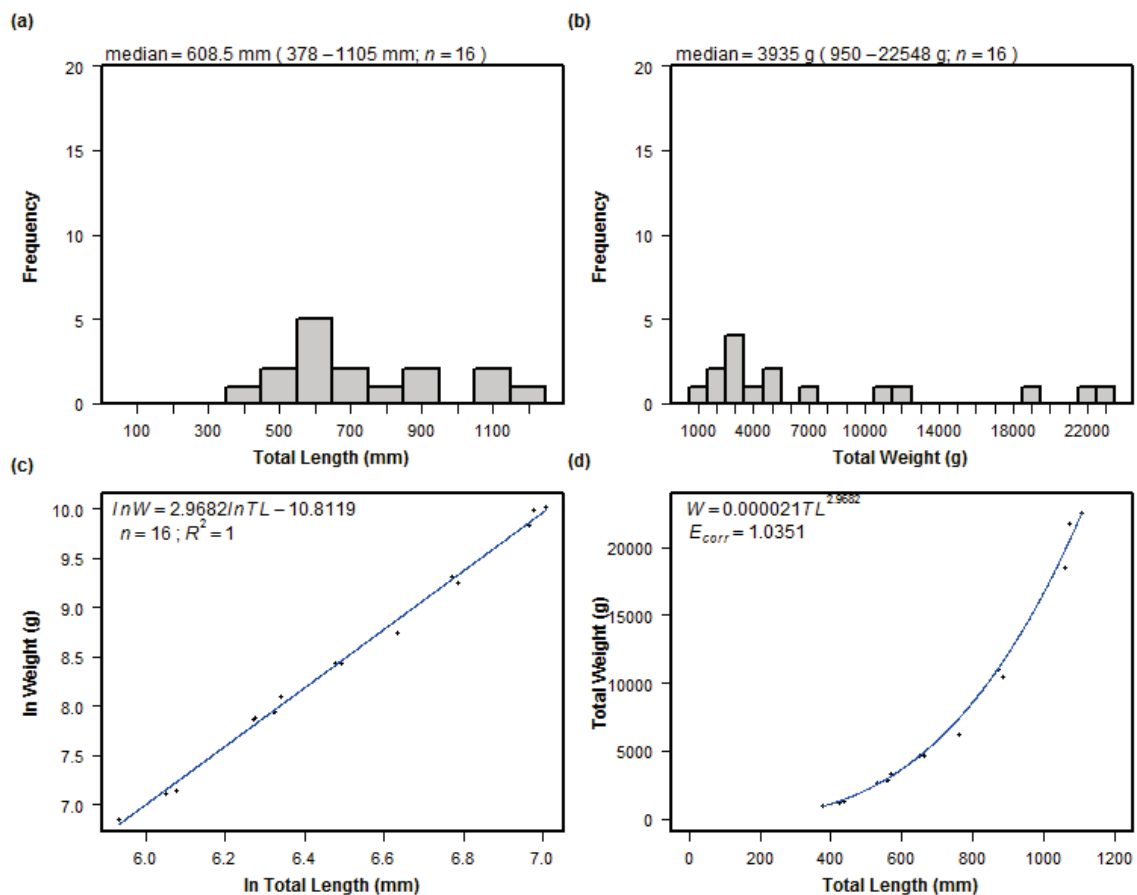


Figure 35. State-wide summary of weight-length data, aggregated across surveys, for Eightbar Grouper in Western Australia as derived from Boat Ramp surveys; showing (a) length frequency, (b) weight frequency, (c) weight-total length (ln) linear relationship (blue line) and, (d) bias-corrected weight-length (power) relationship (blue line) with correction factor.

3.4.2 Hapuku (*Polyprion oxygeneios*)

Hapuku is found state-wide, and is an offshore demersal indicator species in the West Coast and South Coast. Only six fish were measured during the Boat Ramp Surveys and this was insufficient to undertake regression analysis. However, data summaries (Appendix 3; Appendix 4) were provided for the West Coast and South Coast.

3.4.3 Ruby Snapper (*Etelis carbunculus*)

Ruby Snapper is found in the North Coast and Gascoyne Coast, and is an offshore demersal indicator species in both of these bioregions. A small number of this species were measured during the Boat Ramp Surveys ($n = 73$), encompassing a large range of length (488–1,115 mm) and weight (1,357–19,607 g) values. The high R^2 value (0.99) indicated a strong relationship between W-TL (Figure 36). Weight-length parameters for Ruby Snapper were calculated state-wide, and for the Gascoyne Coast, using data from the Boat Ramp Surveys (Appendix 1). No data was collected from the North Coast. FL-TL conversion parameters were also calculated (Appendix 2). Data summaries on length and weight are provided for all bioregions in which the species was recorded (Appendix 3; Appendix 4).

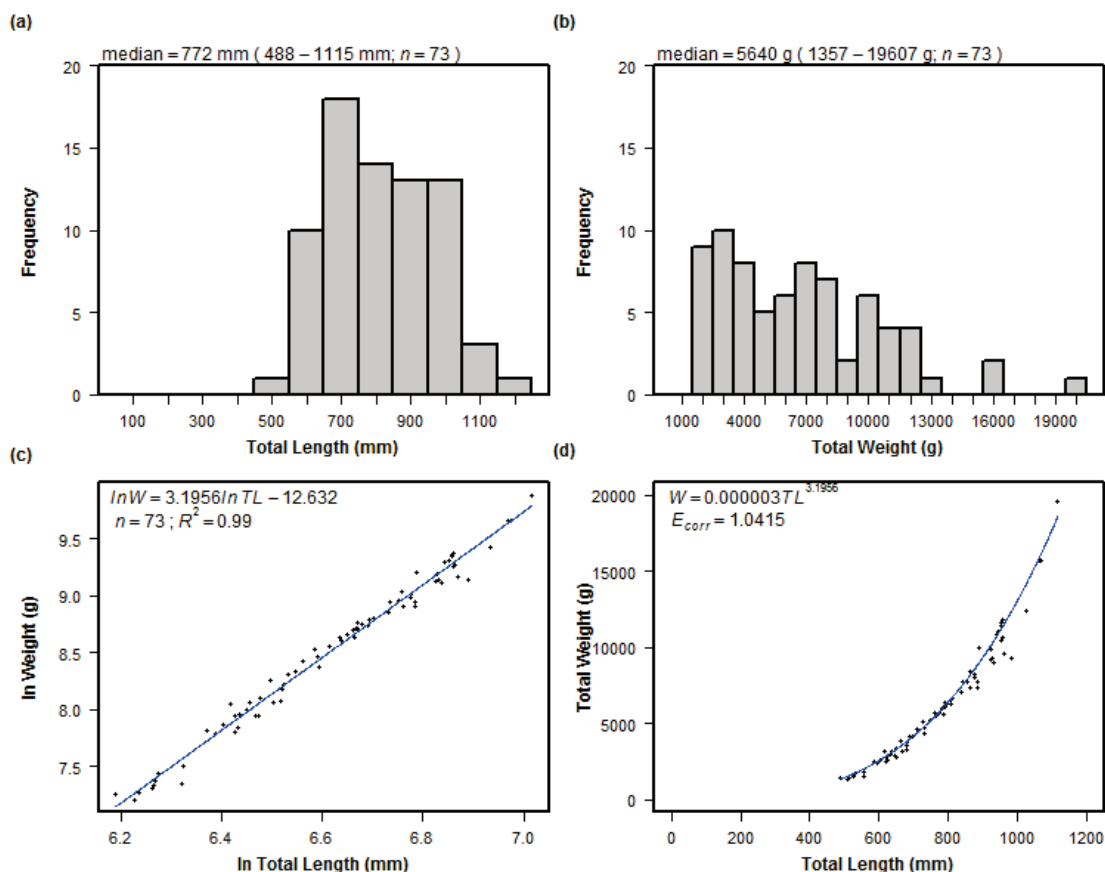


Figure 36. State-wide summary of weight-length data, aggregated across surveys, for Ruby Snapper in Western Australia as derived from Boat Ramp surveys; showing (a) length frequency, (b) weight frequency, (c) weight-total length (ln) linear relationship (blue line) and, (d) bias-corrected weight-length (power) relationship (blue line) with correction factor.

3.5 Pelagic

3.5.1 Spanish Mackerel (*Scomberomorus commerson*)

Spanish Mackerel is found in the North Coast, Gascoyne Coast and West Coast, and is a pelagic indicator species in the North Coast and Gascoyne Coast. A small number of this species were measured during the Boat Ramp Surveys ($n = 229$) encompassing a large range of length (582–1,540 mm) and weight (1,560–25,660 g) values. The R^2 value (0.85) indicated a moderate relationship between W-TL (Figure 37).

Weight-length parameters for Spanish Mackerel were calculated state-wide, and for the North Coast, Gascoyne Coast and West Coast, using data from the Boat Ramp Surveys (Appendix 1). FL-TL conversion parameters were also calculated (Appendix 2). Data summaries on length and weight are provided for all bioregions in which the species was recorded (Appendix 3; Appendix 4).

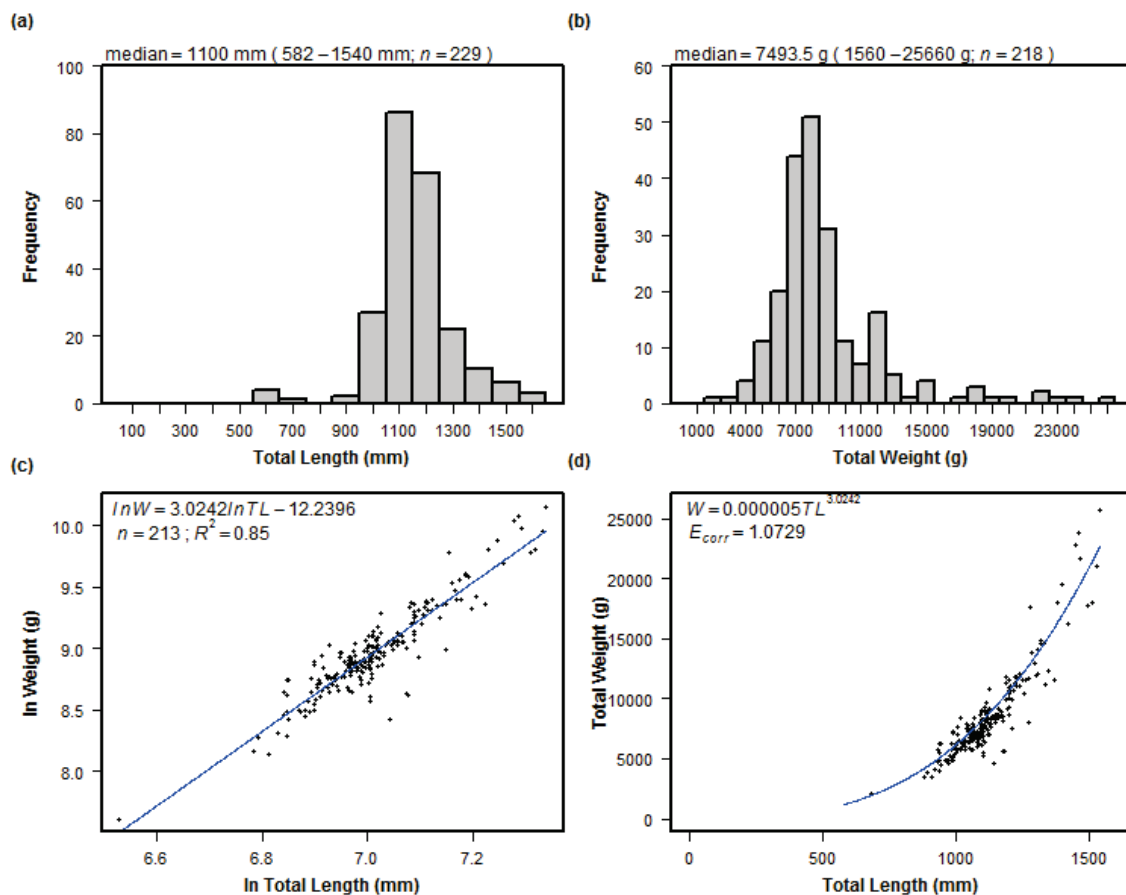


Figure 37. State-wide summary of weight-length data, aggregated across surveys, for Spanish Mackerel Western Australia as derived from Boat Ramp surveys; showing (a) length frequency, (b) weight frequency, (c) weight-total length (ln) linear relationship (blue line) and, (d) bias-corrected weight-length (power) relationship (blue line) with correction factor.

3.5.2 Samsonfish (*Seriola hippos*)

Samsonfish has a state-wide distribution, and is a pelagic indicator species in the West Coast. A small number of this species were measured during the Boat Ramp Surveys ($n = 101$), encompassing a large range of length (515–1,480 mm) and weight (1,680–28,406 g values. The high R^2 value (0.98) indicates a strong relationship between W-TL (Figure 38).

Weight-length parameters for Samsonfish were calculated state-wide, and for the West Coast and South Coast, using data from the Boat Ramp Surveys (Appendix 1). No data was collected in the other bioregions. FL-TL conversion parameters were also calculated (Appendix 2). Data summaries on length and weight are provided for all bioregions in which the species was recorded (Appendix 3; Appendix 4).

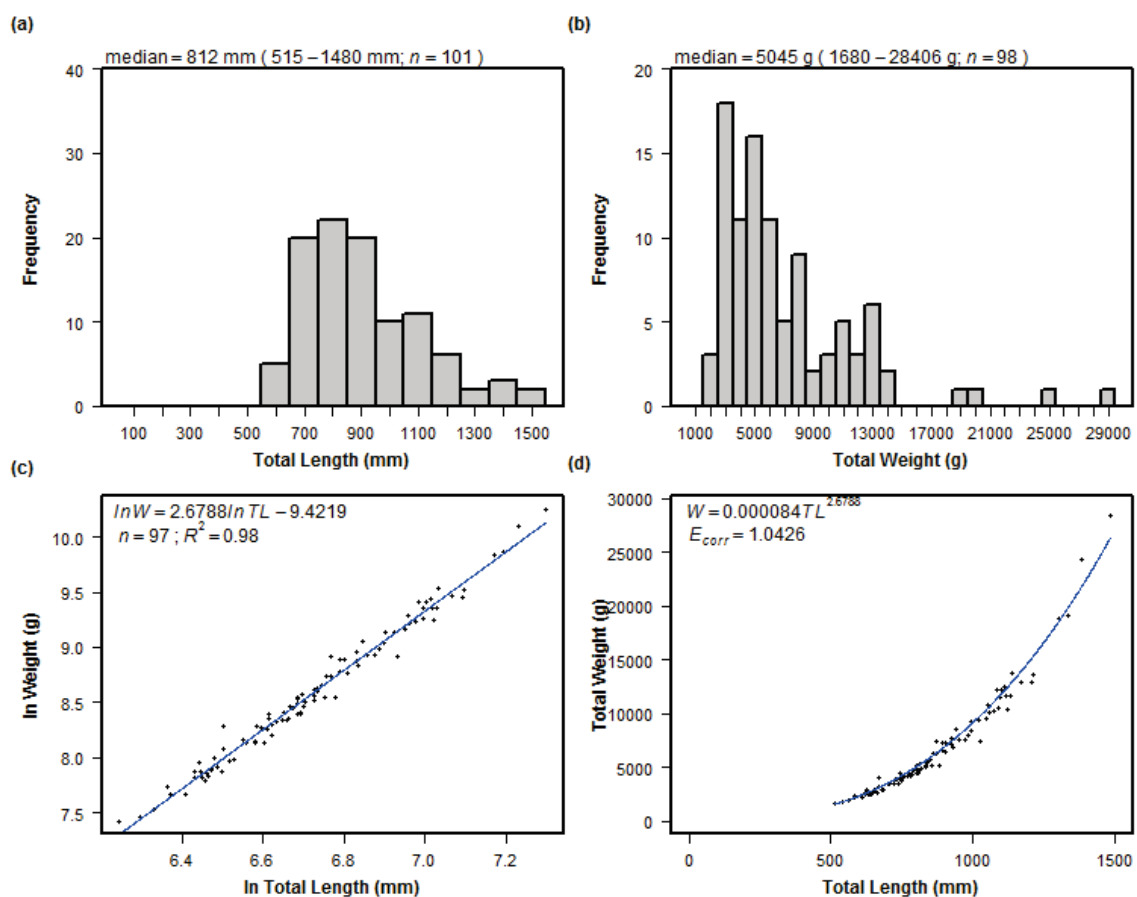


Figure 38. State-wide summary of weight-length data, aggregated across surveys, for Samsonfish in Western Australia as derived from Boat Ramp surveys; showing (a) length frequency, (b) weight frequency, (c) weight-total length (ln) linear relationship (blue line) and, (d) bias-corrected weight-length (power) relationship (blue line) with correction factor.

3.5.3 Grey Mackerel (*Scomberomorus semifasciatus*)

Grey Mackerel is found in the North Coast and Gascoyne Coast, and is a pelagic indicator species in both bioregions. Only 11 fish were measured during the Boat Ramp Surveys and this was insufficient to undertake a reliable regression analysis. However, data summaries (Appendix 3; Appendix 4) were provided for all bioregions in which measurements were obtained.

3.5.4 Blue Mackerel (*Scomber australasicus*)

Blue Mackerel has a state-wide distribution. A small number of this species were measured during the Boat Ramp Surveys ($n = 60$), with a median length of 240 mm and weight of 125 g. The R^2 value (0.97) indicates a strong relationship between W-TL (Figure 39). Weight-length parameters for Blue Mackerel were calculated state-wide, and for the West Coast and South Coast, using data from the Boat Ramp Surveys (Appendix 1). No data was collected in the North Coast or Gascoyne Coast. FL-TL conversion parameters were also calculated (Appendix 2). Data summaries on length and weight are provided for all bioregions in which the species was recorded (Appendix 3; Appendix 4).

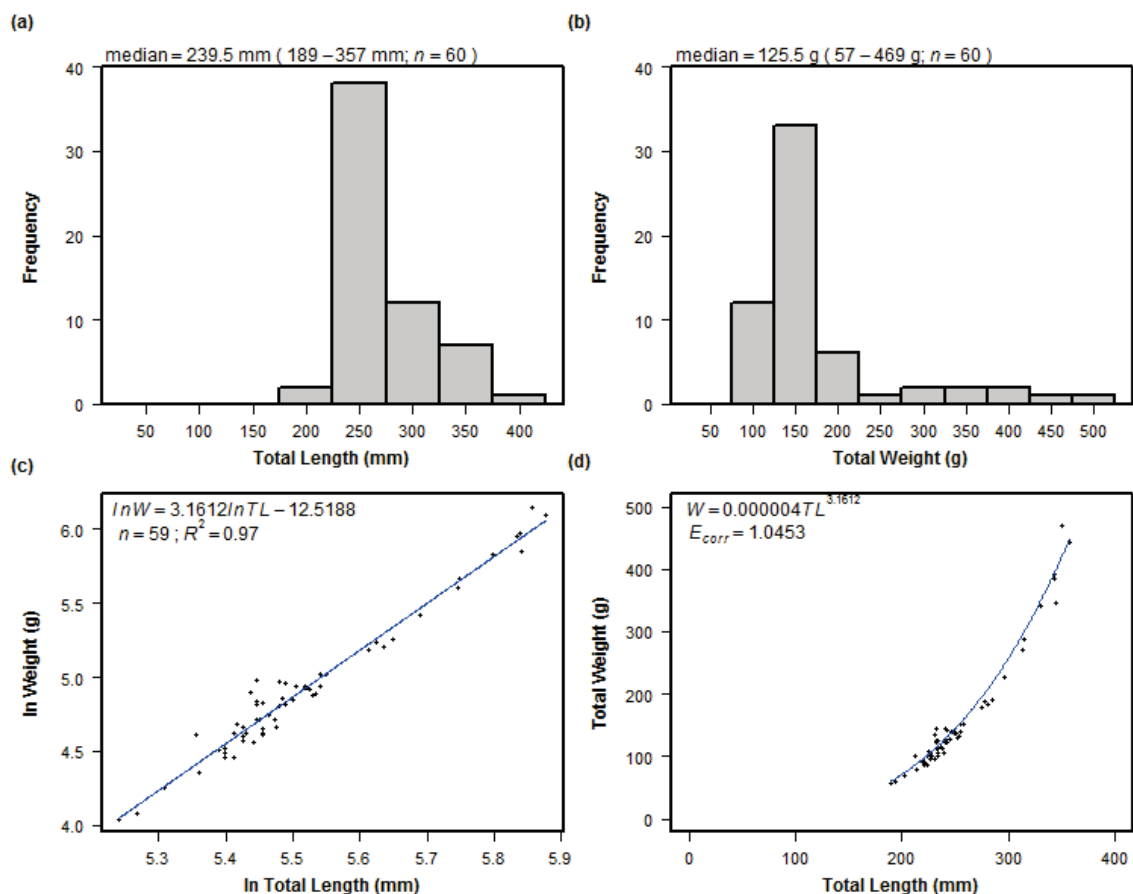


Figure 39. State-wide summary of weight-length data, aggregated across surveys, for Blue Mackerel in Western Australia as derived from Boat Ramp surveys; showing (a) length frequency, (b) weight frequency, (c) weight-total length (ln) linear relationship (blue line) and, (d) bias-corrected weight-length (power) relationship (blue line) with correction factor.

3.5.5 Yellowtail Scad (*Trachurus novaezelandiae*)

Yellowtail Scad is found in the Gascoyne Coast, West Coast and South Coast, and is a pelagic indicator species in the South Coast. A small number of this species were measured during the Boat Ramp Surveys ($n = 114$), with a median length of 198 mm and weight of 69 g. The high R^2 value (0.85) did indicate a strong relationship between W-TL (Figure 35).

Weight-length parameters for Yellowtail Scad were calculated state-wide, and for the West Coast and South Coast, using data from the Boat Ramp Surveys (Appendix 1). No data was collected in the Gascoyne Coast. FL-TL conversion parameters were also calculated (Appendix 2). Data summaries on length and weight are provided for all bioregions in which the species was recorded (Appendix 3; Appendix 4).

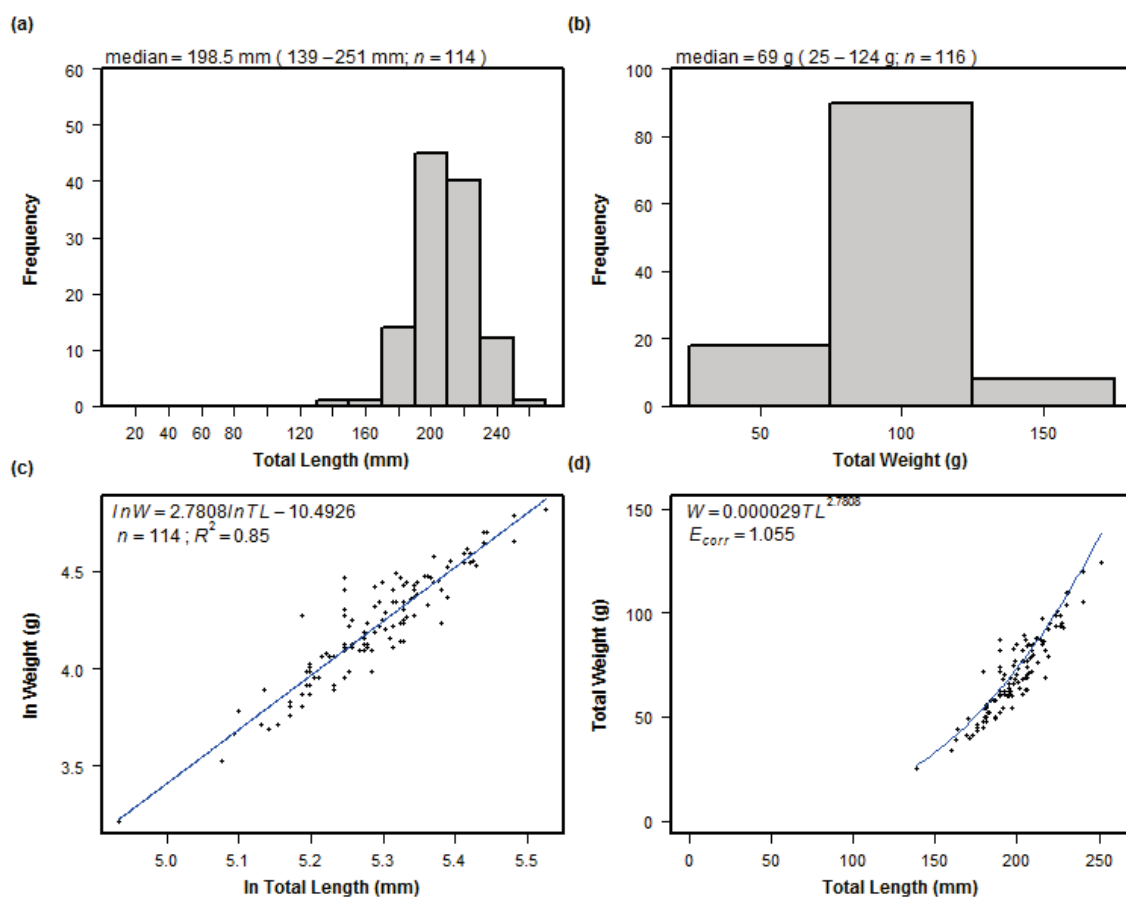


Figure 40. State-wide summary of weight-length data, aggregated across surveys, for Yellowtail Scad in Western Australia as derived from Boat Ramp surveys; showing (a) length frequency, (b) weight frequency, (c) weight-total length (\ln) linear relationship (blue line) and, (d) bias-corrected weight-length (power) relationship (blue line) with correction factor.

3.5.6 Southern Bluefin Tuna (*Thunnus maccoyii*)

Southern Bluefin Tuna has a state-wide distribution. A small number of this species were measured during the Boat Ramp Surveys ($n = 102$), with a median length of 715 mm and weight of 5,285 g. The R^2 value (0.97) indicates a strong relationship between W-TL (Figure 41).

Weight-length parameters for Southern Bluefin Tuna were calculated state-wide, and for the West Coast and South Coast, using data from the Boat Ramp Surveys (Appendix 1). No data was collected in the North Coast or Gascoyne Coast. FL-TL conversion parameters were also calculated (Appendix 2). Data summaries on length and weight are provided for all bioregions in which the species was recorded (Appendix 3; Appendix 4).

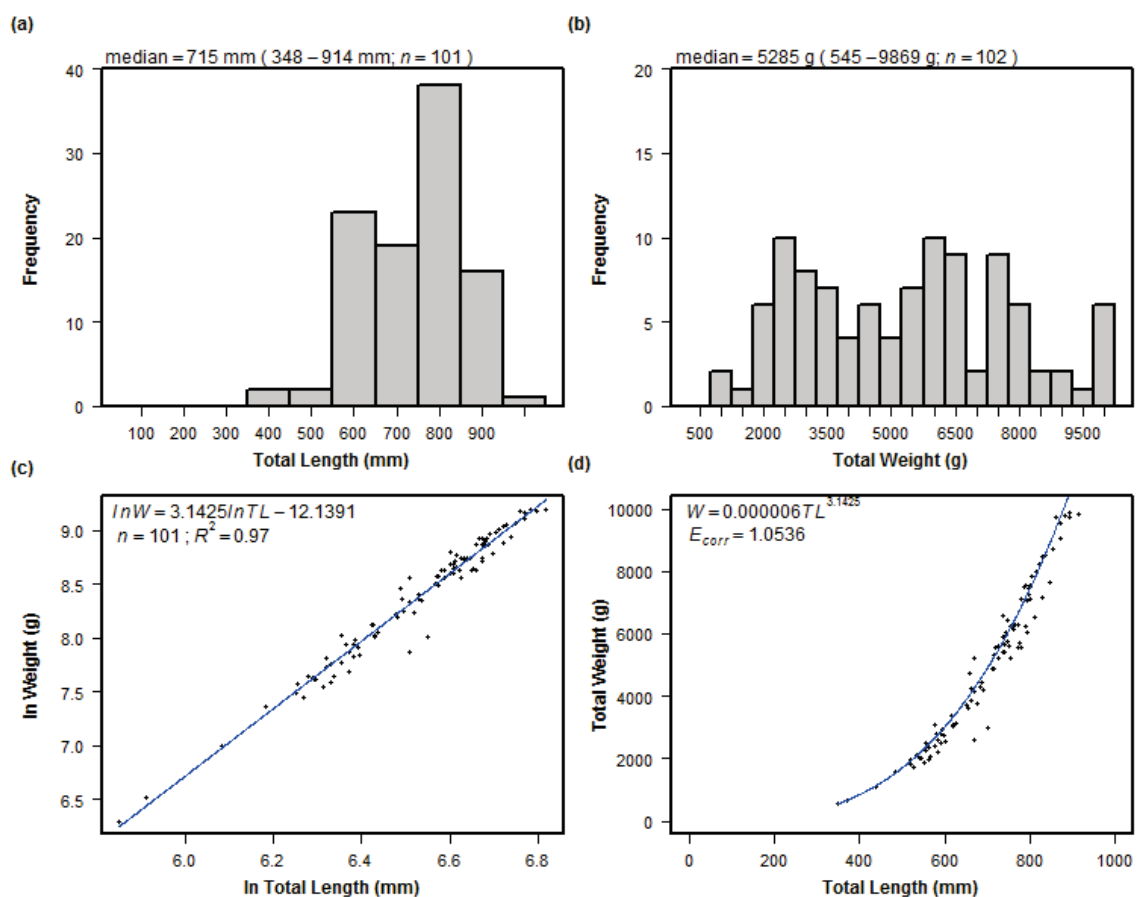


Figure 41. State-wide summary of weight-length data, aggregated across surveys, for Southern Bluefin Tuna in Western Australia as derived from Boat Ramp surveys; showing (a) length frequency, (b) weight frequency, (c) weight-total length (ln) linear relationship (blue line) and, (d) bias-corrected weight-length (power) relationship (blue line) with correction factor.

3.6 Sharks

3.6.1 Whaler Sharks (Family Carcharhinidae)

Whaler Sharks have a state-wide distribution, and are also a state-wide indicator species. Whaler Sharks (Family Carcharhinidae) have been aggregated to include the Bronze Whaler (*Carcharhinus brachyurus*), Blacktip Reef Shark (*C. melanopterus*) and Spinner Shark (*C. brevipinna*). A small number of these species were measured during the Boat Ramp Surveys ($n = 10$). A meaningful regression analysis could not be completed with such a small sample, or with such a broad array of species. However, a data summary (Appendix 3; Appendix 4) is provided state-wide and for bioregions where measurements occurred.

3.6.2 Gummy Sharks (*Mustelus antarcticus* and *M. stevensi*)

Gummy Sharks have a state-wide distribution, and includes Gummy Shark (*Mustelus antarcticus*), which occurs in southern waters to Geraldton, and Western Spotted Gummy Shark (*M. stevensi*), which occurs from Shark Bay to the Kimberley. A small number of these species were measured during the Boat Ramp Surveys ($n = 14$). A meaningful regression analysis could not be completed with such a small sample. However, a data summary (Appendix 3; Appendix 4) is provided state-wide and for bioregions where measurements occurred.

3.6.3 Wobbegong (Family Orectolobidae)

Wobbegongs are found in the Gascoyne Coast, West Coast and South Coast. Only nine sharks were measured during the Boat Ramp Surveys (none in the Gascoyne Coast) and this was insufficient to undertake regression analysis. However, data summaries (Appendix 3; Appendix 4) were provided for the West Coast and South Coast.

3.7 Crustaceans

3.7.1 Western Rock Lobster (*Panulirus cygnus*)

Western Rock Lobsters are found in the Gascoyne Coast and West Coast. A large number of this species were measured during the Boat Ramp Surveys ($n = 1,852$), with a median carapace length of 82 mm and weight of 501 g. The high R^2 value (0.95) indicates a strong relationship between W-TL (Figure 42).

Weight-length parameters for Western Rock Lobster were calculated state-wide, and for the Gascoyne Coast and West Coast, using data from the Boat Ramp Surveys (Appendix 1). FL-TL conversions are not applicable for this species. Data summaries on length and weight are provided for all bioregions in which the species was recorded (Appendix 3; Appendix 4).

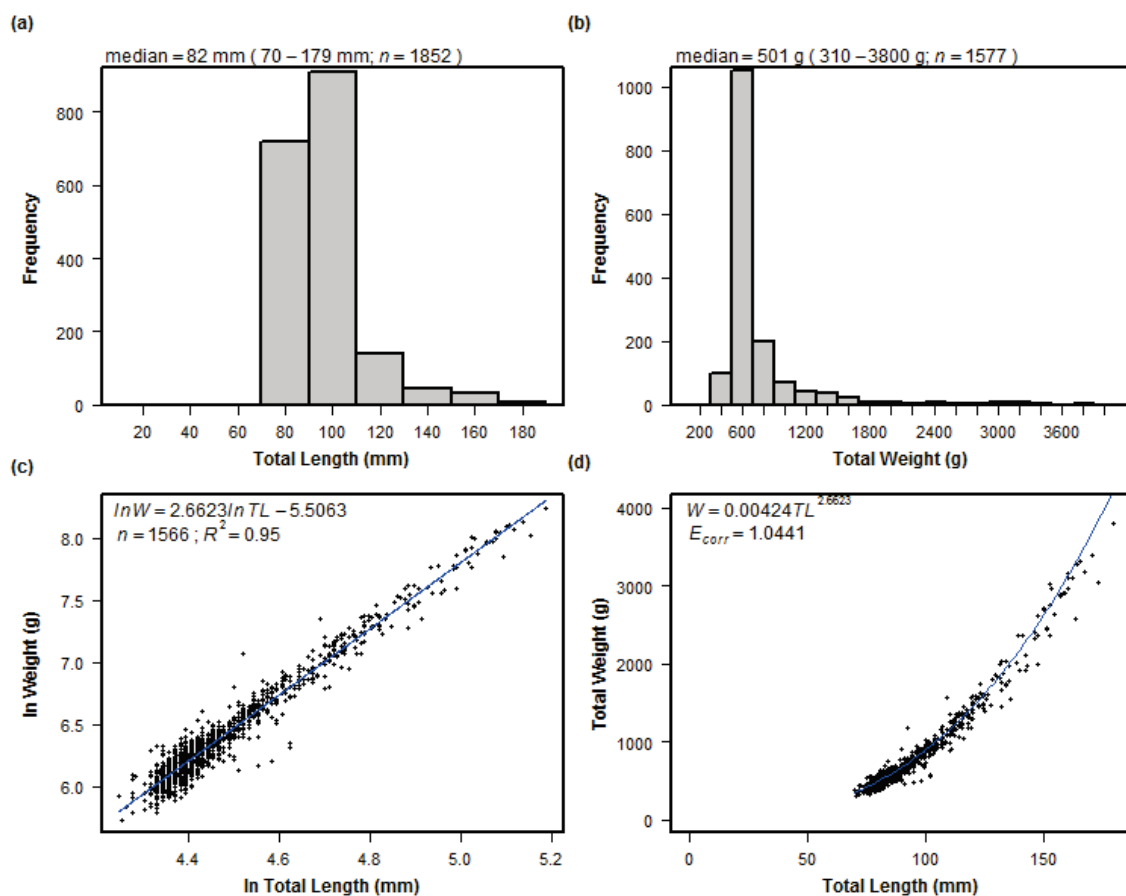


Figure 42. State-wide summary of weight-length data, aggregated across surveys, for Western Rock Lobster in Western Australia as derived from Boat Ramp surveys; showing (a) length frequency, (b) weight frequency, (c) weight-total length (ln) linear relationship (blue line) and, (d) bias-corrected weight-length (power) relationship (blue line) with correction factor.

3.7.2 Mud Crab (*Scylla olivacea* and *S. serrata*)

Mud Crabs are found in the North Coast and Gascoyne Coast. A small number of this species were measured during the Boat Ramp Surveys ($n = 79$), with a median carapace width of 130 mm and median weight of 620 g. The R^2 value (0.74) indicated a moderate relationship between W-TL (Figure 43). Due to inconsistencies with carapace width measurements taken at various locations in the North Coast, some data were excluded from this analysis. The remaining variability in these data is most likely caused by the condition of retained catch (*i.e.*, missing limbs) which were not consistently recorded.

Weight-length parameters for Mud Crabs were calculated state-wide, and for the North Coast, using data from the Boat Ramp Surveys (Appendix 1). Insufficient data were collected in the Gascoyne Coast. FL-TL conversions are not applicable for this species. Data summaries on length and weight are provided for all bioregions in which the species was recorded (Appendix 3; Appendix 4).

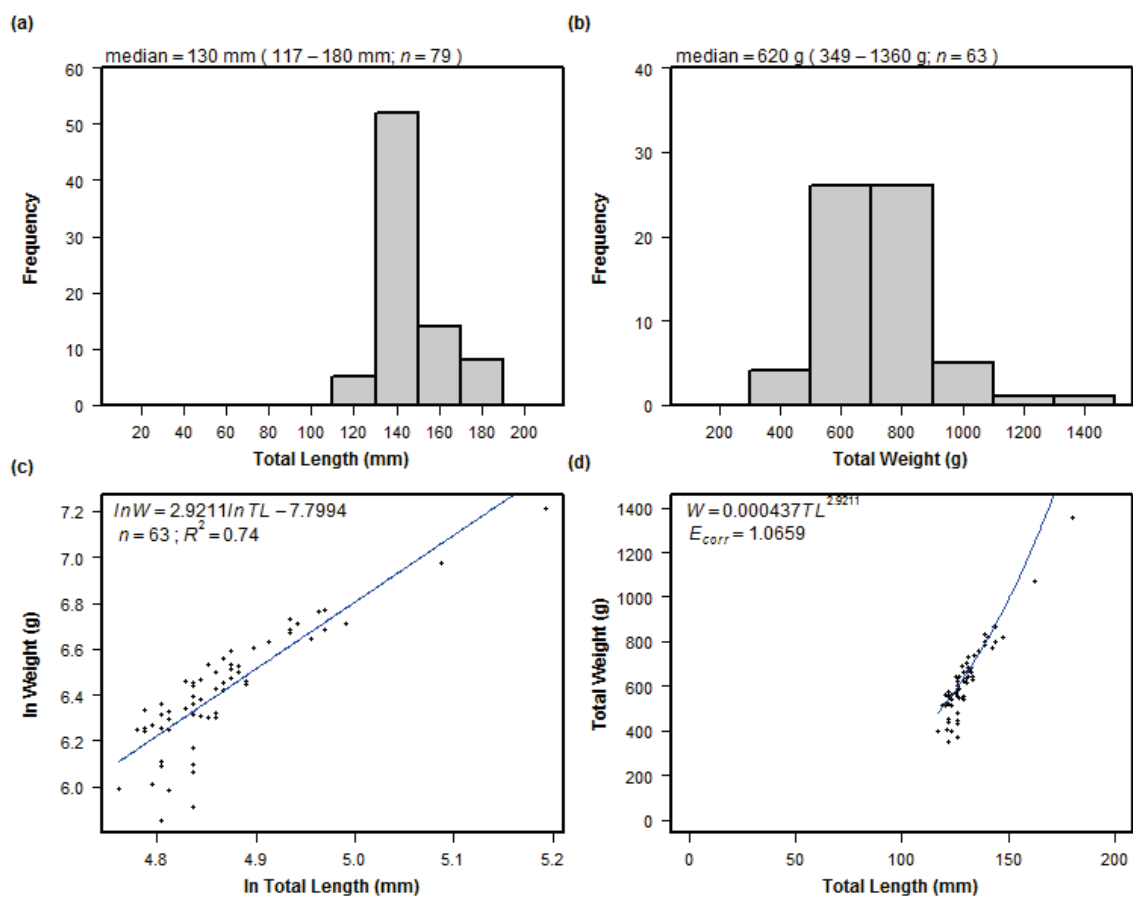


Figure 43. State-wide summary of weight-length data, aggregated across surveys, for Mud Crab in Western Australia as derived from Boat Ramp surveys; showing (a) length frequency, (b) weight frequency, (c) weight-total length (\ln) linear relationship (blue line) and, (d) bias-corrected weight-length (power) relationship (blue line) with correction factor.

3.7.3 Blue Swimmer Crab (*Portunus armatus*)

Blue Swimmer Crabs have a state-wide distribution. A large number of this species were measured during the Boat Ramp Surveys ($n = 1,805$), with a median carapace width of 135 mm and weight of 225 g. The R^2 value (0.71) indicated a moderate relationship between W-TL (Figure 44). The variability in these data is most likely caused by the condition of retained catch (*i.e.*, missing limbs) which were not consistently recorded.

Weight-length parameters for Blue Swimmer Crab were calculated state-wide, and for all bioregions, using data from the Boat Ramp Surveys (Appendix 1). FL-TL conversions are not applicable for this species. Data summaries on length and weight are provided for all bioregions in which the species was recorded (Appendix 3; Appendix 4).

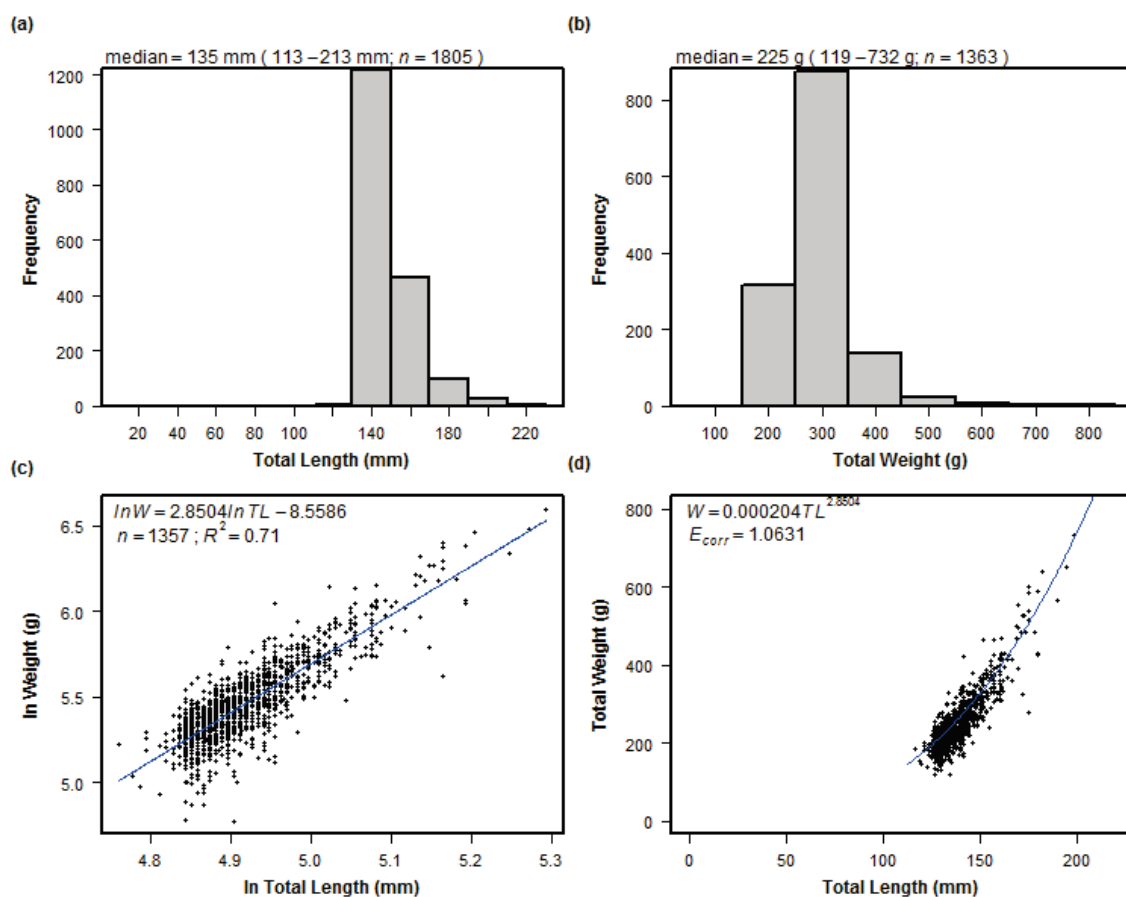


Figure 44. State-wide summary of weight-length data, aggregated across surveys, for Blue Swimmer Crab in Western Australia as derived from Boat Ramp surveys; showing (a) length frequency, (b) weight frequency, (c) weight-total length (\ln) linear relationship (blue line) and, (d) bias-corrected weight-length (power) relationship (blue line) with correction factor.

3.8 Molluscs

3.8.1 Abalone (*Haliotis* spp.)

Abalone species are distributed in the West Coast and South Coast. This grouping comprises the smaller Roe's Abalone (*Haliotis roei*) with an average maximum length of 89 mm (Hart et al., 2013), and the larger Greenlip Abalone (*Haliotis laevis*) and Brownlip Abalone (*Haliotis rubra conicopora*). A small number of these species were measured during the Boat Ramp Surveys ($n = 153$), with a median shell width of 75 mm and weight of 76 g. The R^2 value (0.94) indicated a moderate relationship between W-TL (Figure 45). The bimodal distribution reflects species differences within this grouping, with the smaller Roe's Abalone all with total lengths <100 mm.

Weight-length parameters for Abalone were calculated state-wide, and for the West Coast and South Coast, using data from the Boat Ramp Surveys (Appendix 1). FL-TL conversions are not applicable for this species. Data summaries on length and weight are provided for all bioregions in which the species was recorded (Appendix 3; Appendix 4).

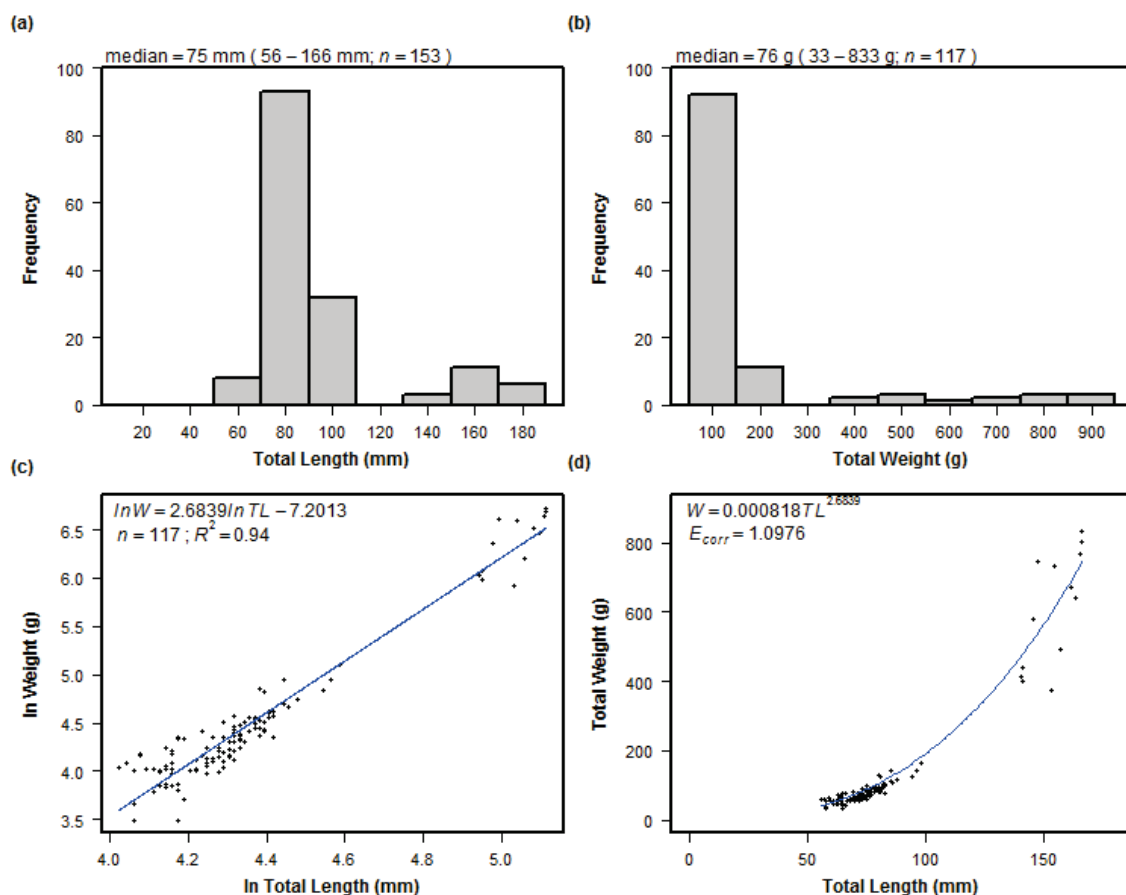


Figure 45. State-wide summary of weight-length data aggregated across years for Abalone in Western Australia as derived from Boat Ramp surveys; showing (a) length frequency, (b) weight frequency, (c) weight-total length (ln) linear relationship (blue line) and, (d) bias-corrected weight-length (power) relationship (blue line) with correction factor.

3.9 Cephalopods

3.9.1 Squid (Order Teuthoidea)

Squid have a state-wide distribution. A small number of this species was measured during the Boat Ramp Surveys ($n = 83$), with a median mantle length of 195 mm and body weight was 334 g. The R^2 value (0.91) indicated a moderate relationship between W-TL (Figure 46).

Weight-length parameters for Squid were calculated state-wide, and for the Gascoyne Coast, West Coast and South Coast, using data from the Boat Ramp Surveys (Appendix 1). Insufficient data were obtained from the North Coast. FL-TL conversions are not applicable for this species. Data summaries on length and weight are provided for all bioregions in which the species was recorded (Appendix 3; Appendix 4).

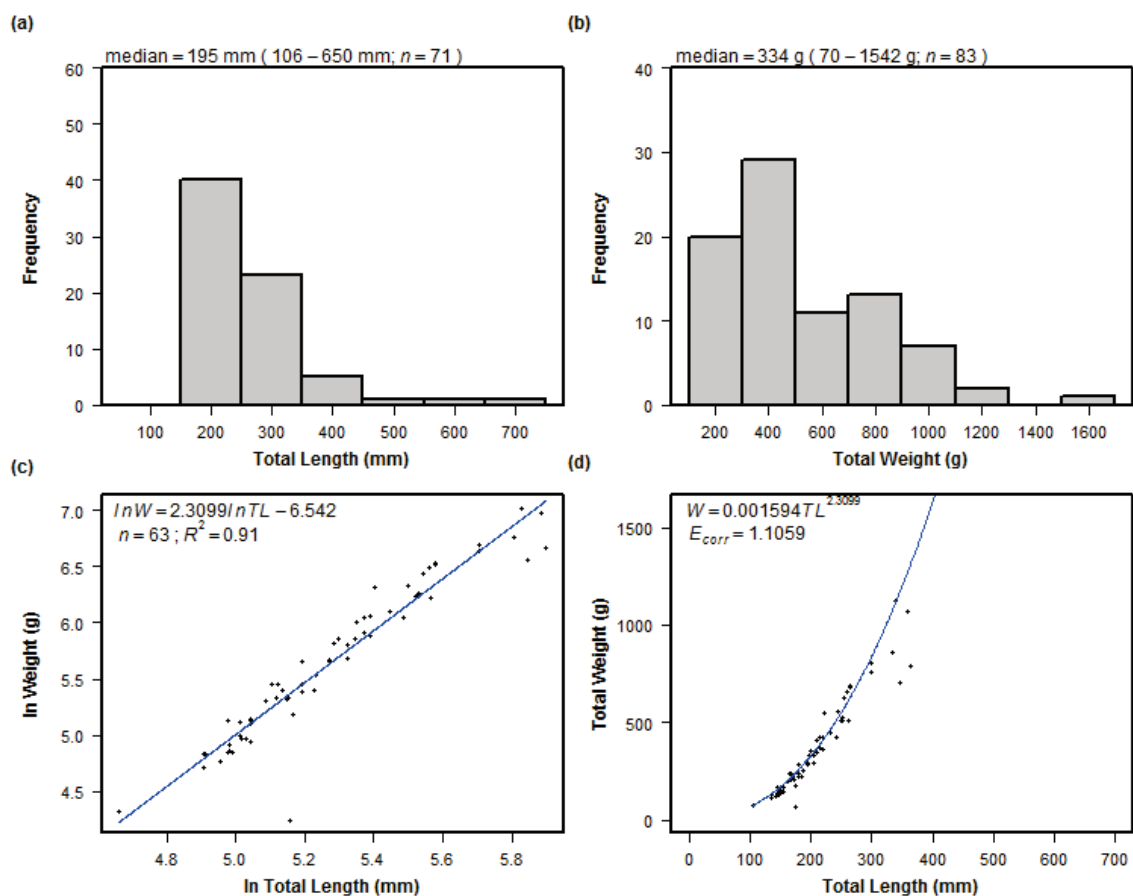


Figure 46. State-wide summary of weight-length data aggregated across years for Squid in Western Australia as derived from Boat Ramp surveys; showing (a) length frequency, (b) weight frequency, (c) weight-total length (ln) linear relationship (blue line) and, (d) bias-corrected weight-length (power) relationship (blue line) with correction factor.

3.9.2 Cuttlefish (Order Sepiidae)

Cuttlefish have a state-wide distribution. Only nine individuals were measured during the Boat Ramp Surveys (none in the North Coast or Gascoyne Coast) and this was insufficient to undertake regression analysis. However, data summaries (Appendix 3; Appendix 4) were provided for the West Coast and South Coast.

3.9.3 Octopuses (Order Octopodidae)

Octopuses have a state-wide distribution. Only eight individuals were measured (weight only) during the Boat Ramp Surveys (all in the West Coast) and this was insufficient to undertake regression analysis. However, data summaries (Appendix 3) were provided for the West Coast.

4 Discussion

4.1 Overview

This report provides a summary of weight-length data obtained for species caught by boat-based recreational fishers in Western Australia during three Boat Ramp Surveys conducted between 2011/12 and 2015/16. The Boat Ramp Surveys were completed as part of a larger integrated survey involving Phone-Diary Surveys and Remote Camera Surveys. This report is intended to complement previous publications relating to these integrated surveys (Ryan et al., 2013; Ryan et al., 2015). The weight-length data are primarily used to facilitate more accurate conversion of estimates of recreational catch from numbers to harvest weight [see Ryan et al. (2013) and Ryan et al. (2015)]. Several recreational species for which weight-length or fork length-total length relationships were not locally, or recently, available [see Smallwood et al. (2013)] have also been determined.

Harvest weights are currently calculated by combining estimates of catch (by numbers) obtained from the off-site Phone-Diary Survey with an average weight. These harvest weights are calculated for the dominant 10–15 species within each resource suite, which comprise 76–98% of the total catch (by numbers kept) (Ryan et al., 2015). Average weights obtained from Boat Ramp Surveys were used to calculate harvest weights in 2011/12 and 2013/14 at the state-wide and Bioregion levels (estimates not yet available for 2015/16) as follows;

- Overall (73.3% of species in 2011/12 to 71.3% of species in 2013/14)
 - State-wide (51.5% of species in 2011/12 to 43.6% of species in 2013/14)
 - Bioregion (21.8% of species in 2011/12 to 27.7% of species in 2013/14) (Ryan et al., 2013; Ryan et al., 2015).

For some species, a state-wide estimate may be just as applicable as that obtained for a Bioregion, especially if populations mix across broad spatial scales (*i.e.*, Spanish Mackerel). If the aim of the Boat Ramp Surveys is to provide an average weight at Bioregion or state-wide level for key species during each survey period, then improvements can still be made in the Boat Ramp Surveys as ~30% of average weights used to estimate harvest from the Phone-Diary Surveys are being applied from alternative data sources. This generally occurs when only a small sample size has been obtained from the Boat Ramp Surveys, which may result in the average weight being more greatly affected by extreme measurements. Alternative average weights are currently selected using a hierarchy of decision rules to determine the most appropriate data source, which can be outlined as follows;

- Bioregion average weight (Boat Ramp Surveys)
- State-wide average weight (Boat Ramp Surveys)
- State-wide average weight (Tour Operator Returns). These values are calculated based on length data obtained from charter boat-based recreational fishing where weights are calculated by applying externally sourced weight-length relationships (available for <100 species) to each reported length measurement (noting that these data are aggregated across all bioregions and years so average weight values will change as additional data is added).

- State-wide average weight (obtained from fisheries independent samples or other research).

The values obtained from each of these sources are considered in terms of sample size and average weight prior to determining which is the most appropriate to use. Previous studies have excluded species with <10 measurements (Pleizier et al., 2015), <20 measurements (Mata et al., 2008) and <50 measurements (Kamikawa et al., 2015). In this report, species with <10 measurements are highlighted in average weight (Appendix 3) and length (Appendix 4) tables for the reader to use decide if the value is representative. Species with <10 measurements were excluded from weight-length and length-length tables as it was not possible to reliably estimate these parameters with such small sample sizes. Examining the percentage of priority and fish resource categories with >100 weight measurements from the off-site Phone-Diary Surveys revealed that between 26.1–38.8% of species are achieving this number in each survey year, which drops to 7.4–11.9% when considering all species.

The three Boat Ramp Surveys provided weight-length data for >300 species caught by boat-based recreational fishers in Western Australia over three biennial survey years. Weight-length data for fish (and other aquatic organisms) in Western Australia have been reported from various other research projects [see Smallwood et al. (2013) for summary of data available for selected temperate species]. These projects utilised fishery independent sampling techniques for data collection, but also fishery dependent sampling in relation to commercial fisheries. As such, they have a narrow focus on a specific species or small suites of species associated with a fishery, and are not able to provide concurrent data across a broad suite of species.

4.2 Range Extensions

More than 27,296 fish (and other aquatic organisms) were measured during the three Boat Ramp Surveys, comprising 314 different species or general categories, of which finfish were the dominant taxa (92%). A benefit of on-site surveys using trained interviews is that species identification can be verified, and on several occasions, species were caught outside of their established range. For example, Spangled Emperor was caught off the Perth Metropolitan area, Red Emperor off Jurien Bay and Redthroat Emperor off Rockingham. These types of range extensions are likely to have become more frequent with recent environmental events, such as the ‘marine heat wave’ along the Western Australian coast during the summer of 2010/11 (Caputi et al., 2014; Pearce et al., 2011).

4.3 Limitations

Average weights for all species caught by recreational fishers cannot be ascertained exclusively from Boat Ramp Surveys. Some species, such as Sea Mullet, are mainly caught in large numbers by shore-based netting, for which information is not often captured at boat ramps. Other nearshore or estuarine species, such as Australian Herring or Western Australian Salmon, are more likely to be caught by shore-based recreational fishers. A licence is not required to fish from the shore, which creates challenges for providing state-wide or Bioregion estimates of catch, as on-site surveys are prohibitively expensive over large areas. Finally, some species are not frequently targeted by recreational fishers (*i.e.*, deeper water species such as Hapuku or offshore species such as the Common Coral Trout) or are not often retained (*i.e.* Billfish or

Sharks). Although this preference may change over time, the rarity of retained catches for these species makes it difficult to obtain sufficient weight-length data from interviews at boat ramps.

There are additional factors that need to be considered beyond the collection of sufficient, concurrent weight data for recreationally caught species. This includes the need to consider other known factors that may affect average weight of fish, such as biology (*i.e.*, sex, timing of spawning season) as well as temporal variations (*i.e.*, inter-annual, seasonal) and spatial scales (*i.e.*, movements of fish between different habitats or water depths) (Fowler et al., 2008; Giri and Hall, 2015; Henry and Lyle, 2003). Fisher behaviour, gear selectivity, personal ethics and ability will also have an affect on retained fish length (Henry and Lyle, 2003; Lyle et al., 2009).

Minimum (or maximum) size limits are another important consideration in the collection of weight-length data from recreational fishers as this is likely to truncate the length frequency distributions [see King George Whiting (minimum size 280 mm) (Figure 11) or Bight Redfish (minimum size 300 mm) (Figure 21)]. Although this is likely to increase the average weight of a species, as smaller fish will be excluded, it is an accurate reflection of the retained catch by recreational fishers.

The implementation of three Boat Ramp Surveys has enabled continual evaluation and improvement in survey design. A key design change between the 2011/12 and 2013/14 surveys was the shift from a randomised to a targeted survey design. This shift facilitated an increase in the number of weight-length data obtained, especially outside of the West Coast. It also increased the diversity of species for which measurements were obtained and, for these reasons the targeted design was continued in 2015/16, and is recommended for future surveys. Variation in sampling intensity between years and boat ramps necessitate further consideration of weighting these samples to account for these differences.

In the 2011/12 and 2013/14 Boat Ramp Surveys staff used either handheld or electronic scales during data collection, although the use of the electronic scales was encouraged due to increased accuracy. The use of handheld scales on smaller fish resulted in large variations in weight values (*i.e.* Stripey Snapper). In this situation, values recorded from handheld scales were removed from any analysis. As no fish exceeded the 30 kg capability of the electronic scales, handheld scales were not provided in the 2015/16 Boat Ramp Survey to facilitate increased accuracy and standardised data collection of weight data across sites.

Weight measurements for crustaceans, such as Western Rock Lobster or Blue Swimmer Crab, were complicated by missing limbs on some specimens. While condition categories (*i.e.*, gilled and gutted) were available for fish species, additional categories have now been provided for crustaceans to improve understanding of the effect of limb loss on variations in weight measurements. In future training programs for staff, it will also be important to re-iterate the importance consistently recording this information for both fish and crustaceans, as the majority of weight measurements currently assume an individual fish is whole.

4.4 Future research

The information on average weight collected during Boat Ramp Surveys completed in 2011/12 and 2013/14 has been used to convert estimates of recreational catch by numbers to harvest weight (Ryan et al., 2013; Ryan et al., 2015). It is likely that data from future Boat Ramp

Surveys will further refine and adjust estimates of weights. Exploration of additional analysis techniques and investigation of spatial and temporal differences of the dataset (*i.e.*, weighted regression, weighting of replicates to address pseudoreplication) will also be valuable in understanding changes over time, and provide additional guidance on the survey design, spatial and temporal scope, and frequency of future Boat Ramp Surveys.

Pseudoreplication occurs when measurements are treated inappropriately as independent replicates (*e.g.*, measurements are taken on the same subject, have a hierarchical structure, are correlated in time, or correlated in space) (Hurlbert, 1984). Some authors have argued that observations close in space or time can be considered statistically dependent and recommend analysing such data with hierarchical or mixed models (Lazic, 2010; Schank and Koehnle, 2009). Approaches to address lack of independence among replicates include taking the average of the averages, or weighting replicates to address unequal sample probabilities (*e.g.*, where stratified samples produce unequal sample probabilities between observations). The later approach assigns weights to each replicate, effectively increasing or decreasing the influence of replicates in the final model, and the slope and intercept change from weighted data, rather than the raw (unweighted) data. For this report, although weight-length data were considered statistically dependent and they were taken close in space and time, weighting was not undertaken. This is similar to analyses currently undertaken in other published literature, including average weights reported in Ryan et al. (2015) and Ryan et al. (2013). However, exploration of the most appropriate method for weighting replicates to address unequal sample probabilities among stratified samples will be worthwhile for future analyses of these data.

Boat Ramp Surveys provide weight-length data on species caught (and retained) by boat-based recreational fishers. Future research will need to consider expanding these techniques to include shore-based fishers as, depending on the species, they are responsible for taking a large portion of the recreational catch, especially for nearshore species (Henry and Lyle, 2003; Smallwood et al., 2012).

Adapting an on-site targeted survey design for shore-based recreational fishing is challenging due to the diffuse nature of this activity, which can occur from many access points and many platforms (*i.e.*, sandy beaches, rock platforms and cliffs). Frequent transportation of sensitive scales when accessing shore fishers is time consuming and field-based weight measurements are potentially biased due to a lack of flat surfaces or a need for frequent recalibration. Some shore-based fishing locations, such as jetties or groynes, with a single access point may be easy locations to intercept and interview fishers. Although fishing from beaches and other coastal locations may be difficult. In rare cases, weight measurements have been successfully obtained during on-site surveys of shore-based fishing where access points have been limited (Rangel and Erzini, 2007).

Along with fishing in remote areas, night fishing is also popular in some locations in Western Australia (Smallwood et al., 2012). The costs of providing staff and surveying at these locations and times may need to be factored into the survey costs.

As with the targeted Boat Ramp Survey, high-use sites for shore-based recreational fishing in Western Australia have been identified during previous surveys (Ayvazian et al., 1997; Beckley, 2015; Smallwood and Beckley, 2012; Smallwood et al., 2011; Smallwood and

Gaughan, 2013; Smallwood et al., 2012). Furthermore, by following other design principles of the targeted survey in terms of selecting peak locations and times for shore-based fishing activity, it should be possible to obtain weight-length data for key species. Additional research may be needed to identify differences (if any) in average weights between catches by boat- and shore-based recreational fishers as, in difficult to access (but high-use) locations, it may only be possible to obtain length information. If similar data are obtained, then assuming the same average weights for the species between fishing platforms may be acceptable. However, movement patterns of various species through their life cycles should also be considered as this will impact on weight and/or length of individuals caught as they move between shallow and deeper water habitats.

At the forefront of any future surveys, is consideration of fishing platform (boat-based and/or shore-based), design issues (including pseudoreplication), potential spatial and temporal differences, survey scope (such as, peak locations and times of fishing), survey costs and logistics, along with biology (*e.g.* life cycle) and behavioural changes (*e.g.* habitat shifts).

5 Acknowledgements

This report would not be possible without contributions from all the recreational fishers who took the time to participate in the recreational fishing surveys at boat ramps throughout Western Australia. The efforts of our many Research Survey Officers and Technical Officers who were based throughout Western Australia with respect to collecting this data from fishers were also invaluable (Aimee Brown, Steve Bunce, Jeremy Cassin, Kim Clayton, Sherri Cowcher, Rob Coxall, Cameron Desfosses, Chris Giles, Kim Gray, Jason Harney, Blaine Hodgson, Jerry Jenke, Graham Kay, Danielle Kelly, Lyn Kendle, Danielle Kyrwood, Yee Ten Lwoy, Shannon McNamara, Judy Maughan, Gabby Mitsopoulos, Penelope Normington, Arthur Ruul, Tom Ryan, Michael Sawyers, Craig Skepper, Rosie Smallwood, Ashley Thompson, Jodi Vitler, Wayne Wasey, Tom Williams, Daniel Yeoh). Stuart Blight, Vangie Gerginis, Norm Hall, Tim Leary, Rod Lenanton, Elena Sulin, Adrian Thomson, Veronique Vanderklift, Karen Williams and Brent Wise from the Department of Primary Industries and Regional Development also provided invaluable support throughout these projects. Thank you also to Mark Pagano, Alex Hesp and Cameron Desfosses from the Department of Primary Industries and Regional Development for taking the time to review the report.

The authors finally like to thank the many managers and researchers from the Department of Primary Industries and Regional Development, Edith Cowan University, and RecFishWest for participating in and contributing to the planning and implementation of these projects.

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7 Appendices

Appendix 1. State-wide and Bioregion bias-corrected weight-length parameter estimates (a and b), standard errors (S[a]and S[b]) and regression correlation coefficient (R^2) of fish species aggregating data calculated across years; derived from Boat Ramp Surveys. Note: SW = state-wide. Only species with >10 measurements included, therefore state-wide n values may not equal the sum of Bioregion n values, and only state-wide values may be available for some species.

Reporting Group	Common Name	Scientific Name	Bioregion	n	a	S[a]	b	S[b]	R^2
Gastropod	Abalone	<i>Haliotis</i> spp.	Statewide	122	0.000773	0.247536	2.6768	0.0562	0.95
Gastropod	Abalone	<i>Haliotis</i> spp.	West Coast	66	0.001027	0.275045	2.6239	0.0620	0.97
Gastropod	Abalone	<i>Haliotis</i> spp.	South Coast	56	0.000291	0.590731	2.8867	0.1355	0.89
Cephalopods	Squid	Order Teuthoidea	Statewide	63	0.001449	0.482695	2.3099	0.0913	0.91
Cephalopods	Squid	Order Teuthoidea	West Coast	47	0.001206	0.325106	2.3494	0.0619	0.97
Cephalopods	Squid	Order Teuthoidea	South Coast	16	0.001117	1.697984	2.3436	0.3149	0.80
Lobster	Western Rock Lobster	<i>Panulirus cygnus</i>	Statewide	1566	0.004105	0.066117	2.6623	0.0148	0.95
Lobster	Western Rock Lobster	<i>Panulirus cygnus</i>	Gascoyne Coast	17	0.004018	0.783421	2.6499	0.1631	0.95
Lobster	Western Rock Lobster	<i>Panulirus cygnus</i>	West Coast	1549	0.003867	0.068278	2.6759	0.0153	0.95
Crab	Blue Swimmer Crab	<i>Portunus armatus</i>	Statewide	1357	0.000195	0.241562	2.8504	0.0491	0.71
Crab	Blue Swimmer Crab	<i>Portunus armatus</i>	Gascoyne Coast	22	0.000367	1.872535	2.6996	0.3738	0.72
Crab	Blue Swimmer Crab	<i>Portunus armatus</i>	West Coast	1249	0.000268	0.288499	2.7854	0.0588	0.64
Crab	Blue Swimmer Crab	<i>Portunus armatus</i>	South Coast	84	0.000020	0.588569	3.3052	0.1175	0.91
Crab	Mud Crab	<i>Scylla</i> spp.	Statewide	63	0.000411	1.082033	2.9211	0.2224	0.74
Crab	Mud Crab	<i>Scylla</i> spp.	North Coast	61	0.000240	1.221279	3.0322	0.2513	0.71
Sharks	Gummy Shark	<i>Mustelus antarcticus</i>	Statewide	12	926.110417	1.545714	0.2167	0.2327	0.08
Sharks	Whaler & Weasel Sharks	Carcharhinidae & Hemigaleidae	Statewide	10	0.000440	3.952960	2.3448	0.5802	0.67
Bonito	Leaping Bonito	<i>Cybiosarda elegans</i>	Statewide	17	0.000001	1.393563	3.3891	0.2289	0.94
Bonito	Leaping Bonito	<i>Cybiosarda elegans</i>	West Coast	16	0.000001	2.897761	3.3350	0.4748	0.78
Bonito	Oriental Bonito	<i>Sarda orientalis</i>	Statewide	162	0.000048	0.746827	2.7711	0.1180	0.78
Bonito	Oriental Bonito	<i>Sarda orientalis</i>	South Coast	154	0.000125	0.736824	2.6203	0.1164	0.77
Bream	Black Bream	<i>Acanthopagrus butcheri</i>	Statewide	51	0.000010	0.513360	3.0630	0.0918	0.96
Bream	Black Bream	<i>Acanthopagrus butcheri</i>	South Coast	49	0.000012	0.563990	3.0452	0.1009	0.95
Bream	Frypan Bream	<i>Argyrops spinifer</i>	Statewide	30	0.000031	2.312086	2.9206	0.4004	0.66

Reporting Group	Common Name	Scientific Name	Bioregion	n	a	S[a]	b	S[b]	R ²
Bream	Frypan Bream	<i>Argyrops spinifer</i>	Gascoyne Coast	27	0.000124	0.933616	2.6886	0.1616	0.92
Bream	Pink Snapper	<i>Chrysophrys auratus</i>	Statewide	455	0.000087	0.145943	2.6884	0.0230	0.97
Bream	Pink Snapper	<i>Chrysophrys f. auratus</i>	Gascoyne Coast	34	0.000301	0.967902	2.4925	0.1526	0.89
Bream	Pink Snapper	<i>Chrysophrys auratus</i>	West Coast	335	0.000080	0.177671	2.7016	0.0281	0.97
Bream	Pink Snapper	<i>Chrysophrys auratus</i>	South Coast	86	0.000095	0.272956	2.6734	0.0427	0.98
Bream	Tarwhine	<i>Rhabdosargus sarba</i>	Statewide	44	0.000169	0.905218	2.5769	0.1596	0.86
Bream	Tarwhine	<i>Rhabdosargus sarba</i>	West Coast	29	0.000459	1.005222	2.4051	0.1772	0.87
Bream	Tarwhine	<i>Rhabdosargus sarba</i>	South Coast	15	0.000006	1.613944	3.1660	0.2847	0.90
Bream	Western Yellowfin Bream	<i>Acanthopagrus morrisoni</i>	Statewide	29	0.000008	1.118676	3.1314	0.1952	0.91
Bream	Western Yellowfin Bream	<i>Acanthopagrus morrisoni</i>	North Coast	25	0.000046	1.361128	2.8271	0.2373	0.86
Cobia	Cobia	<i>Rachycentron canadum</i>	Statewide	48	0.000012	1.404438	2.9197	0.2030	0.82
Cobia	Cobia	<i>Rachycentron canadum</i>	Gascoyne Coast	30	0.000001	1.695974	3.3081	0.2455	0.87
Cobia	Cobia	<i>Rachycentron canadum</i>	West Coast	11	0.007478	2.936504	1.9976	0.4200	0.72
Cod	Blackspotted Rockcod	<i>Epinephelus malabaricus</i>	Statewide	48	0.000031	1.472157	2.8770	0.2379	0.76
Cod	Blackspotted Rockcod	<i>Epinephelusfff malabaricus</i>	North Coast	40	0.000001	2.609750	3.4041	0.4248	0.63
Cod	Breaksea Cod	<i>Epinephelides armatus</i>	Statewide	861	0.000009	0.153639	3.0969	0.0259	0.94
Cod	Breaksea Cod	<i>Epinephelides armatus</i>	West Coast	512	0.000011	0.200462	3.0697	0.0338	0.94
Cod	Breaksea Cod	<i>Epinephelides armatus</i>	South Coast	349	0.000008	0.236085	3.1215	0.0397	0.95
Cod	Chinaman Rockcod	<i>Epinephelus rivulatus</i>	Statewide	475	0.000032	0.513631	2.8654	0.0899	0.68
Cod	Chinaman Rockcod	<i>Epinephelus rivulatus</i>	Gascoyne Coast	459	0.000038	0.572680	2.8381	0.1001	0.64
Cod	Chinaman Rockcod	<i>Epinephelus rivulatus</i>	West Coast	15	0.000011	0.670722	3.0694	0.1187	0.98
Cod	Eightbar Grouper	<i>Epinephelus octofasciatus</i>	Statewide	16	0.000020	0.337220	2.9682	0.0520	1.00
Cod	Eightbar Grouper	<i>Epinephelus octofasciatus</i>	Gascoyne Coast	11	0.000014	0.507439	3.0229	0.0765	0.99
Cod	Frostback Rockcod	<i>Epinephelus bilobatus</i>	Statewide	14	0.000004	2.461834	3.2083	0.4001	0.84
Cod	Frostback Rockcod	<i>Epinephelus bilobatus</i>	Gascoyne Coast	14	0.000004	2.461834	3.2083	0.4001	0.84
Cod	Goldspotted Rockcod	<i>Epinephelus coioides</i>	Statewide	92	0.000017	0.563774	2.9752	0.0904	0.92
Cod	Goldspotted Rockcod	<i>Epinephelus coioides</i>	North Coast	57	0.000094	1.008648	2.7074	0.1626	0.83
Cod	Goldspotted Rockcod	<i>Epinephelus coioides</i>	Gascoyne Coast	27	0.000003	0.532456	3.2342	0.0859	0.98
Cod	Greasy Rockcod	<i>Epinephelus tauvina</i>	Statewide	15	0.000070	1.038737	2.7426	0.1699	0.95
Cod	Greasy Rockcod	<i>Epinephelus tauvina</i>	Gascoyne Coast	15	0.000070	1.038737	2.7426	0.1699	0.95

Reporting Group	Common Name	Scientific Name	Bioregion	n	a	S[a]	b	S[b]	R ²
Cod	Harlequin Fish	<i>Othos dentex</i>	Statewide	129	0.000060	0.685152	2.7502	0.1114	0.83
Cod	Harlequin Fish	<i>Othos dentex</i>	West Coast	52	0.000034	1.391743	2.8324	0.2266	0.76
Cod	Harlequin Fish	<i>Othos dentex</i>	South Coast	77	0.000079	0.768594	2.7100	0.1249	0.86
Cod	Rankin Cod	<i>Epinephelus multinotatus</i>	Statewide	129	0.000011	0.300333	3.0525	0.0473	0.97
Cod	Rankin Cod	<i>Epinephelus multinotatus</i>	North Coast	37	0.000008	0.807565	3.0933	0.1270	0.94
Cod	Rankin Cod	<i>Epinephelus multinotatus</i>	Gascoyne Coast	92	0.000011	0.297054	3.0570	0.0468	0.98
Cod	Tomato Rockcod	<i>Cephalopholis sonnerati</i>	Statewide	33	0.000021	1.389086	2.9781	0.2322	0.84
Cod	Tomato Rockcod	<i>Cephalopholis sonnerati</i>	Gascoyne Coast	31	0.000020	1.432234	2.9864	0.2394	0.84
Cod	Yellowspotted Rockcod	<i>Epinephelus areolatus</i>	Statewide	67	0.000015	0.691121	2.9692	0.1163	0.91
Cod	Yellowspotted Rockcod	<i>Epinephelus areolatus</i>	Gascoyne Coast	61	0.000006	0.677318	3.1387	0.1143	0.93
Cod	Temperate Bass & Rockcod	Percichthyidae & Serranidae	Statewide	22	0.000022	2.846320	2.9537	0.4572	0.68
Cod	Temperate Bass & Rockcod	Percichthyidae & Serranidae	North Coast	20	0.000036	3.120129	2.8773	0.4990	0.65
Coral Trout	Barcheek Coral Trout	<i>Plectropomus maculatus</i>	Statewide	129	0.000005	0.459465	3.1645	0.0728	0.94
Coral Trout	Barcheek Coral Trout	<i>Plectropomus maculatus</i>	North Coast	81	0.000015	0.729242	2.9675	0.1165	0.89
Coral Trout	Barcheek Coral Trout	<i>Plectropomus maculatus</i>	Gascoyne Coast	45	0.000002	0.596215	3.3134	0.0933	0.97
Coral Trout	Common Coral Trout	<i>Plectropomus leopardus</i>	Statewide	29	0.000031	1.200172	2.8653	0.1916	0.89
Coral Trout	Common Coral Trout	<i>Plectropomus leopardus</i>	West Coast	27	0.000026	1.415738	2.8963	0.2265	0.87
Coral Trout	Yellowedge Coronation	<i>Variola louti</i>	Statewide	23	0.000001	0.879429	3.3292	0.1401	0.96
Coral Trout	Yellowedge Coronation	<i>Variola louti</i>	Gascoyne Coast	23	0.000001	0.879429	3.3292	0.1401	0.96
Drummer	Western Rock Blackfish	<i>Girella tephraeops</i>	Statewide	13	0.000937	1.357852	2.3420	0.2229	0.91
Emperor	Bluespotted Emperor	<i>Lethrinus</i> sp.	Statewide	13	0.000002	3.737081	3.3788	0.6448	0.71
Emperor	Bluespotted Emperor	<i>Lethrinus</i> sp.	North Coast	11	0.000001	3.206274	3.4488	0.5530	0.81
Emperor	Grass Emperor	<i>Lethrinus laticaudis</i>	Statewide	419	0.000008	0.206288	3.1101	0.0343	0.95
Emperor	Grass Emperor	<i>Lethrinus laticaudis</i>	North Coast	211	0.000008	0.423512	3.1245	0.0693	0.91
Emperor	Grass Emperor	<i>Lethrinus laticaudis</i>	Gascoyne Coast	207	0.000013	0.365157	3.0359	0.0617	0.92
Emperor	Redspot Emperor	<i>Lethrinus lentjan</i>	Statewide	22	0.000013	1.683169	3.0116	0.2869	0.85
Emperor	Redspot Emperor	<i>Lethrinus lentjan</i>	Gascoyne Coast	22	0.000013	1.683169	3.0116	0.2869	0.85
Emperor	Redthroat Emperor	<i>Lethrinus miniatus</i>	Statewide	197	0.000025	0.224455	2.9190	0.0379	0.97
Emperor	Redthroat Emperor	<i>Lethrinus miniatus</i>	Gascoyne Coast	126	0.000032	0.259797	2.8793	0.0438	0.97
Emperor	Redthroat Emperor	<i>Lethrinus miniatus</i>	West Coast	69	0.000015	0.397019	3.0181	0.0671	0.97

Reporting Group	Common Name	Scientific Name	Bioregion	n	a	S[a]	b	S[b]	R ²
Emperor	Robinson's Seabream	<i>Gymnocranius grandoculis</i>	Statewide	85	0.000018	0.353806	2.9681	0.0576	0.97
Emperor	Robinson's Seabream	<i>Gymnocranius grandoculis</i>	Gascoyne Coast	85	0.000018	0.353806	2.9681	0.0576	0.97
Emperor	Spangled Emperor	<i>Lethrinus nebulosus</i>	Statewide	384	0.000037	0.202828	2.8319	0.0324	0.95
Emperor	Spangled Emperor	<i>Lethrinus nebulosus</i>	North Coast	17	0.000281	0.898195	2.5164	0.1464	0.95
Emperor	Spangled Emperor	<i>Lethrinus nebulosus</i>	Gascoyne Coast	354	0.000028	0.207028	2.8761	0.0331	0.96
Emperor	Spangled Emperor	<i>Lethrinus nebulosus</i>	West Coast	13	0.000043	1.237664	2.8193	0.1982	0.95
Emperor	Spotcheek Emperor	<i>Lethrinus rubrioperculatus</i>	Statewide	27	0.000005	0.932803	3.1592	0.1603	0.94
Emperor	Spotcheek Emperor	<i>Lethrinus rubrioperculatus</i>	Gascoyne Coast	27	0.000005	0.932803	3.1592	0.1603	0.94
Emperor	Yellowtail Emperor	<i>Lethrinus atkinsoni</i>	Statewide	79	0.000016	0.647082	2.9996	0.1123	0.90
Emperor	Yellowtail Emperor	<i>Lethrinus atkinsoni</i>	Gascoyne Coast	74	0.000020	0.665351	2.9625	0.1156	0.90
Flathead	Longspine Flathead	<i>Platycephalus longispinis</i>	Statewide	10	0.000001	0.994485	3.3935	0.1812	0.98
Flathead	Longspine Flathead	<i>Platycephalus longispinis</i>	West Coast	10	0.000001	0.994485	3.3935	0.1812	0.98
Flathead	Sthn Bluespotted Flathead	<i>Platycephalus speculator</i>	Statewide	183	0.000002	0.200657	3.1619	0.0330	0.98
Flathead	Sthn Bluespotted Flathead	<i>Platycephalus speculator</i>	West Coast	96	0.000003	0.347927	3.1252	0.0567	0.97
Flathead	Sthn Bluespotted Flathead	<i>Platycephalus speculator</i>	South Coast	87	0.000002	0.242835	3.1432	0.0404	0.99
Flathead	Yellowtail Flathead	<i>Platycephalus westraliae</i>	Statewide	12	0.001577	1.729502	2.0596	0.2888	0.84
Flathead	Flatheads	Platycephalidae	Statewide	13	0.000000	1.512661	3.5019	0.2466	0.95
Flathead	Flatheads	Platycephalidae	South Coast	11	0.000000	2.131409	3.5624	0.3459	0.92
Flounder	Smalltooth Flounder	<i>Pseudorhombus jenynsii</i>	Statewide	18	0.000017	1.166847	2.8978	0.1992	0.93
Flounder	Smalltooth Flounder	<i>Pseudorhombus jenynsii</i>	West Coast	12	0.000017	1.377091	2.9071	0.2355	0.94
Garfish	Garfishes	Hemiramphidae	Statewide	140	0.000113	0.684189	2.3507	0.1176	0.74
Garfish	Garfishes	Hemiramphidae	West Coast	108	0.000188	0.867707	2.2663	0.1485	0.69
Garfish	Garfishes	Hemiramphidae	South Coast	28	0.000048	1.624607	2.4899	0.2824	0.75
Goatfish	Blacksaddle Goatfish	<i>Parupeneus spilurus</i>	Statewide	14	0.000049	1.036282	2.7885	0.1736	0.96
Goatfish	Blacksaddle Goatfish	<i>Parupeneus spilurus</i>	West Coast	14	0.000049	1.036282	2.7885	0.1736	0.96
Goatfish	Bluespotted Goatfish	<i>Upeneichthys vlamingii</i>	Statewide	29	0.000017	0.360194	2.9645	0.0646	0.99
Goatfish	Bluespotted Goatfish	<i>Upeneichthys vlamingii</i>	West Coast	16	0.000012	0.395681	3.0251	0.0695	0.99
Goatfish	Bluespotted Goatfish	<i>Upeneichthys vlamingii</i>	South Coast	13	0.000157	2.000090	2.5570	0.3679	0.81
Grunter	Western Striped Grunter	<i>Pelates octolineatus</i>	Statewide	81	0.000031	0.704578	2.8189	0.1317	0.85
Grunter	Western Striped Grunter	<i>Pelates octolineatus</i>	West Coast	47	0.000063	1.125318	2.6980	0.2106	0.78

Reporting Group	Common Name	Scientific Name	Bioregion	n	a	S[a]	b	S[b]	R ²
Grunter	Western Striped Grunter	<i>Pelates octolineatus</i>	South Coast	34	0.000016	0.681759	2.9328	0.1273	0.94
Grunter Bream	Goldspotted Sweetlips	<i>Plectorhinchus flavomaculatus</i>	Statewide	36	0.001531	1.430812	2.2459	0.2334	0.73
Grunter Bream	Goldspotted Sweetlips	<i>Plectorhinchus flavomaculatus</i>	West Coast	36	0.001531	1.430812	2.2459	0.2334	0.73
Grunter Bream	Painted Sweetlips	<i>Diagramma labiosum</i>	Statewide	63	0.000098	0.469383	2.6689	0.0744	0.95
Grunter Bream	Painted Sweetlips	<i>Diagramma labiosum</i>	North Coast	18	0.000035	1.090177	2.8374	0.1738	0.94
Grunter Bream	Painted Sweetlips	<i>Diagramma labiosum</i>	Gascoyne Coast	38	0.000158	0.609187	2.5895	0.0970	0.95
Gurnard	Bighead Gurnard Perch	<i>Neosebastes pandus</i>	Statewide	22	1.946234	2.374304	1.0182	0.4058	0.24
Gurnard	Bighead Gurnard Perch	<i>Neosebastes pandus</i>	West Coast	20	2.342815	2.631513	0.9869	0.4493	0.21
Herring	Sandy Sprat	<i>Hyperlophus vittatus</i>	Statewide	25	0.000013	1.228696	2.9218	0.2381	0.87
Herring	Sandy Sprat	<i>Hyperlophus vittatus</i>	West Coast	25	0.000013	1.228696	2.9218	0.2381	0.87
Jewfish	Black Jewfish	<i>Protonibea diacanthus</i>	Statewide	16	0.001770	5.590787	2.2478	0.8252	0.35
Jewfish	Black Jewfish	<i>Protonibea diacanthus</i>	North Coast	14	0.003002	5.994886	2.1736	0.8840	0.34
Jewfish	Mulloway	<i>Argyrosomus hololepidotus</i>	Statewide	13	0.000011	0.882885	2.9479	0.1293	0.98
Jewfish	Mulloway	<i>Argyrosomus hololepidotus</i>	West Coast	11	0.000011	1.149165	2.9541	0.1675	0.97
Leatherjacket	Bluelined Leatherjacket	<i>Meuschenia galii</i>	Statewide	11	0.000004	2.188950	3.2426	0.3853	0.89
Leatherjacket	Bluelined Leatherjacket	<i>Meuschenia galii</i>	West Coast	10	0.000003	2.232889	3.2876	0.3928	0.90
Leatherjacket	Horseshoe Leatherjacket	<i>Meuschenia hippocrepis</i>	Statewide	21	0.001165	1.648985	2.2791	0.2811	0.78
Leatherjacket	Horseshoe Leatherjacket	<i>Meuschenia hippocrepis</i>	West Coast	17	0.001567	1.838209	2.2244	0.3143	0.77
Leatherjacket	Sixspine Leatherjacket	<i>Meuschenia freycineti</i>	Statewide	26	0.000029	1.161218	2.8735	0.2002	0.90
Leatherjacket	Sixspine Leatherjacket	<i>Meuschenia freycineti</i>	South Coast	18	0.000108	1.974802	2.6357	0.3428	0.79
Leatherjacket	Triggerfish & Leatherjackets	Balistidae & Monacanthidae	Statewide	18	0.001656	1.110922	2.1646	0.1925	0.89
Leatherjacket	Triggerfish & Leatherjackets	Balistidae & Monacanthidae	South Coast	12	0.000439	0.684364	2.4006	0.1185	0.98
Mackerel	Blue Mackerel	<i>Scomber australasicus</i>	Statewide	59	0.000004	0.438585	3.1612	0.0795	0.97
Mackerel	Blue Mackerel	<i>Scomber australasicus</i>	West Coast	11	0.000004	0.759752	3.1696	0.1326	0.98
Mackerel	Blue Mackerel	<i>Scomber australasicus</i>	South Coast	48	0.000008	0.836701	3.0208	0.1531	0.89
Mackerel	Grey Mackerel	<i>Scomberomorus semifasciatus</i>	Statewide	10	0.000027	4.843291	2.7637	0.6947	0.66
Mackerel	Mackerel Tuna	<i>Euthynnus affinis</i>	Statewide	37	0.000011	1.126908	3.0119	0.1756	0.89
Mackerel	Mackerel Tuna	<i>Euthynnus affinis</i>	Gascoyne Coast	26	0.000070	0.463938	2.7203	0.0723	0.98
Mackerel	School Mackerel	<i>Scomberomorus queenslandicus</i>	Statewide	82	0.000058	0.731502	2.6561	0.1128	0.87
Mackerel	School Mackerel	<i>Scomberomorus queenslandicus</i>	North Coast	32	0.000189	1.161844	2.4705	0.1802	0.86

Reporting Group	Common Name	Scientific Name	Bioregion	n	a	S[a]	b	S[b]	R ²
Mackerel	School Mackerel	<i>Scomberomorus queenslandicus</i>	Gascoyne Coast	44	0.000015	0.774687	2.8612	0.1193	0.93
Mackerel	Spanish Mackerel	<i>Scomberomorus commerson</i>	Statewide	213	0.000005	0.623411	3.0242	0.0889	0.85
Mackerel	Spanish Mackerel	<i>Scomberomorus commerson</i>	North Coast	39	0.000015	1.646591	2.8517	0.2347	0.80
Mackerel	Spanish Mackerel	<i>Scomberomorus commerson</i>	Gascoyne Coast	147	0.000001	0.628943	3.2019	0.0897	0.90
Mackerel	Spanish Mackerel	<i>Scomberomorus commerson</i>	West Coast	27	0.000063	1.892646	2.6657	0.2700	0.80
Mackerel	Mackerels	Scombridae	Statewide	10	0.001681	8.968701	2.1880	1.3279	0.25
Mackerel	Mackerels	Scombridae	North Coast	10	0.001681	8.968701	2.1880	1.3279	0.25
Morwong	Blue Morwong	<i>Nemadactylus valenciennesi</i>	Statewide	293	0.000043	0.249042	2.7892	0.0388	0.95
Morwong	Blue Morwong	<i>Nemadactylus valenciennesi</i>	West Coast	49	0.000060	0.637803	2.7428	0.0996	0.94
Morwong	Blue Morwong	<i>Nemadactylus valenciennesi</i>	South Coast	244	0.000040	0.267639	2.8008	0.0417	0.95
Pearl Perch	Northern Pearl Perch	<i>Glaucosoma buergeri</i>	Statewide	33	0.000038	1.027699	2.8686	0.1683	0.90
Pearl Perch	Northern Pearl Perch	<i>Glaucosoma buergeri</i>	Gascoyne Coast	32	0.000062	1.145690	2.7873	0.1873	0.88
Pearl Perch	West Australian Dhufish	<i>Glaucosoma hebraicum</i>	Statewide	790	0.000024	0.136902	2.9435	0.0212	0.96
Pearl Perch	West Australian Dhufish	<i>Glaucosoma hebraicum</i>	West Coast	773	0.000025	0.140099	2.9387	0.0217	0.96
Pearl Perch	West Australian Dhufish	<i>Glaucosoma hebraicum</i>	South Coast	17	0.000012	0.536754	3.0513	0.0829	0.99
Pigfish	Saddleback Pigfish	<i>Bodianus bilunulatus</i>	Statewide	14	0.000311	1.338610	2.4815	0.2242	0.91
Pigfish	Saddleback Pigfish	<i>Bodianus bilunulatus</i>	Gascoyne Coast	13	0.000252	1.526618	2.5164	0.2550	0.90
Pike	Snook	<i>Sphyraena novaehollandiae</i>	Statewide	82	0.000147	0.493484	2.3997	0.0787	0.92
Pike	Snook	<i>Sphyraena novaehollandiae</i>	West Coast	26	0.000261	1.000546	2.3116	0.1589	0.90
Pike	Snook	<i>Sphyraena novaehollandiae</i>	South Coast	56	0.000117	0.563017	2.4339	0.0900	0.93
Pike	Striped Barracuda	<i>Sphyraena pinguis</i>	Statewide	29	0.001857	0.566406	2.0119	0.0935	0.94
Pike	Striped Barracuda	<i>Sphyraena pinguis</i>	West Coast	28	0.002029	0.575320	1.9982	0.0948	0.94
Redfish	Bight Redfish	<i>Centroberyx gerrardi</i>	Statewide	477	0.000166	0.119910	2.5974	0.0198	0.97
Redfish	Bight Redfish	<i>Centroberyx gerrardi</i>	West Coast	31	0.000158	1.007407	2.6035	0.1660	0.89
Redfish	Bight Redfish	<i>Centroberyx gerrardi</i>	South Coast	446	0.000165	0.118650	2.5978	0.0196	0.98
Redfish	Swallowtail	<i>Centroberyx lineatus</i>	Statewide	179	0.001306	0.926328	2.1331	0.1574	0.51
Redfish	Swallowtail	<i>Centroberyx lineatus</i>	West Coast	10	0.003406	1.964604	1.9772	0.3337	0.81
Redfish	Swallowtail	<i>Centroberyx lineatus</i>	South Coast	169	0.001211	0.982916	2.1453	0.1670	0.50
Salmon & Herring	Australian Herring	<i>Arripis georgianus</i>	Statewide	2816	0.000021	0.117181	2.8787	0.0216	0.86
Salmon & Herring	Australian Herring	<i>Arripis georgianus</i>	West Coast	1406	0.000032	0.199330	2.7966	0.0366	0.81

Reporting Group	Common Name	Scientific Name	Bioregion	n	a	S[a]	b	S[b]	R ²
Salmon & Herring	Australian Herring	<i>Arripis georgianus</i>	South Coast	1410	0.000014	0.142587	2.9581	0.0263	0.90
Salmon & Herring	Western Australian Salmon	<i>Arripis truttaceus</i>	Statewide	269	0.000016	0.085887	2.9303	0.0133	0.99
Salmon & Herring	Western Australian Salmon	<i>Arripis truttaceus</i>	West Coast	124	0.000534	1.012722	2.4028	0.1526	0.67
Salmon & Herring	Western Australian Salmon	<i>Arripis truttaceus</i>	South Coast	145	0.000016	0.096544	2.9324	0.0154	1.00
Sergeant Baker	Sergeant Baker	<i>Latropiscis purpurissatus</i>	Statewide	60	0.000010	0.710482	2.9832	0.1175	0.92
Sergeant Baker	Sergeant Baker	<i>Latropiscis purpurissatus</i>	West Coast	23	0.000247	1.959009	2.4503	0.3240	0.73
Sergeant Baker	Sergeant Baker	<i>Latropiscis purpurissatus</i>	South Coast	37	0.000005	0.701606	3.0837	0.1161	0.95
Snappers (King)	Goldband Snapper	<i>Pristipomoides multidens</i>	Statewide	198	0.000007	0.276746	3.0822	0.0439	0.96
Snappers (King)	Goldband Snapper	<i>Pristipomoides multidens</i>	Gascoyne Coast	196	0.000007	0.277011	3.0793	0.0439	0.96
Snappers (King)	Rosy Snapper	<i>Pristipomoides filamentosus</i>	Statewide	13	0.000034	1.347007	2.8099	0.2170	0.94
Snappers (King)	Rosy Snapper	<i>Pristipomoides filamentosus</i>	Gascoyne Coast	13	0.000034	1.347007	2.8099	0.2170	0.94
Snappers (King)	Sharptooth Snapper	<i>Pristipomoides typus</i>	Statewide	90	0.000005	0.816882	3.0985	0.1308	0.86
Snappers (King)	Sharptooth Snapper	<i>Pristipomoides typus</i>	Gascoyne Coast	90	0.000005	0.816882	3.0985	0.1308	0.86
Snapper (Tropical)	Blackspot Snapper	<i>Lutjanus fulviflamma</i>	Statewide	10	0.000417	1.201855	2.3963	0.2155	0.94
Snapper (Tropical)	Chinamanfish	<i>Symphorus nematophorus</i>	Statewide	38	0.000126	1.103258	2.6574	0.1703	0.87
Snapper (Tropical)	Chinamanfish	<i>Symphorus nematophorus</i>	North Coast	27	0.000260	1.477491	2.5451	0.2295	0.83
Snapper (Tropical)	Chinamanfish	<i>Symphorus nematophorus</i>	Gascoyne Coast	11	0.000004	0.656264	3.1662	0.0997	0.99
Snapper (Tropical)	Crimson Snapper	<i>Lutjanus erythropterus</i>	Statewide	13	0.000871	2.426113	2.3342	0.3878	0.77
Snapper (Tropical)	Crimson Snapper	<i>Lutjanus erythropterus</i>	North Coast	13	0.000871	2.426113	2.3342	0.3878	0.77
Snapper (Tropical)	Darktail Snapper	<i>Lutjanus lemniscatus</i>	Statewide	23	0.000006	1.538199	3.1273	0.2614	0.87
Snapper (Tropical)	Darktail Snapper	<i>Lutjanus lemniscatus</i>	Gascoyne Coast	19	0.000016	1.258611	2.9731	0.2129	0.92
Snappers (Tropical)	Golden Snapper	<i>Lutjanus johnii</i>	Statewide	16	0.027553	2.212665	1.7187	0.3725	0.60
Snappers (Tropical)	Golden Snapper	<i>Lutjanus johnii</i>	North Coast	15	0.064583	2.352385	1.5769	0.3955	0.55
Snapper (Tropical)	Mangrove Jack	<i>Lutjanus argentimaculatus</i>	Statewide	73	0.000018	0.606679	2.9556	0.1024	0.92
Snapper (Tropical)	Mangrove Jack	<i>Lutjanus argentimaculatus</i>	North Coast	67	0.000012	0.779247	3.0230	0.1319	0.89
Snapper (Tropical)	Moses' Snapper	<i>Lutjanus russellii</i>	Statewide	48	0.000005	0.671309	3.1657	0.1129	0.94
Snapper (Tropical)	Moses' Snapper	<i>Lutjanus russellii</i>	North Coast	11	0.012349	3.865158	1.8465	0.6517	0.47
Snapper (Tropical)	Moses' Snapper	<i>Lutjanus russellii</i>	Gascoyne Coast	37	0.000004	0.676004	3.2024	0.1137	0.96
Snappers (Tropical)	Red Emperor	<i>Lutjanus sebae</i>	Statewide	176	0.000006	0.302225	3.1624	0.0479	0.96
Snappers (Tropical)	Red Emperor	<i>Lutjanus sebae</i>	North Coast	40	0.000006	0.865822	3.1590	0.1386	0.93

Reporting Group	Common Name	Scientific Name	Bioregion	n	a	S[a]	b	S[b]	R ²
Snappers (Tropical)	Red Emperor	<i>Lutjanus sebae</i>	Gascoyne Coast	134	0.000007	0.337372	3.1517	0.0533	0.96
Snapper (Tropical)	Ruby Snapper	<i>Etelis carbunculus</i>	Statewide	73	0.000003	0.302920	3.1956	0.0457	0.99
Snapper (Tropical)	Ruby Snapper	<i>Etelis carbunculus</i>	Gascoyne Coast	73	0.000003	0.302920	3.1956	0.0457	0.99
Snapper (Tropical)	Saddletail Snapper	<i>Lutjanus malabaricus</i>	Statewide	71	0.000020	0.839869	2.9265	0.1371	0.87
Snapper (Tropical)	Saddletail Snapper	<i>Lutjanus malabaricus</i>	North Coast	47	0.000018	1.122032	2.9438	0.1834	0.85
Snapper (Tropical)	Saddletail Snapper	<i>Lutjanus malabaricus</i>	Gascoyne Coast	24	0.000043	0.733512	2.8112	0.1194	0.96
Snapper (Tropical)	Stripey Snapper	<i>Lutjanus carponotatus</i>	Statewide	132	0.000031	0.551709	2.8715	0.0947	0.88
Snapper (Tropical)	Stripey Snapper	<i>Lutjanus carponotatus</i>	North Coast	63	0.000022	0.904950	2.9299	0.1553	0.85
Snapper (Tropical)	Stripey Snapper	<i>Lutjanus carponotatus</i>	Gascoyne Coast	69	0.000036	0.681296	2.8493	0.1170	0.90
Snapper (Tropical)	Fusiliers & Snappers	Caesionidae & Lutjanidae	Statewide	18	96.580540	2.159416	0.4512	0.3610	0.09
Snapper (Tropical)	Fusiliers & Snappers	Caesionidae & Lutjanidae	North Coast	14	13.126343	2.686991	0.7952	0.4531	0.20
Stonefish	Western Red Scorpionfish	<i>Scorpaena sumptuosa</i>	Statewide	11	0.000041	1.714617	2.8809	0.2988	0.91
Striped Grunter	Eastern Striped Grunter	<i>Pelates sexlineatus</i>	Statewide	56	0.000004	0.532519	3.1654	0.1003	0.95
Striped Grunter	Eastern Striped Grunter	<i>Pelates sexlineatus</i>	West Coast	36	0.000003	0.719526	3.2576	0.1365	0.94
Striped Grunter	Eastern Striped Grunter	<i>Pelates sexlineatus</i>	South Coast	20	0.000007	1.057483	3.0849	0.1968	0.93
Sweep	Banded Sweep	<i>Scorpis georgiana</i>	Statewide	33	0.000041	1.264287	2.8594	0.2170	0.85
Sweep	Banded Sweep	<i>Scorpis georgiana</i>	West Coast	26	0.000016	1.417834	3.0223	0.2440	0.86
Sweep	Moonlighter	<i>Tilodon sexfasciatus</i>	Statewide	15	0.012560	2.021934	1.9081	0.3458	0.70
Sweep	Moonlighter	<i>Tilodon sexfasciatus</i>	West Coast	10	0.023395	2.667040	1.7940	0.4557	0.66
Sweep	Sea Sweep	<i>Scorpis aequipinnis</i>	Statewide	143	0.000047	0.484013	2.8006	0.0792	0.90
Sweep	Sea Sweep	<i>Scorpis aequipinnis</i>	West Coast	47	0.000021	1.045062	2.9236	0.1706	0.87
Sweep	Sea Sweep	<i>Scorpis aequipinnis</i>	South Coast	96	0.000052	0.526712	2.7878	0.0862	0.92
Tailor	Tailor	<i>Pomatomus saltatrix</i>	Statewide	106	0.000020	0.252088	2.8699	0.0420	0.98
Tailor	Tailor	<i>Pomatomus saltatrix</i>	Gascoyne Coast	10	0.000234	1.439733	2.4694	0.2361	0.93
Tailor	Tailor	<i>Pomatomus saltatrix</i>	West Coast	92	0.000019	0.259425	2.8760	0.0432	0.98
Threadfin	Blue Threadfin	<i>Eleutheronema tetradactylum</i>	Statewide	21	0.000022	1.094447	2.8631	0.1770	0.93
Threadfin	Blue Threadfin	<i>Eleutheronema tetradactylum</i>	North Coast	20	0.000034	1.126011	2.7987	0.1817	0.93
Threadfin Bream	Western Butterflyfish	<i>Pentapodus vitta</i>	Statewide	199	0.000039	0.377017	2.8044	0.0691	0.89
Threadfin Bream	Western Butterflyfish	<i>Pentapodus vitta</i>	West Coast	196	0.000039	0.374489	2.8018	0.0687	0.90
Trevally	Amberjack	<i>Seriola dumerili</i>	Statewide	11	0.000185	0.852500	2.5596	0.1277	0.98

Reporting Group	Common Name	Scientific Name	Bioregion	n	a	S[a]	b	S[b]	R ²
Trevally	Bludger Trevally	<i>Carangoides gymnostethus</i>	Statewide	22	0.000023	1.026496	2.8892	0.1639	0.94
Trevally	Bludger Trevally	<i>Carangoides gymnostethus</i>	Gascoyne Coast	20	0.000053	1.538725	2.7553	0.2452	0.88
Trevally	Blue Trevally	<i>Carangoides ferdau</i>	Statewide	10	0.043273	7.996424	1.6574	1.3253	0.16
Trevally	Giant Trevally	<i>Caranx ignobilis</i>	Statewide	14	0.000063	1.575459	2.7225	0.2535	0.91
Trevally	Golden Trevally	<i>Gnathanodon speciosus</i>	Statewide	97	0.000067	0.493636	2.7091	0.0787	0.93
Trevally	Golden Trevally	<i>Gnathanodon speciosus</i>	North Coast	69	0.000098	0.697832	2.6469	0.1127	0.89
Trevally	Golden Trevally	<i>Gnathanodon speciosus</i>	Gascoyne Coast	28	0.000045	0.436889	2.7756	0.0677	0.98
Trevally	Samsonfish	<i>Seriola hippos</i>	Statewide	97	0.000081	0.252817	2.6788	0.0376	0.98
Trevally	Samsonfish	<i>Seriola hippos</i>	West Coast	79	0.000090	0.290058	2.6623	0.0433	0.98
Trevally	Samsonfish	<i>Seriola hippos</i>	South Coast	18	0.000094	0.734579	2.6603	0.1068	0.97
Trevally	Silver Trevally	<i>Pseudocaranx georgianus</i>	Statewide	1296	0.000027	0.088283	2.8549	0.0151	0.96
Trevally	Silver Trevally	<i>Pseudocaranx georgianus</i>	West Coast	892	0.000025	0.147084	2.8660	0.0251	0.94
Trevally	Silver Trevally	<i>Pseudocaranx georgianus</i>	South Coast	404	0.000029	0.112377	2.8423	0.0195	0.98
Trevally	Turrum	<i>Carangoides fulvoguttatus</i>	Statewide	81	0.000164	0.797184	2.5796	0.1275	0.84
Trevally	Turrum	<i>Carangoides fulvoguttatus</i>	North Coast	22	0.000305	2.204999	2.5184	0.3516	0.72
Trevally	Turrum	<i>Carangoides fulvoguttatus</i>	Gascoyne Coast	59	0.000164	0.548166	2.5648	0.0878	0.94
Trevally	Yellowtail Kingfish	<i>Seriola lalandi</i>	Statewide	44	0.000116	0.542843	2.5831	0.0828	0.96
Trevally	Yellowtail Kingfish	<i>Seriola lalandi</i>	West Coast	30	0.000147	0.745741	2.5446	0.1140	0.95
Trevally	Yellowtail Kingfish	<i>Seriola lalandi</i>	South Coast	14	0.000091	0.625882	2.6251	0.0948	0.98
Trevally	Yellowtail Scad	<i>Trachurus novaezelandiae</i>	Statewide	114	0.000028	0.572515	2.7808	0.1082	0.85
Trevally	Yellowtail Scad	<i>Trachurus novaezelandiae</i>	West Coast	46	0.000086	0.841164	2.5782	0.1586	0.86
Trevally	Yellowtail Scad	<i>Trachurus novaezelandiae</i>	South Coast	68	0.000011	0.609756	2.9576	0.1154	0.91
Trevally	Trevallies	Carangidae	Statewide	22	0.000044	3.860228	2.8433	0.6294	0.51
Trevally	Trevallies	Carangidae	North Coast	21	0.000067	3.956840	2.7793	0.6444	0.49
Tuna	Longtail Tuna	<i>Thunnus tonggol</i>	Statewide	56	0.000363	0.552104	2.4723	0.0832	0.94
Tuna	Longtail Tuna	<i>Thunnus tonggol</i>	Gascoyne Coast	50	0.000228	0.527318	2.5413	0.0793	0.96
Tuna	Skipjack Tuna	<i>Katsuwonus pelamis</i>	Statewide	59	0.000015	0.997589	2.9981	0.1558	0.87
Tuna	Skipjack Tuna	<i>Katsuwonus pelamis</i>	Gascoyne Coast	38	0.000010	1.397499	3.0538	0.2192	0.84
Tuna	Skipjack Tuna	<i>Katsuwonus pelamis</i>	West Coast	12	0.191065	3.172089	1.5547	0.4869	0.50
Tuna	Southern Bluefin Tuna	<i>Thunnus maccoyii</i>	Statewide	101	0.000005	0.370296	3.1425	0.0567	0.97

Reporting Group	Common Name	Scientific Name	Bioregion	n	a	S[a]	b	S[b]	R ²
Tuna	Southern Bluefin Tuna	<i>Thunnus maccoyii</i>	West Coast	18	0.000057	0.984841	2.7589	0.1559	0.95
Tuna	Southern Bluefin Tuna	<i>Thunnus maccoyii</i>	South Coast	83	0.000005	0.453798	3.1703	0.0690	0.96
Tuna	Yellowfin Tuna	<i>Thunnus albacares</i>	Statewide	29	0.000052	1.057391	2.7804	0.1577	0.92
Tuna	Yellowfin Tuna	<i>Thunnus albacares</i>	Gascoyne Coast	15	0.000050	1.310004	2.7883	0.1939	0.94
Tuna	Yellowfin Tuna	<i>Thunnus albacares</i>	West Coast	13	0.000006	1.393576	3.1131	0.2102	0.95
Tuskfish & Wrasse	Baldchin Groper	<i>Choerodon rubescens</i>	Statewide	649	0.000045	0.173883	2.8661	0.0281	0.94
Tuskfish & Wrasse	Baldchin Groper	<i>Choerodon rubescens</i>	Gascoyne Coast	13	0.000219	2.399572	2.6207	0.3870	0.81
Tuskfish & Wrasse	Baldchin Groper	<i>Choerodon rubescens</i>	West Coast	636	0.000044	0.169635	2.8704	0.0274	0.95
Tuskfish & Wrasse	Blackspot Tuskfish	<i>Choerodon schoenleinii</i>	Statewide	78	0.000011	0.581645	3.0930	0.0937	0.93
Tuskfish & Wrasse	Blackspot Tuskfish	<i>Choerodon schoenleinii</i>	North Coast	30	0.000023	1.033590	2.9693	0.1665	0.92
Tuskfish & Wrasse	Blackspot Tuskfish	<i>Choerodon schoenleinii</i>	Gascoyne Coast	48	0.000008	0.695260	3.1486	0.1120	0.94
Tuskfish & Wrasse	Brownspotted Wrasse	<i>Notolabrus parilus</i>	Statewide	341	0.000026	0.167704	2.9072	0.0295	0.97
Tuskfish & Wrasse	Brownspotted Wrasse	<i>Notolabrus parilus</i>	West Coast	259	0.000042	0.207228	2.8216	0.0364	0.96
Tuskfish & Wrasse	Brownspotted Wrasse	<i>Notolabrus parilus</i>	South Coast	82	0.000014	0.290358	3.0166	0.0510	0.98
Tuskfish & Wrasse	Foxfish	<i>Bodianus frenchii</i>	Statewide	119	0.000180	0.692509	2.5914	0.1172	0.81
Tuskfish & Wrasse	Foxfish	<i>Bodianus frenchii</i>	West Coast	79	0.000195	0.884552	2.5752	0.1501	0.79
Tuskfish & Wrasse	Foxfish	<i>Bodianus frenchii</i>	South Coast	40	0.000359	1.144731	2.4806	0.1927	0.81
Tuskfish & Wrasse	Southern Maori Wrasse	<i>Ophthalmolepis lineolatus</i>	Statewide	83	0.000011	0.576880	2.9863	0.1019	0.91
Tuskfish & Wrasse	Southern Maori Wrasse	<i>Ophthalmolepis lineolatus</i>	West Coast	65	0.000011	0.644176	2.9860	0.1139	0.92
Tuskfish & Wrasse	Southern Maori Wrasse	<i>Ophthalmolepis lineolatus</i>	South Coast	18	0.000012	1.381487	2.9798	0.2438	0.90
Tuskfish & Wrasse	Tuskfishes	<i>Choerodon</i> spp.	Statewide	20	0.000135	3.679040	2.7250	0.5945	0.54
Tuskfish & Wrasse	Tuskfishes	<i>Choerodon</i> spp.	North Coast	19	0.000421	4.408212	2.5442	0.7095	0.43
Tuskfish & Wrasse	Western Blue Groper	<i>Achoerodus gouldii</i>	Statewide	32	0.000015	0.607010	3.0475	0.0935	0.97
Tuskfish & Wrasse	Western Blue Groper	<i>Achoerodus gouldii</i>	West Coast	11	0.000003	0.741326	3.2858	0.1126	0.99
Tuskfish & Wrasse	Western Blue Groper	<i>Achoerodus gouldii</i>	South Coast	21	0.000054	0.905351	2.8440	0.1405	0.96
Tuskfish & Wrasse	Western King Wrasse	<i>Coris auricularis</i>	Statewide	395	0.000013	0.188209	2.9690	0.0330	0.95
Tuskfish & Wrasse	Western King Wrasse	<i>Coris auricularis</i>	West Coast	350	0.000013	0.195600	2.9722	0.0344	0.96
Tuskfish & Wrasse	Western King Wrasse	<i>Coris auricularis</i>	South Coast	45	0.000015	0.689155	2.9386	0.1203	0.93
Tuskfish & Wrasse	Wrasses	Labridae	Statewide	12	0.000055	1.449668	2.7632	0.2555	0.92
Whiting	King George Whiting	<i>Sillaginodes punctata</i>	Statewide	2644	0.000001	0.071728	3.3102	0.0123	0.96

Reporting Group	Common Name	Scientific Name	Bioregion	n	a	S[a]	b	S[b]	R ²
Whiting	King George Whiting	<i>Sillaginodes punctata</i>	West Coast	430	0.000001	0.128225	3.2869	0.0215	0.98
Whiting	King George Whiting	<i>Sillaginodes punctata</i>	South Coast	2214	0.000001	0.107796	3.2294	0.0187	0.93
Whiting	Western Trumpeter Whiting	<i>Sillago berrus</i>	Statewide	10	0.000040	1.338368	2.7093	0.2544	0.93
Whiting	Western Trumpeter Whiting	<i>Sillago berrus</i>	West Coast	10	0.000040	1.338368	2.7093	0.2544	0.93
Whiting	School Whiting	Sillaginidae	Statewide	3043	0.000012	0.082383	2.9264	0.0153	0.92
Whiting	School Whiting	Sillaginidae	West Coast	2478	0.000012	0.084286	2.9322	0.0156	0.93
Whiting	School Whiting	Sillaginidae	South Coast	558	0.000017	0.277807	2.8723	0.0511	0.85
Wirrah	Western Wirrah	<i>Acanthistius serratus</i>	Statewide	12	0.000065	1.596167	2.7781	0.2714	0.91
Southern Blue Devil	Southern Blue Devil	<i>Paraplesiops meleagris</i>	Statewide	18	0.000030	1.599092	2.8924	0.2801	0.87
Southern Blue Devil	Southern Blue Devil	<i>Paraplesiops meleagris</i>	South Coast	17	0.000039	1.673270	2.8486	0.2929	0.86

Appendix 2. State-wide and Bioregion fork length-total length parameter estimates (a and b), standard errors (S[a] and S[b]) and regression correlation coefficient (R^2) of fish species aggregated across years; derived from Boat Ramp Surveys. Note: SW = state-wide. Only species with >10 measurements included, therefore state-wide n values may not equal the sum of Bioregion n values, and only state-wide values may be available for some species.

Reporting Group	Common Name	Scientific Name	Bioregion	n	a	S[a]	b	S[b]	R^2
Bonito	Leaping Bonito	<i>Cybiosarda elegans</i>	Statewide	16	17.582861	11.102181	1.1016	0.0288	0.99
Bonito	Leaping Bonito	<i>Cybiosarda elegans</i>	West Coast	15	47.036056	17.209849	1.0267	0.0440	0.98
Bonito	Oriental Bonito	<i>Sarda orientalis</i>	Statewide	156	12.053110	9.266815	1.0933	0.0184	0.96
Bonito	Oriental Bonito	<i>Sarda orientalis</i>	South Coast	149	12.420563	9.607825	1.0927	0.0191	0.96
Bream	Black Bream	<i>Acanthopagrus butcheri</i>	Statewide	51	4.802614	5.056667	1.0908	0.0207	0.98
Bream	Black Bream	<i>Acanthopagrus butcheri</i>	South Coast	49	4.973793	5.659269	1.0900	0.0234	0.98
Bream	Frypan Bream	<i>Argyrops spinifer</i>	Statewide	30	13.080137	8.850464	1.0598	0.0302	0.98
Bream	Frypan Bream	<i>Argyrops spinifer</i>	Gascoyne Coast	27	15.418383	8.912541	1.0534	0.0303	0.98
Bream	Pink Snapper	<i>Chrysophrys auratus</i>	Statewide	456	20.872414	2.974597	1.1152	0.0058	0.99
Bream	Pink Snapper	<i>Chrysophrys auratus</i>	Gascoyne Coast	34	19.465472	13.974591	1.1296	0.0284	0.98
Bream	Pink Snapper	<i>Chrysophrys auratus</i>	West Coast	334	14.673575	3.725394	1.1269	0.0074	0.99
Bream	Pink Snapper	<i>Chrysophrys auratus</i>	South Coast	88	32.716048	5.483633	1.0920	0.0099	0.99
Bream	Tarwhine	<i>Rhabdosargus sarba</i>	Statewide	45	-5.453846	9.883310	1.1658	0.0382	0.96
Bream	Tarwhine	<i>Rhabdosargus sarba</i>	West Coast	30	-11.939812	12.622368	1.1970	0.0488	0.96
Bream	Tarwhine	<i>Rhabdosargus sarba</i>	South Coast	15	13.814256	11.408524	1.0790	0.0441	0.98
Bream	Western Yellowfin Bream	<i>Acanthopagrus morrisoni</i>	Statewide	27	23.138772	11.521400	1.0069	0.0404	0.96
Bream	Western Yellowfin Bream	<i>Acanthopagrus morrisoni</i>	North Coast	23	14.259720	15.760592	1.0376	0.0550	0.94
Cobia	Cobia	<i>Rachycentron canadum</i>	Statewide	44	-17.211464	24.913038	1.1451	0.0277	0.98
Cobia	Cobia	<i>Rachycentron canadum</i>	Gascoyne Coast	29	-34.862214	37.372348	1.1646	0.0417	0.97
Coral Trout	Barcheek Coral Trout	<i>Plectropomus maculatus</i>	Statewide	73	5.511068	4.328518	1.0389	0.0079	1.00
Coral Trout	Barcheek Coral Trout	<i>Plectropomus maculatus</i>	North Coast	30	8.343646	10.141010	1.0325	0.0200	0.99
Coral Trout	Barcheek Coral Trout	<i>Plectropomus maculatus</i>	Gascoyne Coast	43	6.007176	5.035081	1.0385	0.0087	1.00

Reporting Group	Common Name	Scientific Name	Bioregion	n	a	S[a]	b	S[b]	R ²
Coral Trout	Yellowedge Coronation Trout	<i>Variola louti</i>	Statewide	23	22.781838	13.167080	1.1301	0.0283	0.99
Coral Trout	Yellowedge Coronation Trout	<i>Variola louti</i>	Gascoyne Coast	23	22.781838	13.167080	1.1301	0.0283	0.99
Drummer	Western Rock Blackfish	<i>Girella tephraeops</i>	Statewide	12	16.025231	19.639973	1.0856	0.0491	0.98
Emperor	Grass Emperor	<i>Lethrinus laticaudis</i>	Statewide	410	13.584064	2.812302	1.0465	0.0073	0.98
Emperor	Grass Emperor	<i>Lethrinus laticaudis</i>	North Coast	201	18.444681	5.522769	1.0375	0.0131	0.97
Emperor	Grass Emperor	<i>Lethrinus laticaudis</i>	Gascoyne Coast	208	26.544906	4.906545	1.0058	0.0141	0.96
Emperor	Redspot Emperor	<i>Lethrinus lentjan</i>	Statewide	23	-14.210753	7.324115	1.1785	0.0230	0.99
Emperor	Redspot Emperor	<i>Lethrinus lentjan</i>	Gascoyne Coast	23	-14.210753	7.324115	1.1785	0.0230	0.99
Emperor	Redthroat Emperor	<i>Lethrinus miniatus</i>	Statewide	181	16.731766	3.331041	1.0218	0.0093	0.99
Emperor	Redthroat Emperor	<i>Lethrinus miniatus</i>	Gascoyne Coast	126	20.001441	3.725995	1.0160	0.0103	0.99
Emperor	Redthroat Emperor	<i>Lethrinus miniatus</i>	West Coast	54	12.842975	6.518523	1.0248	0.0187	0.98
Emperor	Robinson's Seabream	<i>Gymnocranius grandoculis</i>	Statewide	88	20.606479	7.173070	1.0679	0.0167	0.98
Emperor	Robinson's Seabream	<i>Gymnocranius grandoculis</i>	Gascoyne Coast	88	20.606479	7.173070	1.0679	0.0167	0.98
Emperor	Spangled Emperor	<i>Lethrinus nebulosus</i>	Statewide	381	4.933543	2.786398	1.0990	0.0058	0.99
Emperor	Spangled Emperor	<i>Lethrinus nebulosus</i>	North Coast	15	-3.518845	25.728426	1.1061	0.0600	0.96
Emperor	Spangled Emperor	<i>Lethrinus nebulosus</i>	Gascoyne Coast	354	5.700442	2.716965	1.0981	0.0057	0.99
Emperor	Spangled Emperor	<i>Lethrinus nebulosus</i>	West Coast	12	19.836953	15.446643	1.0588	0.0328	0.99
Emperor	Spotcheek Emperor	<i>Lethrinus rubrioperculatus</i>	Statewide	27	9.603447	9.680430	1.1107	0.0327	0.98
Emperor	Spotcheek Emperor	<i>Lethrinus rubrioperculatus</i>	Gascoyne Coast	27	9.603447	9.680430	1.1107	0.0327	0.98
Emperor	Yellowtail Emperor	<i>Lethrinus atkinsoni</i>	Statewide	79	15.926039	5.857638	1.0466	0.0201	0.97
Emperor	Yellowtail Emperor	<i>Lethrinus atkinsoni</i>	Gascoyne Coast	74	11.215880	5.986264	1.0639	0.0207	0.97
Goatfish	Blacksaddle Goatfish	<i>Parupeneus spilurus</i>	Statewide	14	34.101473	21.090008	1.0477	0.0613	0.96
Goatfish	Blacksaddle Goatfish	<i>Parupeneus spilurus</i>	West Coast	14	34.101473	21.090008	1.0477	0.0613	0.96
Goatfish	Bluespotted Goatfish	<i>Upeneichthys vlamingii</i>	Statewide	27	-4.305280	4.043165	1.1613	0.0161	1.00
Goatfish	Bluespotted Goatfish	<i>Upeneichthys vlamingii</i>	West Coast	17	-0.300461	4.876562	1.1511	0.0178	1.00

Reporting Group	Common Name	Scientific Name	Bioregion	n	a	S[a]	b	S[b]	R ²
Goatfish	Bluespotted Goatfish	<i>Upeneichthys vlamingii</i>	South Coast	10	18.454662	19.432783	1.0389	0.0948	0.94
Grunter	Western Striped Grunter	<i>Pelates octolineatus</i>	Statewide	69	-0.134147	2.640427	1.0614	0.0131	0.99
Grunter	Western Striped Grunter	<i>Pelates octolineatus</i>	West Coast	35	1.338193	4.840926	1.0512	0.0242	0.98
Grunter	Western Striped Grunter	<i>Pelates octolineatus</i>	South Coast	34	-0.279677	2.988451	1.0650	0.0147	0.99
Grunter Bream	Painted Sweetlips	<i>Diagramma labiosum</i>	Statewide	56	7.306766	6.190967	1.0407	0.0116	0.99
Grunter Bream	Painted Sweetlips	<i>Diagramma labiosum</i>	North Coast	13	1.487517	13.688366	1.0466	0.0271	0.99
Grunter Bream	Painted Sweetlips	<i>Diagramma labiosum</i>	Gascoyne Coast	39	11.000028	7.230514	1.0346	0.0138	0.99
Herring	Sandy Sprat	<i>Hyperlophus vittatus</i>	Statewide	25	5.330643	6.177574	1.0587	0.0385	0.97
Herring	Sandy Sprat	<i>Hyperlophus vittatus</i>	West Coast	25	5.330643	6.177574	1.0587	0.0385	0.97
Mackerel	Blue Mackerel	<i>Scomber australasicus</i>	Statewide	58	-1.100728	3.319007	1.1162	0.0146	0.99
Mackerel	Blue Mackerel	<i>Scomber australasicus</i>	West Coast	10	-15.772377	16.701632	1.1648	0.0597	0.98
Mackerel	Blue Mackerel	<i>Scomber australasicus</i>	South Coast	48	-1.538933	4.248145	1.1194	0.0198	0.99
Mackerel	Mackerel Tuna	<i>Euthynnus affinis</i>	Statewide	37	17.735316	13.440087	1.0827	0.0238	0.98
Mackerel	Mackerel Tuna	<i>Euthynnus affinis</i>	Gascoyne Coast	26	-5.332380	10.649764	1.1302	0.0190	0.99
Mackerel	School Mackerel	<i>Scomberomorus queenslandicus</i>	Statewide	87	-26.610102	10.965286	1.1723	0.0185	0.98
Mackerel	School Mackerel	<i>Scomberomorus queenslandicus</i>	North Coast	37	-23.547661	17.394203	1.1596	0.0300	0.98
Mackerel	School Mackerel	<i>Scomberomorus queenslandicus</i>	Gascoyne Coast	44	-40.746653	13.339027	1.2041	0.0225	0.99
Mackerel	Shark Mackerel	<i>Grammatorcynus bicarinatus</i>	Statewide	10	43.161563	55.087387	1.0787	0.0693	0.97
Mackerel	Spanish Mackerel	<i>Scomberomorus commerson</i>	Statewide	226	99.954988	18.741199	1.0147	0.0187	0.93
Mackerel	Spanish Mackerel	<i>Scomberomorus commerson</i>	North Coast	49	85.546056	43.251607	1.0300	0.0440	0.92
Mackerel	Spanish Mackerel	<i>Scomberomorus commerson</i>	Gascoyne Coast	153	124.554285	21.975554	0.9914	0.0218	0.93
Mackerel	Spanish Mackerel	<i>Scomberomorus commerson</i>	West Coast	24	13.785118	41.679942	1.0915	0.0412	0.97
Mackerel	Spotted Mackerel	<i>Scomberomorus munroi</i>	Statewide	11	42.479964	35.539283	1.0563	0.0578	0.97
Morwong	Blue Morwong	<i>Nemadactylus valenciennesi</i>	Statewide	293	24.868831	4.846009	1.1081	0.0089	0.98
Morwong	Blue Morwong	<i>Nemadactylus valenciennesi</i>	West Coast	50	20.892567	16.313779	1.1038	0.0298	0.97
Morwong	Blue Morwong	<i>Nemadactylus valenciennesi</i>	South Coast	243	25.462719	4.680774	1.1094	0.0086	0.99
Pike	Snook	<i>Sphyaena novaehollandiae</i>	Statewide	86	1.869216	4.001439	1.0915	0.0075	1.00

Reporting Group	Common Name	Scientific Name	Bioregion	n	a	S[a]	b	S[b]	R ²
Pike	Snook	<i>Sphyraena novaehollandiae</i>	West Coast	31	10.449352	8.311562	1.0760	0.0145	0.99
Pike	Snook	<i>Sphyraena novaehollandiae</i>	South Coast	55	-3.226638	4.461534	1.1020	0.0088	1.00
Pike	Striped Barracuda	<i>Sphyraena pinguis</i>	Statewide	29	-14.623450	5.730609	1.1308	0.0134	1.00
Pike	Striped Barracuda	<i>Sphyraena pinguis</i>	West Coast	28	-13.545851	5.857031	1.1289	0.0136	1.00
Redfish	Bight Redfish	<i>Centroberyx gerrardi</i>	Statewide	478	24.683831	2.424738	1.1380	0.0067	0.98
Redfish	Bight Redfish	<i>Centroberyx gerrardi</i>	West Coast	31	14.890700	10.590699	1.1677	0.0295	0.98
Redfish	Bight Redfish	<i>Centroberyx gerrardi</i>	South Coast	447	24.932238	2.500489	1.1371	0.0069	0.98
Redfish	Swallowtail	<i>Centroberyx lineatus</i>	Statewide	169	-23.547785	16.132203	1.5308	0.0642	0.77
Redfish	Swallowtail	<i>Centroberyx lineatus</i>	West Coast	10	-70.378764	33.743230	1.6810	0.1306	0.95
Redfish	Swallowtail	<i>Centroberyx lineatus</i>	South Coast	159	-21.988401	17.199805	1.5266	0.0685	0.76
Salmon & Herring	Australian Herring	<i>Arripis georgianus</i>	Statewide	2862	9.589603	0.954690	1.1051	0.0048	0.95
Salmon & Herring	Australian Herring	<i>Arripis georgianus</i>	West Coast	1401	10.616063	1.393555	1.1015	0.0069	0.95
Salmon & Herring	Australian Herring	<i>Arripis georgianus</i>	South Coast	1461	9.338499	1.322258	1.1049	0.0067	0.95
Salmon & Herring	Western Australian Salmon	<i>Arripis truttaceus</i>	Statewide	268	2.329974	1.852373	1.1241	0.0031	1.00
Salmon & Herring	Western Australian Salmon	<i>Arripis truttaceus</i>	West Coast	125	28.370100	13.224944	1.0872	0.0195	0.96
Salmon & Herring	Western Australian Salmon	<i>Arripis truttaceus</i>	South Coast	143	3.727718	2.193172	1.1194	0.0042	1.00
Sergeant Baker	Sergeant Baker	<i>Latropiscis purpurissatus</i>	Statewide	60	-3.934960	6.081315	1.1195	0.0157	0.99
Sergeant Baker	Sergeant Baker	<i>Latropiscis purpurissatus</i>	West Coast	23	7.249172	14.495444	1.0885	0.0376	0.98
Sergeant Baker	Sergeant Baker	<i>Latropiscis purpurissatus</i>	South Coast	37	-5.967742	6.783072	1.1259	0.0174	0.99
Snapper (King)	Goldband Snapper	<i>Pristipomoides multidens</i>	Statewide	194	40.393897	5.671667	1.0786	0.0119	0.98
Snapper (King)	Goldband Snapper	<i>Pristipomoides multidens</i>	Gascoyne Coast	192	40.263816	5.705706	1.0789	0.0120	0.98
Snapper (King)	Rosy Snapper	<i>Pristipomoides filamentosus</i>	Statewide	13	25.853624	22.184478	1.1212	0.0521	0.98
Snapper (King)	Rosy Snapper	<i>Pristipomoides filamentosus</i>	Gascoyne Coast	13	25.853624	22.184478	1.1212	0.0521	0.98
Snapper (King)	Sharptooth Snapper	<i>Pristipomoides typus</i>	Statewide	89	55.539680	11.805126	1.0688	0.0270	0.95
Snapper (King)	Sharptooth Snapper	<i>Pristipomoides typus</i>	Gascoyne Coast	89	55.539680	11.805126	1.0688	0.0270	0.95
Snapper (Tropical)	Blackspot Snapper	<i>Lutjanus fulviflamma</i>	Statewide	10	-11.033100	6.372356	1.1179	0.0255	1.00
Snapper (Tropical)	Chinamanfish	<i>Symphorus nematophorus</i>	Statewide	36	-2.373529	7.712678	1.0871	0.0123	1.00

Reporting Group	Common Name	Scientific Name	Bioregion	n	a	S[a]	b	S[b]	R ²
Snapper (Tropical)	Chinamanfish	<i>Symphorus nematophorus</i>	North Coast	25	-0.024204	10.027701	1.0831	0.0167	0.99
Snapper (Tropical)	Chinamanfish	<i>Symphorus nematophorus</i>	Gascoyne Coast	11	-10.910443	13.255259	1.0997	0.0194	1.00
Snapper (Tropical)	Darktail Snapper	<i>Lutjanus lemniscatus</i>	Statewide	22	10.186239	11.372637	1.0429	0.0328	0.98
Snapper (Tropical)	Darktail Snapper	<i>Lutjanus lemniscatus</i>	Gascoyne Coast	19	-3.943623	8.604080	1.0799	0.0242	0.99
Snapper (Tropical)	Moses' Snapper	<i>Lutjanus russellii</i>	Statewide	43	9.134513	4.696509	1.0440	0.0129	0.99
Snapper (Tropical)	Moses' Snapper	<i>Lutjanus russellii</i>	Gascoyne Coast	37	8.854398	4.841720	1.0447	0.0133	0.99
Snapper (Tropical)	Red Emperor	<i>Lutjanus sebae</i>	Statewide	166	9.454922	3.690575	1.0481	0.0069	0.99
Snapper (Tropical)	Red Emperor	<i>Lutjanus sebae</i>	North Coast	43	9.207025	8.926012	1.0488	0.0183	0.99
Snapper (Tropical)	Red Emperor	<i>Lutjanus sebae</i>	Gascoyne Coast	122	10.083139	4.451500	1.0468	0.0081	0.99
Snapper (Tropical)	Ruby Snapper	<i>Etelis carbunculus</i>	Statewide	73	29.195696	8.892505	1.1038	0.0130	0.99
Snapper (Tropical)	Ruby Snapper	<i>Etelis carbunculus</i>	Gascoyne Coast	73	29.195696	8.892505	1.1038	0.0130	0.99
Snapper (Tropical)	Stripey Snapper	<i>Lutjanus carponotatus</i>	Statewide	131	20.220594	4.409828	1.0090	0.0138	0.98
Snapper (Tropical)	Stripey Snapper	<i>Lutjanus carponotatus</i>	North Coast	63	24.296915	8.466912	0.9972	0.0265	0.96
Snapper (Tropical)	Stripey Snapper	<i>Lutjanus carponotatus</i>	Gascoyne Coast	68	17.981270	4.735829	1.0152	0.0149	0.99
Striped Grunter	Eastern Striped Grunter	<i>Pelates sexlineatus</i>	Statewide	52	-10.660541	6.755240	1.1242	0.0352	0.95
Striped Grunter	Eastern Striped Grunter	<i>Pelates sexlineatus</i>	West Coast	32	-10.655811	9.871378	1.1227	0.0534	0.94
Striped Grunter	Eastern Striped Grunter	<i>Pelates sexlineatus</i>	South Coast	20	-6.282270	11.536519	1.1047	0.0570	0.95
Sweep	Banded Sweep	<i>Scorpius georgiana</i>	Statewide	31	0.750692	7.859054	1.1378	0.0260	0.99
Sweep	Banded Sweep	<i>Scorpius georgiana</i>	West Coast	24	2.179483	8.556831	1.1306	0.0287	0.99
Sweep	Moonlighter	<i>Tilodon sexfasciatus</i>	Statewide	14	37.816645	28.840414	0.9673	0.0882	0.91
Sweep	Moonlighter	<i>Tilodon sexfasciatus</i>	West Coast	10	4.358876	31.826006	1.0743	0.0990	0.94
Sweep	Sea Sweep	<i>Scorpius aequipinnis</i>	Statewide	143	36.144460	5.785869	1.0666	0.0147	0.97
Sweep	Sea Sweep	<i>Scorpius aequipinnis</i>	West Coast	49	37.270798	12.944373	1.0660	0.0325	0.96
Sweep	Sea Sweep	<i>Scorpius aequipinnis</i>	South Coast	94	36.229113	6.360940	1.0651	0.0162	0.98
Tailor	Tailor	<i>Pomatomus saltatrix</i>	Statewide	109	5.702866	3.483297	1.1027	0.0094	0.99
Tailor	Tailor	<i>Pomatomus saltatrix</i>	Gascoyne Coast	10	41.687377	13.505311	0.9968	0.0330	0.99
Tailor	Tailor	<i>Pomatomus saltatrix</i>	West Coast	95	1.546039	3.473222	1.1162	0.0094	0.99

Reporting Group	Common Name	Scientific Name	Bioregion	n	a	S[a]	b	S[b]	R ²
Threadfin	Blue Threadfin	<i>Eleutheronema tetradactylum</i>	Statewide	20	-1.037307	12.794800	1.1844	0.0295	0.99
Threadfin	Blue Threadfin	<i>Eleutheronema tetradactylum</i>	North Coast	19	-8.306723	12.828628	1.1987	0.0291	0.99
Threadfin Bream	Western Butterfish	<i>Pentapodus vitta</i>	Statewide	196	7.668223	2.122728	1.0730	0.0099	0.98
Threadfin Bream	Western Butterfish	<i>Pentapodus vitta</i>	West Coast	193	7.355674	2.132387	1.0742	0.0100	0.98
Trevally	Amberjack	<i>Seriola dumerili</i>	Statewide	11	-5.060120	28.740749	1.1455	0.0384	0.99
Trevally	Bludger Trevally	<i>Carangoides gymnostethus</i>	Statewide	22	-1.036032	17.912368	1.1402	0.0386	0.98
Trevally	Bludger Trevally	<i>Carangoides gymnostethus</i>	Gascoyne Coast	20	-5.889877	26.695822	1.1504	0.0569	0.96
Trevally	Blue Trevally	<i>Carangoides ferdau</i>	Statewide	11	-7.631438	16.248354	1.1763	0.0433	0.99
Trevally	Giant Trevally	<i>Caranx ignobilis</i>	Statewide	16	32.741630	14.082021	1.0959	0.0295	0.99
Trevally	Giant Trevally	<i>Caranx ignobilis</i>	North Coast	10	-28.725264	48.936648	1.2451	0.1176	0.93
Trevally	Golden Trevally	<i>Gnathanodon speciosus</i>	Statewide	100	3.926186	3.617930	1.1642	0.0074	1.00
Trevally	Golden Trevally	<i>Gnathanodon speciosus</i>	North Coast	70	2.640356	4.509754	1.1629	0.0100	0.99
Trevally	Golden Trevally	<i>Gnathanodon speciosus</i>	Gascoyne Coast	30	24.381546	5.930226	1.1353	0.0103	1.00
Trevally	Samsonfish	<i>Seriola hippos</i>	Statewide	100	37.123382	9.197869	1.0845	0.0117	0.99
Trevally	Samsonfish	<i>Seriola hippos</i>	West Coast	81	38.872307	11.106764	1.0818	0.0148	0.99
Trevally	Samsonfish	<i>Seriola hippos</i>	South Coast	19	29.348440	13.397977	1.0942	0.0148	1.00
Trevally	Silver Trevally	<i>Pseudocaranx georgianus</i>	Statewide	1299	-0.340734	1.207580	1.1948	0.0041	0.98
Trevally	Silver Trevally	<i>Pseudocaranx georgianus</i>	West Coast	896	3.065148	2.023058	1.1862	0.0068	0.97
Trevally	Silver Trevally	<i>Pseudocaranx georgianus</i>	South Coast	403	-1.817950	1.423111	1.1931	0.0050	0.99
Trevally	Turrum	<i>Carangoides fulvoguttatus</i>	Statewide	85	4.084952	5.027823	1.1381	0.0104	0.99
Trevally	Turrum	<i>Carangoides fulvoguttatus</i>	North Coast	25	-1.692495	10.571971	1.1563	0.0222	0.99
Trevally	Turrum	<i>Carangoides fulvoguttatus</i>	Gascoyne Coast	60	5.642576	5.652724	1.1324	0.0117	0.99
Trevally	Yellowtail Kingfish	<i>Seriola lalandi</i>	Statewide	44	-6.800825	5.797083	1.1484	0.0090	1.00
Trevally	Yellowtail Kingfish	<i>Seriola lalandi</i>	West Coast	29	-12.470992	8.154626	1.1597	0.0133	1.00
Trevally	Yellowtail Kingfish	<i>Seriola lalandi</i>	South Coast	14	-4.513386	9.974340	1.1413	0.0147	1.00
Trevally	Yellowtail Scad	<i>Trachurus novaezelandiae</i>	Statewide	110	-2.092058	3.499649	1.1524	0.0200	0.97
Trevally	Yellowtail Scad	<i>Trachurus novaezelandiae</i>	West Coast	42	-6.377025	6.664483	1.1808	0.0376	0.96

Reporting Group	Common Name	Scientific Name	Bioregion	n	a	S[a]	b	S[b]	R ²
Trevally	Yellowtail Scad	<i>Trachurus novaezelandiae</i>	South Coast	68	4.854694	3.114365	1.1099	0.0179	0.98
Trevally	Trevallies	Carangidae	Statewide	21	-8.748035	14.226948	1.1600	0.0333	0.98
Trevally	Trevallies	Carangidae	North Coast	20	-13.457853	14.113996	1.1686	0.0327	0.99
Tuna	Longtail Tuna	<i>Thunnus tonggol</i>	Statewide	56	20.328726	21.310733	1.0940	0.0309	0.96
Tuna	Longtail Tuna	<i>Thunnus tonggol</i>	Gascoyne Coast	50	17.337980	24.800113	1.1001	0.0356	0.95
Tuna	Skipjack Tuna	<i>Katsuwonus pelamis</i>	Statewide	59	45.792264	23.622888	1.0169	0.0429	0.91
Tuna	Skipjack Tuna	<i>Katsuwonus pelamis</i>	Gascoyne Coast	39	-17.941823	21.380207	1.1464	0.0404	0.96
Tuna	Skipjack Tuna	<i>Katsuwonus pelamis</i>	West Coast	11	64.642133	145.790490	0.9815	0.2353	0.66
Tuna	Southern Bluefin Tuna	<i>Thunnus maccoyii</i>	Statewide	101	24.250447	10.002378	1.0871	0.0160	0.98
Tuna	Southern Bluefin Tuna	<i>Thunnus maccoyii</i>	West Coast	18	27.644310	13.459026	1.0798	0.0267	0.99
Tuna	Southern Bluefin Tuna	<i>Thunnus maccoyii</i>	South Coast	83	23.752702	14.689907	1.0880	0.0226	0.97
Tuna	Yellowfin Tuna	<i>Thunnus albacares</i>	Statewide	30	39.891464	44.938924	1.0707	0.0604	0.92
Tuna	Yellowfin Tuna	<i>Thunnus albacares</i>	Gascoyne Coast	16	79.026017	62.948286	1.0452	0.0822	0.92
Tuna	Yellowfin Tuna	<i>Thunnus albacares</i>	West Coast	13	88.308937	38.782640	0.9665	0.0550	0.97
Whiting	King George Whiting	<i>Sillaginodes punctata</i>	Statewide	2683	-2.044314	0.808952	1.0700	0.0025	0.99
Whiting	King George Whiting	<i>Sillaginodes punctata</i>	West Coast	442	-6.011472	1.256151	1.0809	0.0033	1.00
Whiting	King George Whiting	<i>Sillaginodes punctata</i>	South Coast	2241	2.016250	1.341795	1.0567	0.0044	0.96
Whiting	School Whiting	Sillaginidae	Statewide	2977	2.771749	0.553037	1.0721	0.0027	0.98
Whiting	School Whiting	Sillaginidae	West Coast	2419	2.229701	0.599645	1.0741	0.0029	0.98
Whiting	School Whiting	Sillaginidae	South Coast	552	6.084127	1.482754	1.0597	0.0070	0.98

Appendix 3. State-wide and Bioregion length parameters for fish species across years; derived from Boat Ramp Surveys. Note: SW = state-wide. Species with <10 measurements highlighted in bold to indicate small sample size.

n is the number of length measurements; Av L is the average length (measured in millimetres); se is standard error; Min is the minimum weight (measured in grams); Max is the maximum weight (measured in grams).

Reporting Group	Common Name	Scientific Name	Bioregion	n	Av L	se	Min	Max
Gastropod	Abalone	<i>Haliotis</i> spp.	Statewide	158	86	2	56	166
Gastropod	Abalone	<i>Haliotis</i> spp.	West Coast	67	90	5	56	166
Gastropod	Abalone	<i>Haliotis</i> spp.	South Coast	91	83	2	64	153
Cephalopods	Cuttlefish	<i>Sepia</i> spp.	Statewide	7	227	18	185	300
Cephalopods	Cuttlefish	<i>Sepia</i> spp.	West Coast	4	232	24	195	300
Cephalopods	Cuttlefish	<i>Sepia</i> spp.	South Coast	3	222	34	185	290
Cephalopods	Squid	Order Teuthoidea	Statewide	71	218	11	106	650
Cephalopods	Squid	Order Teuthoidea	North Coast	2	600	50	550	650
Cephalopods	Squid	Order Teuthoidea	Gascoyne Coast	1	444	NA	444	444
Cephalopods	Squid	Order Teuthoidea	West Coast	48	196	8	106	360
Cephalopods	Squid	Order Teuthoidea	South Coast	20	219	14	135	365
Lobster	Painted Rock Lobster	<i>Panulirus versicolor</i>	Statewide	3	103	14	81	128
Lobster	Painted Rock Lobster	<i>Panulirus versicolor</i>	North Coast	3	103	14	81	128
Lobster	Southern Rock Lobster	<i>Jasus edwardsii</i>	Statewide	7	135	13	97	207
Lobster	Southern Rock Lobster	<i>Jasus edwardsii</i>	West Coast	4	124	11	97	145
Lobster	Southern Rock Lobster	<i>Jasus edwardsii</i>	South Coast	3	150	29	114	207
Lobster	Western Rock Lobster	<i>Panulirus cygnus</i>	Statewide	1852	87	0	70	179
Lobster	Western Rock Lobster	<i>Panulirus cygnus</i>	Gascoyne Coast	17	122	3	86	140
Lobster	Western Rock Lobster	<i>Panulirus cygnus</i>	West Coast	1835	87	0	70	179
Lobster	General Rock Lobster	<i>Panulirus</i> spp.	Statewide	1	100	NA	100	100
Lobster	General Rock Lobster	<i>Panulirus</i> spp.	North Coast	1	100	NA	100	100
Crab	Blue Swimmer Crab	<i>Portunus armatus</i>	Statewide	1805	139	0	113	213
Crab	Blue Swimmer Crab	<i>Portunus armatus</i>	North Coast	30	156	2	135	175
Crab	Blue Swimmer Crab	<i>Portunus armatus</i>	Gascoyne Coast	42	149	1	129	170
Crab	Blue Swimmer Crab	<i>Portunus armatus</i>	West Coast	1540	136	0	117	199

Reporting Group	Common Name	Scientific Name	Bioregion	n	Av L	se	Min	Max
Crab	Blue Swimmer Crab	<i>Portunus armatus</i>	South Coast	193	158	1	113	213
Crab	Swimming Crabs	Portunidae	Statewide	1	160	NA	160	160
Crab	Swimming Crabs	Portunidae	North Coast	1	160	NA	160	160
Crab	Mud Crab	<i>Scylla</i> spp.	Statewide	79	136	2	117	180
Crab	Mud Crab	<i>Scylla</i> spp.	North Coast	76	135	2	117	180
Crab	Mud Crab	<i>Scylla</i> spp.	Gascoyne Coast	3	157	5	147	162
Sharks	Grey Carpetshark	<i>Chiloscyllium punctatum</i>	Statewide	1	732	NA	732	732
Sharks	Grey Carpetshark	<i>Chiloscyllium punctatum</i>	Gascoyne Coast	1	732	NA	732	732
Sharks	Gummy Shark	<i>Mustelus antarcticus</i>	Statewide	14	833	82	305	1160
Sharks	Gummy Shark	<i>Mustelus antarcticus</i>	North Coast	1	570	NA	570	570
Sharks	Gummy Shark	<i>Mustelus antarcticus</i>	West Coast	11	812	96	305	1160
Sharks	Gummy Shark	<i>Mustelus antarcticus</i>	South Coast	2	1079	41	1038	1120
Sharks	School Shark	<i>Galeorhinus galeus</i>	Statewide	1	895	NA	895	895
Sharks	School Shark	<i>Galeorhinus galeus</i>	West Coast	1	895	NA	895	895
Sharks	Whiskery Shark	<i>Furgaleus macki</i>	Statewide	2	1000	145	855	1145
Sharks	Whiskery Shark	<i>Furgaleus macki</i>	West Coast	2	1000	145	855	1145
Sharks	Whaler & Weasel Sharks	Carcharhinidae & Hemigaleidae	Statewide	11	938	114	540	2000
Sharks	Whaler & Weasel Sharks	Carcharhinidae & Hemigaleidae	North Coast	1	760	NA	760	760
Sharks	Whaler & Weasel Sharks	Carcharhinidae & Hemigaleidae	Gascoyne Coast	4	835	99	540	956
Sharks	Whaler & Weasel Sharks	Carcharhinidae & Hemigaleidae	West Coast	6	1037	198	665	2000
Sharks	Wobbegong	Orectolobidae	Statewide	8	981	71	584	1235
Sharks	Wobbegong	Orectolobidae	West Coast	7	950	74	584	1235
Sharks	Wobbegong	Orectolobidae	South Coast	1	1200	NA	1200	1200
Rays	Stingarees	Urolophidae & Plesiobatidae	Statewide	5	147	2	140	152
Rays	Stingarees	Urolophidae & Plesiobatidae	West Coast	5	147	2	140	152
Barramundi	Barramundi	<i>Lates calcarifer</i>	Statewide	1	580	NA	580	580
Barramundi	Barramundi	<i>Lates calcarifer</i>	North Coast	1	580	NA	580	580
Bass Groper	Bass Groper	<i>Polyprion americanus</i>	Statewide	1	283	NA	283	283
Bass Groper	Bass Groper	<i>Polyprion americanus</i>	West Coast	1	283	NA	283	283
Beardfish	Beardfishes	Polymixiidae	Statewide	1	443	NA	443	443

Reporting Group	Common Name	Scientific Name	Bioregion	n	Av L	se	Min	Max
Beardfish	Beardfishes	Polymixiidae	Gascoyne Coast	1	443	NA	443	443
Bigeye	Lunartail Bigeye	<i>Priacanthus hamrur</i>	Statewide	1	352	NA	352	352
Bigeye	Lunartail Bigeye	<i>Priacanthus hamrur</i>	Gascoyne Coast	1	352	NA	352	352
Boarfish	Giant Boarfish	<i>Paristiopterus labiosus</i>	Statewide	1	715	NA	715	715
Boarfish	Giant Boarfish	<i>Paristiopterus labiosus</i>	West Coast	1	715	NA	715	715
Boarfish	Longsnout Boarfish	<i>Pentaceropsis recurvirostris</i>	Statewide	6	438	22	377	535
Boarfish	Longsnout Boarfish	<i>Pentaceropsis recurvirostris</i>	West Coast	2	493	43	450	535
Boarfish	Longsnout Boarfish	<i>Pentaceropsis recurvirostris</i>	South Coast	4	411	11	377	425
Boarfish	Boarfishes	Pentacerotidae	Statewide	1	400	NA	400	400
Boarfish	Boarfishes	Pentacerotidae	South Coast	1	400	NA	400	400
Bonito	Leaping Bonito	<i>Cybiosarda elegans</i>	Statewide	17	442	7	347	488
Bonito	Leaping Bonito	<i>Cybiosarda elegans</i>	Gascoyne Coast	1	347	NA	347	347
Bonito	Leaping Bonito	<i>Cybiosarda elegans</i>	West Coast	16	448	4	430	488
Bonito	Oriental Bonito	<i>Sarda orientalis</i>	Statewide	162	563	3	471	715
Bonito	Oriental Bonito	<i>Sarda orientalis</i>	Gascoyne Coast	3	634	28	605	690
Bonito	Oriental Bonito	<i>Sarda orientalis</i>	West Coast	5	522	8	493	545
Bonito	Oriental Bonito	<i>Sarda orientalis</i>	South Coast	154	563	3	471	715
Bonito	Bonitos	<i>S. australis</i> & <i>C. elegans</i>	Statewide	5	620	54	450	745
Bonito	Bonitos	<i>S. australis</i> & <i>C. elegans</i>	West Coast	5	620	54	450	745
Boxfish	Western Smooth Boxfish	<i>Anoplocapros amygdaloides</i>	Statewide	1	270	NA	270	270
Boxfish	Western Smooth Boxfish	<i>Anoplocapros amygdaloides</i>	West Coast	1	270	NA	270	270
Bream	Black Bream	<i>Acanthopagrus butcheri</i>	Statewide	51	270	3	243	348
Bream	Black Bream	<i>Acanthopagrus butcheri</i>	West Coast	2	318	0	318	318
Bream	Black Bream	<i>Acanthopagrus butcheri</i>	South Coast	49	268	3	243	348
Bream	Frypan Bream	<i>Argyrops spinifer</i>	Statewide	30	323	5	261	376
Bream	Frypan Bream	<i>Argyrops spinifer</i>	North Coast	3	312	10	295	330
Bream	Frypan Bream	<i>Argyrops spinifer</i>	Gascoyne Coast	27	324	5	261	376
Bream	Northwest Black Bream	<i>Acanthopagrus palmaris</i>	Statewide	8	283	7	255	310
Bream	Northwest Black Bream	<i>Acanthopagrus palmaris</i>	North Coast	8	283	7	255	310
Bream	Pink Snapper	<i>Chrysophrys auratus</i>	Statewide	470	578	6	180	1009

Reporting Group	Common Name	Scientific Name	Bioregion	n	Av L	se	Min	Max
Bream	Pink Snapper	<i>Chrysophrys auratus</i>	Gascoyne Coast	34	571	11	398	702
Bream	Pink Snapper	<i>Chrysophrys auratus</i>	West Coast	348	570	6	180	880
Bream	Pink Snapper	<i>Chrysophrys auratus</i>	South Coast	88	616	17	214	1009
Bream	Tarwhine	<i>Rhabdosargus sarba</i>	Statewide	45	294	6	226	388
Bream	Tarwhine	<i>Rhabdosargus sarba</i>	West Coast	30	295	8	226	388
Bream	Tarwhine	<i>Rhabdosargus sarba</i>	South Coast	15	291	9	246	365
Bream	Western Yellowfin Bream	<i>Acanthopagrus morrisoni</i>	Statewide	29	309	5	253	366
Bream	Western Yellowfin Bream	<i>Acanthopagrus morrisoni</i>	North Coast	25	311	5	262	362
Bream	Western Yellowfin Bream	<i>Acanthopagrus morrisoni</i>	Gascoyne Coast	4	302	25	253	366
Bream	Breams	Sparidae	Statewide	3	484	98	323	660
Bream	Breams	Sparidae	North Coast	2	565	95	470	660
Bream	Breams	Sparidae	Gascoyne Coast	1	323	NA	323	323
Catfish	Estuary Cobbler	<i>Cnidoglanis macrocephalus</i>	Statewide	1	378	NA	378	378
Catfish	Estuary Cobbler	<i>Cnidoglanis macrocephalus</i>	West Coast	1	378	NA	378	378
Catfish	Giant Sea Catfish	<i>Netuma thalassina</i>	Statewide	6	459	41	403	663
Catfish	Giant Sea Catfish	<i>Netuma thalassina</i>	Gascoyne Coast	6	459	41	403	663
Catfish	Catfishes	<i>Arius</i> spp.	Statewide	2	658	18	640	675
Catfish	Catfishes	<i>Arius</i> spp.	West Coast	2	658	18	640	675
Catfish	Forktail Catfishes	Ariidae	Statewide	4	605	19	560	650
Catfish	Forktail Catfishes	Ariidae	North Coast	4	605	19	560	650
Cobia	Cobia	<i>Rachycentron canadum</i>	Statewide	49	1021	20	698	1410
Cobia	Cobia	<i>Rachycentron canadum</i>	North Coast	7	935	39	810	1101
Cobia	Cobia	<i>Rachycentron canadum</i>	Gascoyne Coast	31	1013	23	698	1200
Cobia	Cobia	<i>Rachycentron canadum</i>	West Coast	11	1098	51	768	1410
Cod	Banded Grouper	<i>Epinephelus amblycephalus</i>	Statewide	3	518	46	436	595
Cod	Banded Grouper	<i>Epinephelus amblycephalus</i>	Gascoyne Coast	3	518	46	436	595
Cod	Barramundi Cod	<i>Chromileptes altivelis</i>	Statewide	2	386	21	365	406
Cod	Barramundi Cod	<i>Chromileptes altivelis</i>	Gascoyne Coast	2	386	21	365	406
Cod	Birdwire Rockcod	<i>Epinephelus merra</i>	Statewide	4	366	27	320	422
Cod	Birdwire Rockcod	<i>Epinephelus merra</i>	North Coast	2	320	0	320	320

Reporting Group	Common Name	Scientific Name	Bioregion	n	Av L	se	Min	Max
Cod	Birdwire Rockcod	<i>Epinephelus merra</i>	Gascoyne Coast	2	413	10	403	422
Cod	Blackspotted Rockcod	<i>Epinephelus malabaricus</i>	Statewide	49	496	14	350	872
Cod	Blackspotted Rockcod	<i>Epinephelus malabaricus</i>	North Coast	41	472	9	400	680
Cod	Blackspotted Rockcod	<i>Epinephelus malabaricus</i>	Gascoyne Coast	7	661	43	510	872
Cod	Blackspotted Rockcod	<i>Epinephelus malabaricus</i>	West Coast	1	350	NA	350	350
Cod	Blacktip Rockcod	<i>Epinephelus fasciatus</i>	Statewide	2	276	42	234	317
Cod	Blacktip Rockcod	<i>Epinephelus fasciatus</i>	Gascoyne Coast	2	276	42	234	317
Cod	Breaksea Cod	<i>Epinephelides armatus</i>	Statewide	871	381	2	237	551
Cod	Breaksea Cod	<i>Epinephelides armatus</i>	West Coast	519	378	2	237	551
Cod	Breaksea Cod	<i>Epinephelides armatus</i>	South Coast	352	384	3	280	544
Cod	Camouflage Grouper	<i>Epinephelus polyphkadion</i>	Statewide	7	546	36	415	665
Cod	Camouflage Grouper	<i>Epinephelus polyphkadion</i>	North Coast	1	415	NA	415	415
Cod	Camouflage Grouper	<i>Epinephelus polyphkadion</i>	Gascoyne Coast	6	568	34	423	665
Cod	Chinaman Rockcod	<i>Epinephelus rivulatus</i>	Statewide	476	305	1	160	420
Cod	Chinaman Rockcod	<i>Epinephelus rivulatus</i>	North Coast	2	315	35	280	350
Cod	Chinaman Rockcod	<i>Epinephelus rivulatus</i>	Gascoyne Coast	459	306	1	210	400
Cod	Chinaman Rockcod	<i>Epinephelus rivulatus</i>	West Coast	15	290	18	160	420
Cod	Comet Grouper	<i>Epinephelus morrhua</i>	Statewide	2	452	36	416	488
Cod	Comet Grouper	<i>Epinephelus morrhua</i>	Gascoyne Coast	2	452	36	416	488
Cod	Convict Grouper	<i>Epinephelus septemfasciatus</i>	Statewide	1	685	NA	685	685
Cod	Convict Grouper	<i>Epinephelus septemfasciatus</i>	West Coast	1	685	NA	685	685
Cod	Coral Rockcod	<i>Cephalopholis miniata</i>	Statewide	9	369	13	316	430
Cod	Coral Rockcod	<i>Cephalopholis miniata</i>	North Coast	2	330	10	320	340
Cod	Coral Rockcod	<i>Cephalopholis miniata</i>	Gascoyne Coast	7	380	14	316	430
Cod	Duskytail Grouper	<i>Epinephelus bleekeri</i>	Statewide	4	353	61	290	535
Cod	Duskytail Grouper	<i>Epinephelus bleekeri</i>	North Coast	3	292	2	290	295
Cod	Duskytail Grouper	<i>Epinephelus bleekeri</i>	West Coast	1	535	NA	535	535
Cod	Eightbar Grouper	<i>Epinephelus octofasciatus</i>	Statewide	16	690	60	378	1105
Cod	Eightbar Grouper	<i>Epinephelus octofasciatus</i>	Gascoyne Coast	11	784	70	436	1105
Cod	Eightbar Grouper	<i>Epinephelus octofasciatus</i>	West Coast	2	402	24	378	425

Reporting Group	Common Name	Scientific Name	Bioregion	n	Av L	se	Min	Max
Cod	Eightbar Grouper	<i>Epinephelus octofasciatus</i>	South Coast	3	540	9	530	558
Cod	Flowery Rockcod	<i>Epinephelus fuscoguttatus</i>	Statewide	1	926	NA	926	926
Cod	Flowery Rockcod	<i>Epinephelus fuscoguttatus</i>	Gascoyne Coast	1	926	NA	926	926
Cod	Frostback Rockcod	<i>Epinephelus bilobatus</i>	Statewide	14	473	17	346	612
Cod	Frostback Rockcod	<i>Epinephelus bilobatus</i>	Gascoyne Coast	14	473	17	346	612
Cod	Goldspotted Rockcod	<i>Epinephelus coioides</i>	Statewide	100	540	17	275	1100
Cod	Goldspotted Rockcod	<i>Epinephelus coioides</i>	North Coast	61	508	17	275	949
Cod	Goldspotted Rockcod	<i>Epinephelus coioides</i>	Gascoyne Coast	29	531	33	277	937
Cod	Goldspotted Rockcod	<i>Epinephelus coioides</i>	West Coast	10	756	69	400	1100
Cod	Greasy Rockcod	<i>Epinephelus tauvina</i>	Statewide	15	455	14	370	530
Cod	Greasy Rockcod	<i>Epinephelus tauvina</i>	Gascoyne Coast	15	455	14	370	530
Cod	Harlequin Fish	<i>Othos dentex</i>	Statewide	130	472	6	272	655
Cod	Harlequin Fish	<i>Othos dentex</i>	West Coast	52	467	7	335	557
Cod	Harlequin Fish	<i>Othos dentex</i>	South Coast	78	475	8	272	655
Cod	Leopard Rockcod	<i>Cephalopholis leopardus</i>	Statewide	2	873	113	760	985
Cod	Leopard Rockcod	<i>Cephalopholis leopardus</i>	North Coast	2	873	113	760	985
Cod	Orange Basslet	<i>Pseudanthias squamipinnis</i>	Statewide	1	1491	NA	1491	1491
Cod	Orange Basslet	<i>Pseudanthias squamipinnis</i>	Gascoyne Coast	1	1491	NA	1491	1491
Cod	Radiant Rockcod	<i>Epinephelus radiatus</i>	Statewide	2	377	46	331	423
Cod	Radiant Rockcod	<i>Epinephelus radiatus</i>	Gascoyne Coast	2	377	46	331	423
Cod	Rankin Cod	<i>Epinephelus multinotatus</i>	Statewide	137	589	11	304	880
Cod	Rankin Cod	<i>Epinephelus multinotatus</i>	North Coast	40	582	13	407	715
Cod	Rankin Cod	<i>Epinephelus multinotatus</i>	Gascoyne Coast	97	591	14	304	880
Cod	Striped Grouper	<i>Epinephelus latifasciatus</i>	Statewide	1	594	NA	594	594
Cod	Striped Grouper	<i>Epinephelus latifasciatus</i>	Gascoyne Coast	1	594	NA	594	594
Cod	Tomato Rockcod	<i>Cephalopholis sonnerati</i>	Statewide	34	398	10	313	593
Cod	Tomato Rockcod	<i>Cephalopholis sonnerati</i>	North Coast	2	396	36	360	431
Cod	Tomato Rockcod	<i>Cephalopholis sonnerati</i>	Gascoyne Coast	32	398	11	313	593
Cod	Wirenet Rockcod	<i>Epinephelus hexagonatus</i>	Statewide	1	420	NA	420	420
Cod	Wirenet Rockcod	<i>Epinephelus hexagonatus</i>	Gascoyne Coast	1	420	NA	420	420

Reporting Group	Common Name	Scientific Name	Bioregion	n	Av L	se	Min	Max
Cod	Yellowspotted Rockcod	<i>Epinephelus areolatus</i>	Statewide	70	381	7	252	580
Cod	Yellowspotted Rockcod	<i>Epinephelus areolatus</i>	North Coast	6	450	32	365	580
Cod	Yellowspotted Rockcod	<i>Epinephelus areolatus</i>	Gascoyne Coast	64	375	6	252	518
Cod	Temperate Bass & Rockcod	Percichthyidae & Serranidae	Statewide	23	527	35	220	860
Cod	Temperate Bass & Rockcod	Percichthyidae & Serranidae	North Coast	21	540	37	220	860
Cod	Temperate Bass & Rockcod	Percichthyidae & Serranidae	Gascoyne Coast	2	385	50	335	435
Coral Trout	Barcheek Coral Trout	<i>Plectropomus maculatus</i>	Statewide	138	552	7	400	778
Coral Trout	Barcheek Coral Trout	<i>Plectropomus maculatus</i>	North Coast	87	526	7	400	690
Coral Trout	Barcheek Coral Trout	<i>Plectropomus maculatus</i>	Gascoyne Coast	48	599	13	443	778
Coral Trout	Barcheek Coral Trout	<i>Plectropomus maculatus</i>	West Coast	3	563	38	525	638
Coral Trout	Bluespotted Coral Trout	<i>Plectropomus laevis</i>	Statewide	1	671	NA	671	671
Coral Trout	Bluespotted Coral Trout	<i>Plectropomus laevis</i>	Gascoyne Coast	1	671	NA	671	671
Coral Trout	Common Coral Trout	<i>Plectropomus leopardus</i>	Statewide	32	531	11	460	730
Coral Trout	Common Coral Trout	<i>Plectropomus leopardus</i>	Gascoyne Coast	2	623	61	562	683
Coral Trout	Common Coral Trout	<i>Plectropomus leopardus</i>	West Coast	30	525	11	460	730
Coral Trout	Passionfruit Coral Trout	<i>Plectropomus areolatus</i>	Statewide	1	310	NA	310	310
Coral Trout	Passionfruit Coral Trout	<i>Plectropomus areolatus</i>	Gascoyne Coast	1	310	NA	310	310
Coral Trout	Yellowedge Coronation	<i>Variola louti</i>	Statewide	23	540	21	327	733
Coral Trout	Yellowedge Coronation	<i>Variola louti</i>	Gascoyne Coast	23	540	21	327	733
Coral Trout	Coral Trout	<i>Plectropomus</i> spp. & <i>Variola</i> spp.	Statewide	1	490	NA	490	490
Coral Trout	Coral Trout	<i>Plectropomus</i> spp. & <i>Variola</i> spp.	West Coast	1	490	NA	490	490
Damselfish	Western Gregory	<i>Stegastes obreptus</i>	Statewide	1	261	NA	261	261
Damselfish	Western Gregory	<i>Stegastes obreptus</i>	West Coast	1	261	NA	261	261
Damselfish	Western Scalyfin	<i>Parma occidentalis</i>	Statewide	1	265	NA	265	265
Damselfish	Western Scalyfin	<i>Parma occidentalis</i>	West Coast	1	265	NA	265	265
Dart	Smallspotted Dart	<i>Trachinotus baillonii</i>	Statewide	1	410	NA	410	410
Dart	Smallspotted Dart	<i>Trachinotus baillonii</i>	North Coast	1	410	NA	410	410
Dory	John Dory	<i>Zeus faber</i>	Statewide	1	495	NA	495	495
Dory	John Dory	<i>Zeus faber</i>	South Coast	1	495	NA	495	495
Dottyback	Lined Dottyback	<i>Labracinus lineatus</i>	Statewide	5	176	3	169	183

Reporting Group	Common Name	Scientific Name	Bioregion	n	Av L	se	Min	Max
Dottyback	Lined Dottyback	<i>Labracinus lineatus</i>	West Coast	5	176	3	169	183
Drummer	Brassy Drummer	<i>Kyphosus vaigiensis</i>	Statewide	1	562	NA	562	562
Drummer	Brassy Drummer	<i>Kyphosus vaigiensis</i>	Gascoyne Coast	1	562	NA	562	562
Drummer	Silver Drummer	<i>Kyphosus sydneyanus</i>	Statewide	1	628	NA	628	628
Drummer	Silver Drummer	<i>Kyphosus sydneyanus</i>	West Coast	1	628	NA	628	628
Drummer	Western Buffalo Bream	<i>Kyphosus cornellii</i>	Statewide	2	432	12	420	443
Drummer	Western Buffalo Bream	<i>Kyphosus cornellii</i>	West Coast	2	432	12	420	443
Drummer	Western Rock Blackfish	<i>Girella tephraeops</i>	Statewide	13	447	20	257	533
Drummer	Western Rock Blackfish	<i>Girella tephraeops</i>	West Coast	4	443	14	414	480
Drummer	Western Rock Blackfish	<i>Girella tephraeops</i>	South Coast	9	449	29	257	533
Drummer	Zebrafish	<i>Girella zebra</i>	Statewide	2	353	36	317	389
Drummer	Zebrafish	<i>Girella zebra</i>	South Coast	2	353	36	317	389
Emperor	Bluespotted Emperor	<i>Lethrinus sp.</i>	Statewide	13	330	8	281	393
Emperor	Bluespotted Emperor	<i>Lethrinus sp.</i>	North Coast	11	331	10	281	393
Emperor	Bluespotted Emperor	<i>Lethrinus sp.</i>	Gascoyne Coast	2	326	1	325	326
Emperor	Drab Emperor	<i>Lethrinus ravus</i>	Statewide	2	369	32	337	400
Emperor	Drab Emperor	<i>Lethrinus ravus</i>	Gascoyne Coast	2	369	32	337	400
Emperor	Grass Emperor	<i>Lethrinus laticaudis</i>	Statewide	424	414	3	280	546
Emperor	Grass Emperor	<i>Lethrinus laticaudis</i>	North Coast	215	453	3	317	546
Emperor	Grass Emperor	<i>Lethrinus laticaudis</i>	Gascoyne Coast	208	373	3	280	499
Emperor	Grass Emperor	<i>Lethrinus laticaudis</i>	West Coast	1	470	NA	470	470
Emperor	Longnose Emperor	<i>Lethrinus olivaceus</i>	Statewide	9	696	56	498	931
Emperor	Longnose Emperor	<i>Lethrinus olivaceus</i>	North Coast	2	613	108	505	720
Emperor	Longnose Emperor	<i>Lethrinus olivaceus</i>	Gascoyne Coast	7	719	66	498	931
Emperor	Redspot Emperor	<i>Lethrinus lentjan</i>	Statewide	23	356	13	284	603
Emperor	Redspot Emperor	<i>Lethrinus lentjan</i>	Gascoyne Coast	23	356	13	284	603
Emperor	Redthroat Emperor	<i>Lethrinus miniatus</i>	Statewide	200	380	4	275	550
Emperor	Redthroat Emperor	<i>Lethrinus miniatus</i>	North Coast	2	348	12	336	360
Emperor	Redthroat Emperor	<i>Lethrinus miniatus</i>	Gascoyne Coast	127	383	5	275	532
Emperor	Redthroat Emperor	<i>Lethrinus miniatus</i>	West Coast	71	378	7	280	550

Reporting Group	Common Name	Scientific Name	Bioregion	n	Av L	se	Min	Max
Emperor	Robinson's Seabream	<i>Gymnocranius grandoculis</i>	Statewide	88	472	8	285	775
Emperor	Robinson's Seabream	<i>Gymnocranius grandoculis</i>	Gascoyne Coast	88	472	8	285	775
Emperor	Spangled Emperor	<i>Lethrinus nebulosus</i>	Statewide	388	525	4	305	733
Emperor	Spangled Emperor	<i>Lethrinus nebulosus</i>	North Coast	17	467	19	360	640
Emperor	Spangled Emperor	<i>Lethrinus nebulosus</i>	Gascoyne Coast	358	528	4	305	733
Emperor	Spangled Emperor	<i>Lethrinus nebulosus</i>	West Coast	13	523	30	420	730
Emperor	Spotcheek Emperor	<i>Lethrinus rubrioperculatus</i>	Statewide	27	338	4	295	395
Emperor	Spotcheek Emperor	<i>Lethrinus rubrioperculatus</i>	Gascoyne Coast	27	338	4	295	395
Emperor	Yellowtail Emperor	<i>Lethrinus atkinsoni</i>	Statewide	79	320	3	273	440
Emperor	Yellowtail Emperor	<i>Lethrinus atkinsoni</i>	North Coast	5	349	6	326	360
Emperor	Yellowtail Emperor	<i>Lethrinus atkinsoni</i>	Gascoyne Coast	74	318	3	273	440
Emperor	Emperors	Lethrinidae	Statewide	8	432	20	350	520
Emperor	Emperors	Lethrinidae	North Coast	8	432	20	350	520
Flathead	Bigtooth Flathead	<i>Platycephalus chauliodous</i>	Statewide	2	444	36	408	479
Flathead	Bigtooth Flathead	<i>Platycephalus chauliodous</i>	West Coast	1	479	NA	479	479
Flathead	Bigtooth Flathead	<i>Platycephalus chauliodous</i>	South Coast	1	408	NA	408	408
Flathead	Fringe-Eye Flathead	<i>Cymbacephalus nematophthalmus</i>	Statewide	3	500	42	440	580
Flathead	Fringe-Eye Flathead	<i>Cymbacephalus nematophthalmus</i>	North Coast	1	440	NA	440	440
Flathead	Fringe-Eye Flathead	<i>Cymbacephalus nematophthalmus</i>	Gascoyne Coast	1	479	NA	479	479
Flathead	Fringe-Eye Flathead	<i>Cymbacephalus nematophthalmus</i>	West Coast	1	580	NA	580	580
Flathead	Longhead Flathead	<i>Leviprora inops</i>	Statewide	3	420	33	384	485
Flathead	Longhead Flathead	<i>Leviprora inops</i>	West Coast	3	420	33	384	485
Flathead	Longspine Flathead	<i>Platycephalus longispinis</i>	Statewide	10	246	16	192	315
Flathead	Longspine Flathead	<i>Platycephalus longispinis</i>	West Coast	10	246	16	192	315
Flathead	Northern Sand Flathead	<i>Platycephalus endrachtensis</i>	Statewide	7	267	29	189	405
Flathead	Northern Sand Flathead	<i>Platycephalus endrachtensis</i>	Gascoyne Coast	1	405	NA	405	405
Flathead	Northern Sand Flathead	<i>Platycephalus endrachtensis</i>	West Coast	6	244	21	189	319
Flathead	Rock Flathead	<i>Platycephalus laevigatus</i>	Statewide	1	398	NA	398	398
Flathead	Rock Flathead	<i>Platycephalus laevigatus</i>	South Coast	1	398	NA	398	398
Flathead	Sthn Bluespotted Flathead	<i>Platycephalus speculator</i>	Statewide	183	443	6	297	657

Reporting Group	Common Name	Scientific Name	Bioregion	n	Av L	se	Min	Max
Flathead	Sthn Bluespotted Flathead	<i>Platycephalus speculator</i>	West Coast	96	468	8	307	649
Flathead	Sthn Bluespotted Flathead	<i>Platycephalus speculator</i>	South Coast	87	415	8	297	657
Flathead	Yellowtail Flathead	<i>Platycephalus westraliae</i>	Statewide	13	422	40	271	757
Flathead	Yellowtail Flathead	<i>Platycephalus westraliae</i>	North Coast	2	485	5	480	489
Flathead	Yellowtail Flathead	<i>Platycephalus westraliae</i>	Gascoyne Coast	5	387	14	355	436
Flathead	Yellowtail Flathead	<i>Platycephalus westraliae</i>	West Coast	6	431	89	271	757
Flathead	Flatheads	Platycephalidae	Statewide	13	467	23	318	630
Flathead	Flatheads	Platycephalidae	North Coast	1	318	NA	318	318
Flathead	Flatheads	Platycephalidae	West Coast	1	496	NA	496	496
Flathead	Flatheads	Platycephalidae	South Coast	11	478	23	385	630
Flounder	Large-tooth Flounder	<i>Pseudorhombus arsius</i>	Statewide	1	394	NA	394	394
Flounder	Large-tooth Flounder	<i>Pseudorhombus arsius</i>	West Coast	1	394	NA	394	394
Flounder	Smalltooth Flounder	<i>Pseudorhombus jenynsii</i>	Statewide	18	352	11	258	423
Flounder	Smalltooth Flounder	<i>Pseudorhombus jenynsii</i>	West Coast	12	349	15	258	423
Flounder	Smalltooth Flounder	<i>Pseudorhombus jenynsii</i>	South Coast	6	358	15	301	400
Flutemouth	Flutemouths	Fistulariidae	Statewide	1	830	NA	830	830
Flutemouth	Flutemouths	Fistulariidae	North Coast	1	830	NA	830	830
Fusilier	False Fusilier	<i>Paracaesio xanthurus</i>	Statewide	2	551	47	504	598
Fusilier	False Fusilier	<i>Paracaesio xanthurus</i>	Gascoyne Coast	2	551	47	504	598
Fusilier	Yellowtail Fusilier	<i>Caesio cuning</i>	Statewide	3	378	10	360	393
Fusilier	Yellowtail Fusilier	<i>Caesio cuning</i>	Gascoyne Coast	3	378	10	360	393
Garfish	Garfishes	Hemiramphidae	Statewide	181	336	3	213	442
Garfish	Garfishes	Hemiramphidae	North Coast	3	251	10	240	270
Garfish	Garfishes	Hemiramphidae	Gascoyne Coast	4	255	5	243	268
Garfish	Garfishes	Hemiramphidae	West Coast	143	345	3	218	442
Garfish	Garfishes	Hemiramphidae	South Coast	31	311	7	213	406
Goatfish	Blacksaddle Goatfish	<i>Parupeneus spilurus</i>	Statewide	14	393	11	289	452
Goatfish	Blacksaddle Goatfish	<i>Parupeneus spilurus</i>	West Coast	14	393	11	289	452
Goatfish	Bluespotted Goatfish	<i>Upeneichthys vlamingii</i>	Statewide	30	272	14	177	418
Goatfish	Bluespotted Goatfish	<i>Upeneichthys vlamingii</i>	West Coast	17	304	22	177	418

Reporting Group	Common Name	Scientific Name	Bioregion	n	Av L	se	Min	Max
Goatfish	Bluespotted Goatfish	<i>Upeneichthys vlamingii</i>	South Coast	13	230	5	210	273
Goatfish	Rosy Goatfish	<i>Parupeneus chrysopleuron</i>	Statewide	2	267	37	230	303
Goatfish	Rosy Goatfish	<i>Parupeneus chrysopleuron</i>	West Coast	2	267	37	230	303
Goatfish	Yellowspot Goatfish	<i>Parupeneus indicus</i>	Statewide	1	255	NA	255	255
Goatfish	Yellowspot Goatfish	<i>Parupeneus indicus</i>	Gascoyne Coast	1	255	NA	255	255
Goatfish	Goatfishes	Mullidae	Statewide	3	277	35	240	346
Goatfish	Goatfishes	Mullidae	Gascoyne Coast	1	346	NA	346	346
Goatfish	Goatfishes	Mullidae	South Coast	2	243	3	240	245
Grunter	Sea Trumpeter	<i>Pelsartia humeralis</i>	Statewide	8	276	14	216	320
Grunter	Sea Trumpeter	<i>Pelsartia humeralis</i>	West Coast	4	264	14	229	291
Grunter	Sea Trumpeter	<i>Pelsartia humeralis</i>	South Coast	4	288	24	216	320
Grunter	Western Striped Grunter	<i>Pelates octolineatus</i>	Statewide	82	212	3	157	263
Grunter	Western Striped Grunter	<i>Pelates octolineatus</i>	West Coast	48	210	3	167	258
Grunter	Western Striped Grunter	<i>Pelates octolineatus</i>	South Coast	34	214	5	157	263
Grunter Bream	Brown Sweetlips	<i>Plectorhinchus gibbosus</i>	Statewide	1	445	NA	445	445
Grunter Bream	Brown Sweetlips	<i>Plectorhinchus gibbosus</i>	North Coast	1	445	NA	445	445
Grunter Bream	Goldspotted Sweetlips	<i>Plectorhinchus flavomaculatus</i>	Statewide	36	463	10	375	582
Grunter Bream	Goldspotted Sweetlips	<i>Plectorhinchus flavomaculatus</i>	West Coast	36	463	10	375	582
Grunter Bream	Lined Javelinfish	<i>Hapalogenys dampieriensis</i>	Statewide	1	386	NA	386	386
Grunter Bream	Lined Javelinfish	<i>Hapalogenys dampieriensis</i>	Gascoyne Coast	1	386	NA	386	386
Grunter Bream	Manylines Sweetlips	<i>Plectorhinchus multivittatus</i>	Statewide	6	394	13	347	434
Grunter Bream	Manylines Sweetlips	<i>Plectorhinchus multivittatus</i>	North Coast	3	392	14	365	410
Grunter Bream	Manylines Sweetlips	<i>Plectorhinchus multivittatus</i>	Gascoyne Coast	3	396	26	347	434
Grunter Bream	Painted Sweetlips	<i>Diagramma labiosum</i>	Statewide	65	556	13	350	810
Grunter Bream	Painted Sweetlips	<i>Diagramma labiosum</i>	North Coast	19	534	18	382	650
Grunter Bream	Painted Sweetlips	<i>Diagramma labiosum</i>	Gascoyne Coast	39	545	16	350	733
Grunter Bream	Painted Sweetlips	<i>Diagramma labiosum</i>	West Coast	7	679	37	500	810
Grunter Bream	Grunter Brems	Haemulidae	Statewide	8	578	29	526	770
Grunter Bream	Grunter Brems	Haemulidae	North Coast	7	585	33	526	770
Grunter Bream	Grunter Brems	Haemulidae	West Coast	1	528	NA	528	528

Reporting Group	Common Name	Scientific Name	Bioregion	n	Av L	se	Min	Max
Gurnard	Bighead Gurnard Perch	<i>Neosebastes pandus</i>	Statewide	22	348	6	275	399
Gurnard	Bighead Gurnard Perch	<i>Neosebastes pandus</i>	West Coast	20	351	6	275	399
Gurnard	Bighead Gurnard Perch	<i>Neosebastes pandus</i>	South Coast	2	324	14	310	337
Gurnard	Blackspotted Gurnard Perch	<i>Neosebastes nigropunctatus</i>	Statewide	1	287	NA	287	287
Gurnard	Blackspotted Gurnard Perch	<i>Neosebastes nigropunctatus</i>	West Coast	1	287	NA	287	287
Hapuku	Hapuku	<i>Polyprion oxygeneios</i>	Statewide	6	835	64	642	1080
Hapuku	Hapuku	<i>Polyprion oxygeneios</i>	West Coast	4	885	80	694	1080
Hapuku	Hapuku	<i>Polyprion oxygeneios</i>	South Coast	2	736	94	642	830
Herring	Dorab Wolf Herring	<i>Chirocentrus dorab</i>	Statewide	1	625	NA	625	625
Herring	Dorab Wolf Herring	<i>Chirocentrus dorab</i>	North Coast	1	625	NA	625	625
Herring	Hawaiian Giant Herring	<i>Elops hawaiiensis</i>	Statewide	1	864	NA	864	864
Herring	Hawaiian Giant Herring	<i>Elops hawaiiensis</i>	Gascoyne Coast	1	864	NA	864	864
Herring	Sandy Sprat	<i>Hyperlophus vittatus</i>	Statewide	25	175	3	162	214
Herring	Sandy Sprat	<i>Hyperlophus vittatus</i>	West Coast	25	175	3	162	214
Herring	Scaly Mackerel	<i>Sardinella lemuru</i>	Statewide	2	186	6	180	191
Herring	Scaly Mackerel	<i>Sardinella lemuru</i>	West Coast	2	186	6	180	191
Herring	Maray	<i>Etrumeus teres</i>	Statewide	1	180	NA	180	180
Herring	Maray	<i>Etrumeus teres</i>	West Coast	1	180	NA	180	180
Javelinfish	Barred Javelin	<i>Pomadasys kaakan</i>	Statewide	2	356	49	307	404
Javelinfish	Barred Javelin	<i>Pomadasys kaakan</i>	North Coast	1	307	NA	307	307
Javelinfish	Barred Javelin	<i>Pomadasys kaakan</i>	Gascoyne Coast	1	404	NA	404	404
Javelinfish	Javelinfishes	<i>Pomadasys spp.</i>	Statewide	2	426	126	300	552
Javelinfish	Javelinfishes	<i>Pomadasys spp.</i>	North Coast	2	426	126	300	552
Jawfish	Black Jawfish	<i>Opistognathus inornatus</i>	Statewide	1	480	NA	480	480
Jawfish	Black Jawfish	<i>Opistognathus inornatus</i>	Gascoyne Coast	1	480	NA	480	480
Jawfish	Blotched Jawfish	<i>Opistognathus latitabundus</i>	Statewide	1	490	NA	490	490
Jawfish	Blotched Jawfish	<i>Opistognathus latitabundus</i>	North Coast	1	490	NA	490	490
Jewfish	Black Jewfish	<i>Protonibea diacanthus</i>	Statewide	18	910	32	720	1180
Jewfish	Black Jewfish	<i>Protonibea diacanthus</i>	North Coast	16	919	35	720	1180
Jewfish	Black Jewfish	<i>Protonibea diacanthus</i>	Gascoyne Coast	2	839	1	838	840

Reporting Group	Common Name	Scientific Name	Bioregion	n	Av L	se	Min	Max
Jewfish	Mulloway	<i>Argyrosomus hololepidotus</i>	Statewide	13	944	57	521	1320
Jewfish	Mulloway	<i>Argyrosomus hololepidotus</i>	Gascoyne Coast	1	1140	NA	1140	1140
Jewfish	Mulloway	<i>Argyrosomus hololepidotus</i>	West Coast	11	965	51	661	1320
Jewfish	Mulloway	<i>Argyrosomus hololepidotus</i>	South Coast	1	521	NA	521	521
Knifejaw	Knifejaw	<i>Oplegnathus woodwardi</i>	Statewide	1	490	NA	490	490
Knifejaw	Knifejaw	<i>Oplegnathus woodwardi</i>	South Coast	1	490	NA	490	490
Leatherjacket	Bluelined Leatherjacket	<i>Meuschenia galii</i>	Statewide	11	294	8	260	345
Leatherjacket	Bluelined Leatherjacket	<i>Meuschenia galii</i>	West Coast	10	295	8	260	345
Leatherjacket	Bluelined Leatherjacket	<i>Meuschenia galii</i>	South Coast	1	284	NA	284	284
Leatherjacket	Horseshoe Leatherjacket	<i>Meuschenia hippocrepis</i>	Statewide	21	358	15	264	550
Leatherjacket	Horseshoe Leatherjacket	<i>Meuschenia hippocrepis</i>	West Coast	17	352	18	264	550
Leatherjacket	Horseshoe Leatherjacket	<i>Meuschenia hippocrepis</i>	South Coast	4	380	3	373	387
Leatherjacket	Ocean Jacket	<i>Nelusetta ayraud</i>	Statewide	6	443	80	241	650
Leatherjacket	Ocean Jacket	<i>Nelusetta ayraud</i>	South Coast	6	443	80	241	650
Leatherjacket	Rough Leatherjacket	<i>Scobinichthys granulatus</i>	Statewide	7	262	5	245	277
Leatherjacket	Rough Leatherjacket	<i>Scobinichthys granulatus</i>	West Coast	3	267	9	249	277
Leatherjacket	Rough Leatherjacket	<i>Scobinichthys granulatus</i>	South Coast	4	258	6	245	274
Leatherjacket	Spinytail Leatherjacket	<i>Acanthaluteres brownii</i>	Statewide	5	330	22	250	377
Leatherjacket	Spinytail Leatherjacket	<i>Acanthaluteres brownii</i>	South Coast	5	330	22	250	377
Leatherjacket	Toothbrush Leatherjacket	<i>Acanthaluteres vittiger</i>	Statewide	1	229	NA	229	229
Leatherjacket	Toothbrush Leatherjacket	<i>Acanthaluteres vittiger</i>	South Coast	1	229	NA	229	229
Leatherjacket	Yellowstriped Leatherjacket	<i>Meuschenia flavolineata</i>	Statewide	4	318	22	275	358
Leatherjacket	Yellowstriped Leatherjacket	<i>Meuschenia flavolineata</i>	West Coast	4	318	22	275	358
Leatherjacket	Sixspine Leatherjacket	<i>Meuschenia freycineti</i>	Statewide	26	338	16	260	541
Leatherjacket	Sixspine Leatherjacket	<i>Meuschenia freycineti</i>	West Coast	8	374	40	260	509
Leatherjacket	Sixspine Leatherjacket	<i>Meuschenia freycineti</i>	South Coast	18	322	15	263	541
Leatherjacket	Bluespotted Leatherjacket	<i>Eubalichthys caeruleoguttatus</i>	Statewide	2	350	1	349	350
Leatherjacket	Bluespotted Leatherjacket	<i>Eubalichthys caeruleoguttatus</i>	West Coast	2	350	1	349	350
Leatherjacket	Triggerfish & Leatherjackets	Balistidae & Monacanthidae	Statewide	18	327	19	262	519
Leatherjacket	Triggerfish & Leatherjackets	Balistidae & Monacanthidae	Gascoyne Coast	1	426	NA	426	426

Reporting Group	Common Name	Scientific Name	Bioregion	n	Av L	se	Min	Max
Leatherjacket	Triggerfish & Leatherjackets	Balistidae & Monacanthidae	West Coast	5	297	11	274	337
Leatherjacket	Triggerfish & Leatherjackets	Balistidae & Monacanthidae	South Coast	12	331	26	262	519
Lizardfish & Grinners	Largescale Saury	<i>Saurida undosquamis</i>	Statewide	2	432	50	382	482
Lizardfish & Grinners	Largescale Saury	<i>Saurida undosquamis</i>	North Coast	2	432	50	382	482
Lizardfish & Grinners	Lizardfishes	Bathysauridae & Synodontidae	Statewide	1	335	NA	335	335
Lizardfish & Grinners	Lizardfishes	Bathysauridae & Synodontidae	Gascoyne Coast	1	335	NA	335	335
Longtom	Stout Longtom	<i>Tylosurus gavioloides</i>	Statewide	1	740	NA	740	740
Longtom	Stout Longtom	<i>Tylosurus gavioloides</i>	Gascoyne Coast	1	740	NA	740	740
Mackerel	Bigeye Tuna	<i>Thunnus obesus</i>	Statewide	1	900	NA	900	900
Mackerel	Bigeye Tuna	<i>Thunnus obesus</i>	Gascoyne Coast	1	900	NA	900	900
Mackerel	Blue Mackerel	<i>Scomber australasicus</i>	Statewide	60	251	5	189	357
Mackerel	Blue Mackerel	<i>Scomber australasicus</i>	West Coast	11	311	14	225	357
Mackerel	Blue Mackerel	<i>Scomber australasicus</i>	South Coast	49	238	3	189	296
Mackerel	Grey Mackerel	<i>Scomberomorus semifasciatus</i>	Statewide	11	1022	61	520	1250
Mackerel	Grey Mackerel	<i>Scomberomorus semifasciatus</i>	North Coast	10	1009	66	520	1250
Mackerel	Grey Mackerel	<i>Scomberomorus semifasciatus</i>	Gascoyne Coast	1	1145	NA	1145	1145
Mackerel	Mackerel Tuna	<i>Euthynnus affinis</i>	Statewide	37	621	17	417	870
Mackerel	Mackerel Tuna	<i>Euthynnus affinis</i>	North Coast	5	703	21	625	745
Mackerel	Mackerel Tuna	<i>Euthynnus affinis</i>	Gascoyne Coast	26	621	21	417	870
Mackerel	Mackerel Tuna	<i>Euthynnus affinis</i>	West Coast	6	554	27	490	680
Mackerel	School Mackerel	<i>Scomberomorus queenslandicus</i>	Statewide	89	659	12	320	1113
Mackerel	School Mackerel	<i>Scomberomorus queenslandicus</i>	North Coast	37	640	19	320	960
Mackerel	School Mackerel	<i>Scomberomorus queenslandicus</i>	Gascoyne Coast	46	663	15	525	1113
Mackerel	School Mackerel	<i>Scomberomorus queenslandicus</i>	West Coast	6	753	43	620	888
Mackerel	Shark Mackerel	<i>Grammatorcynus bicarinatus</i>	Statewide	10	896	29	715	1070
Mackerel	Shark Mackerel	<i>Grammatorcynus bicarinatus</i>	North Coast	1	870	NA	870	870
Mackerel	Shark Mackerel	<i>Grammatorcynus bicarinatus</i>	Gascoyne Coast	7	889	41	715	1070
Mackerel	Shark Mackerel	<i>Grammatorcynus bicarinatus</i>	West Coast	2	935	10	925	945
Mackerel	Spanish Mackerel	<i>Scomberomorus commerson</i>	Statewide	229	1107	9	582	1540
Mackerel	Spanish Mackerel	<i>Scomberomorus commerson</i>	North Coast	49	1078	30	582	1540

Reporting Group	Common Name	Scientific Name	Bioregion	n	Av L	se	Min	Max
Mackerel	Spanish Mackerel	<i>Scomberomorus commerson</i>	Gascoyne Coast	153	1116	9	883	1510
Mackerel	Spanish Mackerel	<i>Scomberomorus commerson</i>	West Coast	27	1111	22	892	1310
Mackerel	Spotted Mackerel	<i>Scomberomorus munroi</i>	Statewide	11	686	27	535	780
Mackerel	Spotted Mackerel	<i>Scomberomorus munroi</i>	North Coast	3	679	59	575	780
Mackerel	Spotted Mackerel	<i>Scomberomorus munroi</i>	Gascoyne Coast	3	596	41	535	675
Mackerel	Spotted Mackerel	<i>Scomberomorus munroi</i>	West Coast	5	745	16	680	770
Mackerel	Wahoo	<i>Acanthocybium solandri</i>	Statewide	4	1364	81	1202	1552
Mackerel	Wahoo	<i>Acanthocybium solandri</i>	Gascoyne Coast	4	1364	81	1202	1552
Mackerel	Mackerels	Scombridae	Statewide	11	905	66	580	1200
Mackerel	Mackerels	Scombridae	North Coast	11	905	66	580	1200
Mahi Mahi	Mahi Mahi	<i>Coryphaena hippurus</i>	Statewide	6	882	38	718	990
Mahi Mahi	Mahi Mahi	<i>Coryphaena hippurus</i>	West Coast	6	882	38	718	990
Moonfish & Batfish	Batfishes	Ephippidae & Drepaneidae	Statewide	1	388	NA	388	388
Moonfish & Batfish	Batfishes	Ephippidae & Drepaneidae	North Coast	1	388	NA	388	388
Morwong	Blue Morwong	<i>Nemadactylus valenciennesi</i>	Statewide	298	620	6	378	875
Morwong	Blue Morwong	<i>Nemadactylus valenciennesi</i>	West Coast	51	620	16	463	840
Morwong	Blue Morwong	<i>Nemadactylus valenciennesi</i>	South Coast	247	620	7	378	875
Morwong	Dusky Morwong	<i>Dactylophora nigricans</i>	Statewide	2	701	131	570	831
Morwong	Dusky Morwong	<i>Dactylophora nigricans</i>	West Coast	1	831	NA	831	831
Morwong	Dusky Morwong	<i>Dactylophora nigricans</i>	South Coast	1	570	NA	570	570
Morwong	Jackass Morwong	<i>Nemadactylus macropterus</i>	Statewide	1	455	NA	455	455
Morwong	Jackass Morwong	<i>Nemadactylus macropterus</i>	South Coast	1	455	NA	455	455
Morwong	Magpie Perch	<i>Cheilodactylus nigripes</i>	Statewide	1	433	NA	433	433
Morwong	Magpie Perch	<i>Cheilodactylus nigripes</i>	South Coast	1	433	NA	433	433
Morwong	Redlip Morwong	<i>Cheilodactylus rubrolabiatus</i>	Statewide	4	467	25	421	536
Morwong	Redlip Morwong	<i>Cheilodactylus rubrolabiatus</i>	West Coast	4	467	25	421	536
Morwong	Morwongs	Cheilodactylidae	Statewide	1	380	NA	380	380
Morwong	Morwongs	Cheilodactylidae	West Coast	1	380	NA	380	380
Mullet	Bluetail Mullet	<i>Valamugil buchanani</i>	Statewide	1	486	NA	486	486
Mullet	Bluetail Mullet	<i>Valamugil buchanani</i>	North Coast	1	486	NA	486	486

Reporting Group	Common Name	Scientific Name	Bioregion	n	Av L	se	Min	Max
Mullet	Yelloweye Mullet	<i>Aldrichetta forsteri</i>	Statewide	1	250	NA	250	250
Mullet	Yelloweye Mullet	<i>Aldrichetta forsteri</i>	South Coast	1	250	NA	250	250
Parrotfish	Blackvein Parrotfish	<i>Scarus rubroviolaceus</i>	Statewide	2	530	68	462	598
Parrotfish	Blackvein Parrotfish	<i>Scarus rubroviolaceus</i>	Gascoyne Coast	2	530	68	462	598
Parrotfish	Bluebarred Parrotfish	<i>Scarus ghobban</i>	Statewide	4	386	25	350	458
Parrotfish	Bluebarred Parrotfish	<i>Scarus ghobban</i>	North Coast	1	355	NA	355	355
Parrotfish	Bluebarred Parrotfish	<i>Scarus ghobban</i>	Gascoyne Coast	1	458	NA	458	458
Parrotfish	Bluebarred Parrotfish	<i>Scarus ghobban</i>	West Coast	2	365	15	350	380
Parrotfish	Surf Parrotfish	<i>Scarus rivulatus</i>	Statewide	1	670	NA	670	670
Parrotfish	Surf Parrotfish	<i>Scarus rivulatus</i>	West Coast	1	670	NA	670	670
Parrotfish	Parrotfishes	Scaridae	Statewide	9	411	41	240	640
Parrotfish	Parrotfishes	Scaridae	Gascoyne Coast	7	460	33	358	640
Parrotfish	Parrotfishes	Scaridae	West Coast	2	240	0	240	240
Pearl Perch	Northern Pearl Perch	<i>Glaucosoma buergeri</i>	Statewide	33	452	10	320	590
Pearl Perch	Northern Pearl Perch	<i>Glaucosoma buergeri</i>	North Coast	1	320	NA	320	320
Pearl Perch	Northern Pearl Perch	<i>Glaucosoma buergeri</i>	Gascoyne Coast	32	456	10	320	590
Pearl Perch	West Australian Dhufish	<i>Glaucosoma hebraicum</i>	Statewide	805	646	4	426	1054
Pearl Perch	West Australian Dhufish	<i>Glaucosoma hebraicum</i>	West Coast	788	645	4	426	1054
Pearl Perch	West Australian Dhufish	<i>Glaucosoma hebraicum</i>	South Coast	17	664	39	495	973
Perch	Barber Perch	<i>Caesioperca rasor</i>	Statewide	3	271	9	253	284
Perch	Barber Perch	<i>Caesioperca rasor</i>	South Coast	3	271	9	253	284
Perch	Bigeye Ocean Perch	<i>Helicolenus barathri</i>	Statewide	1	290	NA	290	290
Perch	Bigeye Ocean Perch	<i>Helicolenus barathri</i>	South Coast	1	290	NA	290	290
Pigfish	Saddleback Pigfish	<i>Bodianus bilunulatus</i>	Statewide	14	395	14	324	515
Pigfish	Saddleback Pigfish	<i>Bodianus bilunulatus</i>	Gascoyne Coast	13	400	14	324	515
Pigfish	Saddleback Pigfish	<i>Bodianus bilunulatus</i>	West Coast	1	325	NA	325	325
Pigfish	Western Pigfish	<i>Bodianus vulpinus</i>	Statewide	9	435	25	331	545
Pigfish	Western Pigfish	<i>Bodianus vulpinus</i>	Gascoyne Coast	3	384	27	331	421
Pigfish	Western Pigfish	<i>Bodianus vulpinus</i>	West Coast	4	422	28	350	482
Pigfish	Western Pigfish	<i>Bodianus vulpinus</i>	South Coast	2	538	8	530	545

Reporting Group	Common Name	Scientific Name	Bioregion	n	Av L	se	Min	Max
Pigfish	Pigfishes	<i>Bodianus</i> spp.	Statewide	4	352	21	308	401
Pigfish	Pigfishes	<i>Bodianus</i> spp.	Gascoyne Coast	4	352	21	308	401
Pike	Great Barracuda	<i>Sphyraena barracuda</i>	Statewide	8	852	114	543	1310
Pike	Great Barracuda	<i>Sphyraena barracuda</i>	North Coast	1	750	NA	750	750
Pike	Great Barracuda	<i>Sphyraena barracuda</i>	Gascoyne Coast	7	866	130	543	1310
Pike	Longfin Pike	<i>Dinolestes lewini</i>	Statewide	1	387	NA	387	387
Pike	Longfin Pike	<i>Dinolestes lewini</i>	West Coast	1	387	NA	387	387
Pike	Snook	<i>Sphyraena novaehollandiae</i>	Statewide	89	560	15	305	939
Pike	Snook	<i>Sphyraena novaehollandiae</i>	West Coast	33	598	27	310	932
Pike	Snook	<i>Sphyraena novaehollandiae</i>	South Coast	56	537	18	305	939
Pike	Striped Barracuda	<i>Sphyraena pinguis</i>	Statewide	29	447	28	222	740
Pike	Striped Barracuda	<i>Sphyraena pinguis</i>	West Coast	28	451	28	222	740
Pike	Striped Barracuda	<i>Sphyraena pinguis</i>	South Coast	1	324	NA	324	324
Pike	Pickhandle Barracuda	<i>Sphyraena jello</i>	Statewide	2	740	360	380	1100
Pike	Pickhandle Barracuda	<i>Sphyraena jello</i>	Gascoyne Coast	2	740	360	380	1100
Pike	Yellowtail Barracuda	<i>Sphyraena obtusata</i>	Statewide	5	533	74	344	714
Pike	Yellowtail Barracuda	<i>Sphyraena obtusata</i>	West Coast	4	487	76	344	630
Pike	Yellowtail Barracuda	<i>Sphyraena obtusata</i>	South Coast	1	714	NA	714	714
Pike	Pikes	Sphyraenidae	Statewide	9	527	87	352	1100
Pike	Pikes	Sphyraenidae	North Coast	5	623	145	360	1100
Pike	Pikes	Sphyraenidae	Gascoyne Coast	1	538	NA	538	538
Pike	Pikes	Sphyraenidae	West Coast	3	365	8	352	380
Queenfish	Needleskin Queenfish	<i>Scomberoides tol</i>	Statewide	2	547	44	503	590
Queenfish	Needleskin Queenfish	<i>Scomberoides tol</i>	North Coast	1	590	NA	590	590
Queenfish	Needleskin Queenfish	<i>Scomberoides tol</i>	Gascoyne Coast	1	503	NA	503	503
Queenfish	Queenfish	<i>Scomberoides</i> spp.	Statewide	10	609	48	320	917
Queenfish	Queenfish	<i>Scomberoides</i> spp.	North Coast	9	600	53	320	917
Queenfish	Queenfish	<i>Scomberoides</i> spp.	West Coast	1	690	NA	690	690
Redfish	Bight Redfish	<i>Centroberyx gerrardi</i>	Statewide	479	427	4	303	820
Redfish	Bight Redfish	<i>Centroberyx gerrardi</i>	West Coast	32	432	9	340	579

Reporting Group	Common Name	Scientific Name	Bioregion	n	Av L	se	Min	Max
Redfish	Bight Redfish	<i>Centroberyx gerrardi</i>	South Coast	447	427	4	303	820
Redfish	Swallowtail	<i>Centroberyx lineatus</i>	Statewide	180	361	2	245	442
Redfish	Swallowtail	<i>Centroberyx lineatus</i>	West Coast	10	362	13	305	442
Redfish	Swallowtail	<i>Centroberyx lineatus</i>	South Coast	170	361	2	245	433
Redfish	Yelloweye Redfish	<i>Centroberyx australis</i>	Statewide	1	397	NA	397	397
Redfish	Yelloweye Redfish	<i>Centroberyx australis</i>	South Coast	1	397	NA	397	397
Remora	Remora	<i>Remora remora</i>	Statewide	4	720	60	620	857
Remora	Remora	<i>Remora remora</i>	North Coast	2	620	0	620	620
Remora	Remora	<i>Remora remora</i>	Gascoyne Coast	2	820	38	782	857
Salmon & Herring	Australian Herring	<i>Arripis georgianus</i>	Statewide	2881	228	0	135	318
Salmon & Herring	Australian Herring	<i>Arripis georgianus</i>	West Coast	1418	231	1	177	309
Salmon & Herring	Australian Herring	<i>Arripis georgianus</i>	South Coast	1463	226	1	135	318
Salmon & Herring	Beach Salmon	<i>Leptobrama muelleri</i>	Statewide	5	505	63	271	645
Salmon & Herring	Beach Salmon	<i>Leptobrama muelleri</i>	North Coast	5	505	63	271	645
Salmon & Herring	Western Australian Salmon	<i>Arripis truttaceus</i>	Statewide	270	651	11	196	869
Salmon & Herring	Western Australian Salmon	<i>Arripis truttaceus</i>	West Coast	125	764	3	655	869
Salmon & Herring	Western Australian Salmon	<i>Arripis truttaceus</i>	South Coast	145	554	16	196	823
Sand Bass	Sand Bass	<i>Psammoperca waigiensis</i>	Statewide	5	362	20	295	408
Sand Bass	Sand Bass	<i>Psammoperca waigiensis</i>	West Coast	5	362	20	295	408
Sergeant Baker	Sergeant Baker	<i>Latropiscis purpurissatus</i>	Statewide	60	426	8	271	556
Sergeant Baker	Sergeant Baker	<i>Latropiscis purpurissatus</i>	West Coast	23	424	9	340	500
Sergeant Baker	Sergeant Baker	<i>Latropiscis purpurissatus</i>	South Coast	37	428	12	271	556
Snappers (King)	Goldband Snapper	<i>Pristipomoides multidentis</i>	Statewide	199	552	6	366	800
Snappers (King)	Goldband Snapper	<i>Pristipomoides multidentis</i>	North Coast	2	585	27	558	611
Snappers (King)	Goldband Snapper	<i>Pristipomoides multidentis</i>	Gascoyne Coast	197	552	6	366	800
Snappers (King)	Rosy Snapper	<i>Pristipomoides filamentosus</i>	Statewide	13	500	18	422	642
Snappers (King)	Rosy Snapper	<i>Pristipomoides filamentosus</i>	Gascoyne Coast	13	500	18	422	642
Snappers (King)	Sharptooth Snapper	<i>Pristipomoides typus</i>	Statewide	90	519	7	363	643
Snappers (King)	Sharptooth Snapper	<i>Pristipomoides typus</i>	Gascoyne Coast	90	519	7	363	643
Snapper (Tropical)	Blackspot Snapper	<i>Lutjanus fulviflamma</i>	Statewide	10	266	12	230	365

Reporting Group	Common Name	Scientific Name	Bioregion	n	Av L	se	Min	Max
Snapper (Tropical)	Blackspot Snapper	<i>Lutjanus fulviflamma</i>	North Coast	1	365	NA	365	365
Snapper (Tropical)	Blackspot Snapper	<i>Lutjanus fulviflamma</i>	Gascoyne Coast	9	255	6	230	283
Snapper (Tropical)	Bluestriped Snapper	<i>Lutjanus kasmira</i>	Statewide	2	318	3	315	320
Snapper (Tropical)	Bluestriped Snapper	<i>Lutjanus kasmira</i>	North Coast	2	318	3	315	320
Snapper (Tropical)	Brownstripe Snapper	<i>Lutjanus vitta</i>	Statewide	7	339	8	318	380
Snapper (Tropical)	Brownstripe Snapper	<i>Lutjanus vitta</i>	Gascoyne Coast	7	339	8	318	380
Snapper (Tropical)	Chinamanfish	<i>Symphorus nematophorus</i>	Statewide	41	661	23	375	939
Snapper (Tropical)	Chinamanfish	<i>Symphorus nematophorus</i>	North Coast	30	636	27	375	895
Snapper (Tropical)	Chinamanfish	<i>Symphorus nematophorus</i>	Gascoyne Coast	11	730	38	499	939
Snapper (Tropical)	Crimson Snapper	<i>Lutjanus erythropterus</i>	Statewide	16	532	18	400	622
Snapper (Tropical)	Crimson Snapper	<i>Lutjanus erythropterus</i>	North Coast	16	532	18	400	622
Snapper (Tropical)	Darktail Snapper	<i>Lutjanus lemniscatus</i>	Statewide	23	364	14	260	527
Snapper (Tropical)	Darktail Snapper	<i>Lutjanus lemniscatus</i>	North Coast	3	312	6	300	321
Snapper (Tropical)	Darktail Snapper	<i>Lutjanus lemniscatus</i>	Gascoyne Coast	19	374	16	260	527
Snapper (Tropical)	Darktail Snapper	<i>Lutjanus lemniscatus</i>	West Coast	1	325	NA	325	325
Snapper (Tropical)	Flame Snapper	<i>Etelis coruscans</i>	Statewide	2	743	14	729	757
Snapper (Tropical)	Flame Snapper	<i>Etelis coruscans</i>	Gascoyne Coast	2	743	14	729	757
Snappers (Tropical)	Golden Snapper	<i>Lutjanus johnii</i>	Statewide	17	378	9	327	472
Snappers (Tropical)	Golden Snapper	<i>Lutjanus johnii</i>	North Coast	16	381	9	327	472
Snappers (Tropical)	Golden Snapper	<i>Lutjanus johnii</i>	Gascoyne Coast	1	338	NA	338	338
Snappers (Tropical)	Green Jobfish	<i>Aprion virescens</i>	Statewide	6	660	74	448	953
Snappers (Tropical)	Green Jobfish	<i>Aprion virescens</i>	Gascoyne Coast	6	660	74	448	953
Snapper (Tropical)	Indonesian Snapper	<i>Lutjanus bitaeniatus</i>	Statewide	2	400	40	360	440
Snapper (Tropical)	Indonesian Snapper	<i>Lutjanus bitaeniatus</i>	North Coast	2	400	40	360	440
Snapper (Tropical)	Mangrove Jack	<i>Lutjanus argentimaculatus</i>	Statewide	76	376	5	305	532
Snapper (Tropical)	Mangrove Jack	<i>Lutjanus argentimaculatus</i>	North Coast	70	369	4	305	480
Snapper (Tropical)	Mangrove Jack	<i>Lutjanus argentimaculatus</i>	Gascoyne Coast	5	454	31	373	532
Snapper (Tropical)	Mangrove Jack	<i>Lutjanus argentimaculatus</i>	West Coast	1	510	NA	510	510
Snapper (Tropical)	Moses' Snapper	<i>Lutjanus russellii</i>	Statewide	48	384	7	298	519
Snapper (Tropical)	Moses' Snapper	<i>Lutjanus russellii</i>	North Coast	11	377	5	348	392

Reporting Group	Common Name	Scientific Name	Bioregion	n	Av L	se	Min	Max
Snapper (Tropical)	Moses' Snapper	<i>Lutjanus russellii</i>	Gascoyne Coast	37	386	9	298	519
Snapper (Tropical)	Paddletail	<i>Lutjanus gibbus</i>	Statewide	1	410	NA	410	410
Snapper (Tropical)	Paddletail	<i>Lutjanus gibbus</i>	Gascoyne Coast	1	410	NA	410	410
Snapper (Tropical)	Pale Ruby Snapper	<i>Etelis radiosus</i>	Statewide	2	303	21	282	323
Snapper (Tropical)	Pale Ruby Snapper	<i>Etelis radiosus</i>	North Coast	2	303	21	282	323
Snapper (Tropical)	Red Bass	<i>Lutjanus bohar</i>	Statewide	5	592	81	410	819
Snapper (Tropical)	Red Bass	<i>Lutjanus bohar</i>	Gascoyne Coast	5	592	81	410	819
Snappers (Tropical)	Red Emperor	<i>Lutjanus sebae</i>	Statewide	184	561	7	401	834
Snappers (Tropical)	Red Emperor	<i>Lutjanus sebae</i>	North Coast	45	519	10	420	706
Snappers (Tropical)	Red Emperor	<i>Lutjanus sebae</i>	Gascoyne Coast	137	574	9	401	834
Snappers (Tropical)	Red Emperor	<i>Lutjanus sebae</i>	West Coast	2	666	115	551	781
Snapper (Tropical)	Ruby Snapper	<i>Etelis carbunculus</i>	Statewide	73	765	18	488	1115
Snapper (Tropical)	Ruby Snapper	<i>Etelis carbunculus</i>	Gascoyne Coast	73	765	18	488	1115
Snapper (Tropical)	Saddletail Snapper	<i>Lutjanus malabaricus</i>	Statewide	72	467	13	319	855
Snapper (Tropical)	Saddletail Snapper	<i>Lutjanus malabaricus</i>	North Coast	48	464	17	319	730
Snapper (Tropical)	Saddletail Snapper	<i>Lutjanus malabaricus</i>	Gascoyne Coast	24	473	20	356	855
Snapper (Tropical)	Stripey Snapper	<i>Lutjanus carponotatus</i>	Statewide	134	340	3	225	424
Snapper (Tropical)	Stripey Snapper	<i>Lutjanus carponotatus</i>	North Coast	65	341	3	225	390
Snapper (Tropical)	Stripey Snapper	<i>Lutjanus carponotatus</i>	Gascoyne Coast	69	339	4	257	424
Snapper (Tropical)	Tang's Snapper	<i>Lipocheilus carnolabrum</i>	Statewide	2	486	33	453	518
Snapper (Tropical)	Tang's Snapper	<i>Lipocheilus carnolabrum</i>	Gascoyne Coast	2	486	33	453	518
Snapper (Tropical)	Fusiliers & Snappers	Caesionidae & Lutjanidae	Statewide	19	397	16	310	493
Snapper (Tropical)	Fusiliers & Snappers	Caesionidae & Lutjanidae	North Coast	15	377	17	310	490
Snapper (Tropical)	Fusiliers & Snappers	Caesionidae & Lutjanidae	Gascoyne Coast	4	471	10	447	493
Squirrelfish	Squirrelfishes	Holocentridae	Statewide	1	332	NA	332	332
Squirrelfish	Squirrelfishes	Holocentridae	Gascoyne Coast	1	332	NA	332	332
Stonefish	Western Red Scorpionfish	<i>Scorpaena sumptuosa</i>	Statewide	11	312	9	250	344
Stonefish	Western Red Scorpionfish	<i>Scorpaena sumptuosa</i>	West Coast	9	305	10	250	340
Stonefish	Western Red Scorpionfish	<i>Scorpaena sumptuosa</i>	South Coast	2	341	3	338	344
Striped Grunter	Eastern Striped Grunter	<i>Pelates sexlineatus</i>	Statewide	59	203	3	163	260

Reporting Group	Common Name	Scientific Name	Bioregion	n	Av L	se	Min	Max
Striped Grunter	Eastern Striped Grunter	<i>Pelates sexlineatus</i>	West Coast	39	196	3	163	240
Striped Grunter	Eastern Striped Grunter	<i>Pelates sexlineatus</i>	South Coast	20	216	5	182	260
Striped Grunter	Striped Grunters	Terapontidae	Statewide	8	259	38	184	521
Striped Grunter	Striped Grunters	Terapontidae	North Coast	1	225	NA	225	225
Striped Grunter	Striped Grunters	Terapontidae	Gascoyne Coast	1	521	NA	521	521
Striped Grunter	Striped Grunters	Terapontidae	West Coast	2	237	19	218	255
Striped Grunter	Striped Grunters	Terapontidae	South Coast	4	213	10	184	230
Sweep	Banded Sweep	<i>Scorpis georgiana</i>	Statewide	33	342	10	246	480
Sweep	Banded Sweep	<i>Scorpis georgiana</i>	West Coast	26	337	11	246	462
Sweep	Banded Sweep	<i>Scorpis georgiana</i>	South Coast	7	361	21	320	480
Sweep	Footballer Sweep	<i>Neatypus obliquus</i>	Statewide	4	227	2	225	231
Sweep	Footballer Sweep	<i>Neatypus obliquus</i>	West Coast	4	227	2	225	231
Sweep	Moonlighter	<i>Tilodon sexfasciatus</i>	Statewide	15	347	9	264	395
Sweep	Moonlighter	<i>Tilodon sexfasciatus</i>	West Coast	10	349	8	308	395
Sweep	Moonlighter	<i>Tilodon sexfasciatus</i>	South Coast	5	344	22	264	392
Sweep	Sea Sweep	<i>Scorpis aequipinnis</i>	Statewide	145	454	4	315	557
Sweep	Sea Sweep	<i>Scorpis aequipinnis</i>	West Coast	49	460	6	348	536
Sweep	Sea Sweep	<i>Scorpis aequipinnis</i>	South Coast	96	452	5	315	557
Sweep	Sweep	Scorpididae	Statewide	5	402	27	353	489
Sweep	Sweep	Scorpididae	South Coast	5	402	27	353	489
Tailor	Tailor	<i>Pomatomus saltatrix</i>	Statewide	110	407	7	284	640
Tailor	Tailor	<i>Pomatomus saltatrix</i>	Gascoyne Coast	10	447	15	389	533
Tailor	Tailor	<i>Pomatomus saltatrix</i>	West Coast	96	407	7	284	640
Tailor	Tailor	<i>Pomatomus saltatrix</i>	South Coast	4	325	4	314	334
Threadfin	Blue Threadfin	<i>Eleutheronema tetradactylum</i>	Statewide	21	496	28	360	825
Threadfin	Blue Threadfin	<i>Eleutheronema tetradactylum</i>	North Coast	20	503	29	360	825
Threadfin	Blue Threadfin	<i>Eleutheronema tetradactylum</i>	Gascoyne Coast	1	362	NA	362	362
Threadfin	Threadfin Salmons	Polynemidae	Statewide	3	650	110	523	870
Threadfin	Threadfin Salmons	Polynemidae	North Coast	3	650	110	523	870
Threadfin Bream	Purple Threadfin Bream	<i>Pentapodus emeryii</i>	Statewide	2	453	35	418	487

Reporting Group	Common Name	Scientific Name	Bioregion	n	Av L	se	Min	Max
Threadfin Bream	Purple Threadfin Bream	<i>Pentapodus emeryii</i>	Gascoyne Coast	2	453	35	418	487
Threadfin Bream	Rainbow Monocle Bream	<i>Scolopsis monogramma</i>	Statewide	4	389	22	331	434
Threadfin Bream	Rainbow Monocle Bream	<i>Scolopsis monogramma</i>	North Coast	2	359	28	331	386
Threadfin Bream	Rainbow Monocle Bream	<i>Scolopsis monogramma</i>	Gascoyne Coast	2	420	15	405	434
Threadfin Bream	Rosy Threadfin Bream	<i>Nemipterus furcosus</i>	Statewide	2	308	3	305	310
Threadfin Bream	Rosy Threadfin Bream	<i>Nemipterus furcosus</i>	North Coast	2	308	3	305	310
Threadfin Bream	Western Butterfly	<i>Pentapodus vitta</i>	Statewide	207	235	2	154	310
Threadfin Bream	Western Butterfly	<i>Pentapodus vitta</i>	Gascoyne Coast	3	224	7	213	238
Threadfin Bream	Western Butterfly	<i>Pentapodus vitta</i>	West Coast	204	235	2	154	310
Tilefish	Australian Tilefish	<i>Branchiostegus australiensis</i>	Statewide	3	418	26	367	454
Tilefish	Australian Tilefish	<i>Branchiostegus australiensis</i>	Gascoyne Coast	3	418	26	367	454
Toadfish	Silver Toadfish	<i>Lagocephalus sceleratus</i>	Statewide	6	348	99	121	610
Toadfish	Silver Toadfish	<i>Lagocephalus sceleratus</i>	West Coast	6	348	99	121	610
Trevalla	Blue-Eye Trevalla	<i>Hyperoglyphe antarctica</i>	Statewide	2	542	6	536	547
Trevalla	Blue-Eye Trevalla	<i>Hyperoglyphe antarctica</i>	West Coast	2	542	6	536	547
Trevally	Amberjack	<i>Seriola dumerili</i>	Statewide	11	818	75	516	1324
Trevally	Amberjack	<i>Seriola dumerili</i>	Gascoyne Coast	3	1020	254	516	1324
Trevally	Amberjack	<i>Seriola dumerili</i>	West Coast	7	770	25	670	854
Trevally	Amberjack	<i>Seriola dumerili</i>	South Coast	1	550	NA	550	550
Trevally	Bludger Trevally	<i>Carangoides gymnostethus</i>	Statewide	22	526	11	371	575
Trevally	Bludger Trevally	<i>Carangoides gymnostethus</i>	North Coast	2	458	87	371	544
Trevally	Bludger Trevally	<i>Carangoides gymnostethus</i>	Gascoyne Coast	20	533	9	432	575
Trevally	Blue Trevally	<i>Carangoides ferdau</i>	Statewide	11	429	20	299	507
Trevally	Blue Trevally	<i>Carangoides ferdau</i>	North Coast	6	447	21	380	500
Trevally	Blue Trevally	<i>Carangoides ferdau</i>	Gascoyne Coast	5	407	36	299	507
Trevally	Bluespotted Trevally	<i>Caranx bucculentus</i>	Statewide	6	308	14	280	367
Trevally	Bluespotted Trevally	<i>Caranx bucculentus</i>	North Coast	6	308	14	280	367
Trevally	Brassy Trevally	<i>Caranx papuensis</i>	Statewide	2	499	13	486	512
Trevally	Brassy Trevally	<i>Caranx papuensis</i>	North Coast	2	499	13	486	512
Trevally	Common Dart	<i>Trachinotus botla</i>	Statewide	1	440	NA	440	440

Reporting Group	Common Name	Scientific Name	Bioregion	n	Av L	se	Min	Max
Trevally	Common Dart	<i>Trachinotus botla</i>	North Coast	1	440	NA	440	440
Trevally	Fringefin Trevally	<i>Pantolabus radiatus</i>	Statewide	1	232	NA	232	232
Trevally	Fringefin Trevally	<i>Pantolabus radiatus</i>	North Coast	1	232	NA	232	232
Trevally	Giant Queenfish	<i>Scomberoides commersonnianus</i>	Statewide	6	511	24	452	574
Trevally	Giant Queenfish	<i>Scomberoides commersonnianus</i>	North Coast	6	511	24	452	574
Trevally	Giant Trevally	<i>Caranx ignobilis</i>	Statewide	16	537	36	375	894
Trevally	Giant Trevally	<i>Caranx ignobilis</i>	North Coast	10	487	20	375	570
Trevally	Giant Trevally	<i>Caranx ignobilis</i>	Gascoyne Coast	5	585	92	425	894
Trevally	Giant Trevally	<i>Caranx ignobilis</i>	West Coast	1	800	NA	800	800
Trevally	Golden Trevally	<i>Gnathanodon speciosus</i>	Statewide	103	550	17	250	982
Trevally	Golden Trevally	<i>Gnathanodon speciosus</i>	North Coast	73	505	19	250	982
Trevally	Golden Trevally	<i>Gnathanodon speciosus</i>	Gascoyne Coast	30	660	28	365	915
Trevally	Longnose Trevally	<i>Carangoides chrysophrys</i>	Statewide	5	500	50	300	553
Trevally	Longnose Trevally	<i>Carangoides chrysophrys</i>	North Coast	1	300	NA	300	300
Trevally	Longnose Trevally	<i>Carangoides chrysophrys</i>	Gascoyne Coast	4	550	2	545	553
Trevally	Rainbow Runner	<i>Elagatis bipinnulata</i>	Statewide	1	425	NA	425	425
Trevally	Rainbow Runner	<i>Elagatis bipinnulata</i>	North Coast	1	425	NA	425	425
Trevally	Redtail Scad	<i>Decapterus kurroides</i>	Statewide	2	418	2	416	420
Trevally	Redtail Scad	<i>Decapterus kurroides</i>	Gascoyne Coast	2	418	2	416	420
Trevally	Samsonfish	<i>Seriola hippos</i>	Statewide	101	859	21	515	1480
Trevally	Samsonfish	<i>Seriola hippos</i>	West Coast	82	825	22	515	1480
Trevally	Samsonfish	<i>Seriola hippos</i>	South Coast	19	1005	41	760	1460
Trevally	Silver Trevally	<i>Pseudocaranx georgianus</i>	Statewide	1312	345	2	184	910
Trevally	Silver Trevally	<i>Pseudocaranx georgianus</i>	West Coast	907	353	2	184	600
Trevally	Silver Trevally	<i>Pseudocaranx georgianus</i>	South Coast	405	328	5	205	910
Trevally	Temperate Scad	<i>Decapterus muroadsi</i>	Statewide	1	159	NA	159	159
Trevally	Temperate Scad	<i>Decapterus muroadsi</i>	South Coast	1	159	NA	159	159
Trevally	Tille Trevally	<i>Caranx tille</i>	Statewide	3	613	139	472	890
Trevally	Tille Trevally	<i>Caranx tille</i>	North Coast	1	890	NA	890	890
Trevally	Tille Trevally	<i>Caranx tille</i>	Gascoyne Coast	2	474	2	472	476

Reporting Group	Common Name	Scientific Name	Bioregion	n	Av L	se	Min	Max
Trevally	Turrum	<i>Carangoides fulvoguttatus</i>	Statewide	86	532	16	320	989
Trevally	Turrum	<i>Carangoides fulvoguttatus</i>	North Coast	26	528	27	320	828
Trevally	Turrum	<i>Carangoides fulvoguttatus</i>	Gascoyne Coast	60	533	20	335	989
Trevally	Yellowtail Kingfish	<i>Seriola lalandi</i>	Statewide	45	730	27	384	1418
Trevally	Yellowtail Kingfish	<i>Seriola lalandi</i>	Gascoyne Coast	1	1035	NA	1035	1035
Trevally	Yellowtail Kingfish	<i>Seriola lalandi</i>	West Coast	30	710	33	438	1418
Trevally	Yellowtail Kingfish	<i>Seriola lalandi</i>	South Coast	14	751	47	384	1125
Trevally	Yellowtail Scad	<i>Trachurus novaezelandiae</i>	Statewide	114	199	2	139	251
Trevally	Yellowtail Scad	<i>Trachurus novaezelandiae</i>	West Coast	46	202	3	139	251
Trevally	Yellowtail Scad	<i>Trachurus novaezelandiae</i>	South Coast	68	197	2	163	231
Trevally	Trevallies	Carangidae	Statewide	22	471	26	343	935
Trevally	Trevallies	Carangidae	North Coast	21	474	27	343	935
Trevally	Trevallies	Carangidae	South Coast	1	400	NA	400	400
Triggerfish	Black Triggerfish	<i>Melichthys niger</i>	Statewide	1	283	NA	283	283
Triggerfish	Black Triggerfish	<i>Melichthys niger</i>	Gascoyne Coast	1	283	NA	283	283
Triggerfish	Bridled Triggerfish	<i>Sufflamen fraenatum</i>	Statewide	7	276	6	248	294
Triggerfish	Bridled Triggerfish	<i>Sufflamen fraenatum</i>	Gascoyne Coast	7	276	6	248	294
Triggerfish	Titan Triggerfish	<i>Balistoides viridescens</i>	Statewide	2	436	106	330	542
Triggerfish	Titan Triggerfish	<i>Balistoides viridescens</i>	Gascoyne Coast	2	436	106	330	542
Triggerfish	Yellowspotted Triggerfish	<i>Pseudobalistes fuscus</i>	Statewide	1	516	NA	516	516
Triggerfish	Yellowspotted Triggerfish	<i>Pseudobalistes fuscus</i>	Gascoyne Coast	1	516	NA	516	516
Tripletail	Tripletail	<i>Lobotes surinamensis</i>	Statewide	2	578	8	570	585
Tripletail	Tripletail	<i>Lobotes surinamensis</i>	North Coast	2	578	8	570	585
Tuna	Longtail Tuna	<i>Thunnus tonggol</i>	Statewide	56	767	15	513	1056
Tuna	Longtail Tuna	<i>Thunnus tonggol</i>	North Coast	3	789	39	730	863
Tuna	Longtail Tuna	<i>Thunnus tonggol</i>	Gascoyne Coast	50	776	16	540	1056
Tuna	Longtail Tuna	<i>Thunnus tonggol</i>	West Coast	3	583	50	513	680
Tuna	Skipjack Tuna	<i>Katsuwonus pelamis</i>	Statewide	60	606	7	509	770
Tuna	Skipjack Tuna	<i>Katsuwonus pelamis</i>	Gascoyne Coast	39	588	6	509	658
Tuna	Skipjack Tuna	<i>Katsuwonus pelamis</i>	West Coast	12	676	12	630	770

Reporting Group	Common Name	Scientific Name	Bioregion	n	Av L	se	Min	Max
Tuna	Skipjack Tuna	<i>Katsuwonus pelamis</i>	South Coast	9	589	16	535	655
Tuna	Southern Bluefin Tuna	<i>Thunnus maccoyii</i>	Statewide	101	696	12	348	914
Tuna	Southern Bluefin Tuna	<i>Thunnus maccoyii</i>	West Coast	18	563	25	348	710
Tuna	Southern Bluefin Tuna	<i>Thunnus maccoyii</i>	South Coast	83	725	11	527	914
Tuna	Yellowfin Tuna	<i>Thunnus albacares</i>	Statewide	30	828	23	624	1066
Tuna	Yellowfin Tuna	<i>Thunnus albacares</i>	North Coast	1	960	NA	960	960
Tuna	Yellowfin Tuna	<i>Thunnus albacares</i>	Gascoyne Coast	16	872	29	624	1066
Tuna	Yellowfin Tuna	<i>Thunnus albacares</i>	West Coast	13	763	30	635	1050
Tuskfish & Wrasse	Baldchin Groper	<i>Choerodon rubescens</i>	Statewide	664	487	3	303	800
Tuskfish & Wrasse	Baldchin Groper	<i>Choerodon rubescens</i>	Gascoyne Coast	14	499	19	399	640
Tuskfish & Wrasse	Baldchin Groper	<i>Choerodon rubescens</i>	West Coast	650	487	3	303	800
Tuskfish & Wrasse	Blackspot Tuskfish	<i>Choerodon schoenleinii</i>	Statewide	81	503	10	280	711
Tuskfish & Wrasse	Blackspot Tuskfish	<i>Choerodon schoenleinii</i>	North Coast	33	502	14	349	672
Tuskfish & Wrasse	Blackspot Tuskfish	<i>Choerodon schoenleinii</i>	Gascoyne Coast	48	503	14	280	711
Tuskfish & Wrasse	Blue Tuskfish	<i>Choerodon cyanodus</i>	Statewide	5	278	15	250	330
Tuskfish & Wrasse	Blue Tuskfish	<i>Choerodon cyanodus</i>	North Coast	2	255	5	250	259
Tuskfish & Wrasse	Blue Tuskfish	<i>Choerodon cyanodus</i>	Gascoyne Coast	3	293	20	260	330
Tuskfish & Wrasse	Bluespotted Tuskfish	<i>Choerodon cauteroma</i>	Statewide	7	339	23	242	421
Tuskfish & Wrasse	Bluespotted Tuskfish	<i>Choerodon cauteroma</i>	Gascoyne Coast	7	339	23	242	421
Tuskfish & Wrasse	Brownspotted Wrasse	<i>Notolabrus parilus</i>	Statewide	345	300	3	143	447
Tuskfish & Wrasse	Brownspotted Wrasse	<i>Notolabrus parilus</i>	West Coast	262	299	3	143	447
Tuskfish & Wrasse	Brownspotted Wrasse	<i>Notolabrus parilus</i>	South Coast	83	303	7	155	407
Tuskfish & Wrasse	Crimson Cleaner Wrasse	<i>Suezichthys aylingi</i>	Statewide	1	225	NA	225	225
Tuskfish & Wrasse	Crimson Cleaner Wrasse	<i>Suezichthys aylingi</i>	South Coast	1	225	NA	225	225
Tuskfish & Wrasse	Elegant Wrasse	<i>Anampses elegans</i>	Statewide	1	219	NA	219	219
Tuskfish & Wrasse	Elegant Wrasse	<i>Anampses elegans</i>	South Coast	1	219	NA	219	219
Tuskfish & Wrasse	False Senator Wrasse	<i>Pictilabrus viridis</i>	Statewide	1	268	NA	268	268
Tuskfish & Wrasse	False Senator Wrasse	<i>Pictilabrus viridis</i>	West Coast	1	268	NA	268	268
Tuskfish & Wrasse	Foxfish	<i>Bodianus frenchii</i>	Statewide	122	370	4	253	450
Tuskfish & Wrasse	Foxfish	<i>Bodianus frenchii</i>	West Coast	81	364	4	253	450

Reporting Group	Common Name	Scientific Name	Bioregion	n	Av L	se	Min	Max
Tuskfish & Wrasse	Foxfish	<i>Bodianus frenchii</i>	South Coast	41	383	6	295	444
Tuskfish & Wrasse	Goldspot Pigfish	<i>Bodianus perditio</i>	Statewide	8	360	17	313	444
Tuskfish & Wrasse	Goldspot Pigfish	<i>Bodianus perditio</i>	Gascoyne Coast	7	348	14	313	401
Tuskfish & Wrasse	Goldspot Pigfish	<i>Bodianus perditio</i>	West Coast	1	444	NA	444	444
Tuskfish & Wrasse	Redblotched Wrasse	<i>Coris aygula</i>	Statewide	1	472	NA	472	472
Tuskfish & Wrasse	Redblotched Wrasse	<i>Coris aygula</i>	Gascoyne Coast	1	472	NA	472	472
Tuskfish & Wrasse	Ringtail Maori Wrasse	<i>Oxycheilinus unifasciatus</i>	Statewide	4	306	11	280	333
Tuskfish & Wrasse	Ringtail Maori Wrasse	<i>Oxycheilinus unifasciatus</i>	Gascoyne Coast	4	306	11	280	333
Tuskfish & Wrasse	Senator Wrasse	<i>Pictilabrus laticlavus</i>	Statewide	3	280	15	250	302
Tuskfish & Wrasse	Senator Wrasse	<i>Pictilabrus laticlavus</i>	West Coast	2	276	26	250	302
Tuskfish & Wrasse	Senator Wrasse	<i>Pictilabrus laticlavus</i>	South Coast	1	287	NA	287	287
Tuskfish & Wrasse	Southern Maori Wrasse	<i>Ophthalmolepis lineolatus</i>	Statewide	83	288	3	204	365
Tuskfish & Wrasse	Southern Maori Wrasse	<i>Ophthalmolepis lineolatus</i>	West Coast	65	288	4	204	365
Tuskfish & Wrasse	Southern Maori Wrasse	<i>Ophthalmolepis lineolatus</i>	South Coast	18	290	7	233	330
Tuskfish & Wrasse	Tripletail Maori Wrasse	<i>Cheilinus trilobatus</i>	Statewide	1	335	NA	335	335
Tuskfish & Wrasse	Tripletail Maori Wrasse	<i>Cheilinus trilobatus</i>	Gascoyne Coast	1	335	NA	335	335
Tuskfish & Wrasse	Tuskfishes	<i>Choerodon</i> spp.	Statewide	20	496	23	300	746
Tuskfish & Wrasse	Tuskfishes	<i>Choerodon</i> spp.	North Coast	19	507	22	320	746
Tuskfish & Wrasse	Tuskfishes	<i>Choerodon</i> spp.	Gascoyne Coast	1	300	NA	300	300
Tuskfish & Wrasse	Western Blue Groper	<i>Achoerodus gouldii</i>	Statewide	32	669	22	463	976
Tuskfish & Wrasse	Western Blue Groper	<i>Achoerodus gouldii</i>	West Coast	11	735	44	551	976
Tuskfish & Wrasse	Western Blue Groper	<i>Achoerodus gouldii</i>	South Coast	21	634	21	463	830
Tuskfish & Wrasse	Western King Wrasse	<i>Coris auricularis</i>	Statewide	395	301	2	170	402
Tuskfish & Wrasse	Western King Wrasse	<i>Coris auricularis</i>	West Coast	350	300	2	170	402
Tuskfish & Wrasse	Western King Wrasse	<i>Coris auricularis</i>	South Coast	45	310	6	230	371
Tuskfish & Wrasse	Wrasses	Labridae	Statewide	12	296	20	225	435
Tuskfish & Wrasse	Wrasses	Labridae	Gascoyne Coast	3	364	37	310	435
Tuskfish & Wrasse	Wrasses	Labridae	West Coast	8	259	12	225	338
Tuskfish & Wrasse	Wrasses	Labridae	South Coast	1	393	NA	393	393
Whiting	Blue Weed Whiting	<i>Haletta semifasciata</i>	Statewide	2	310	19	291	329

Reporting Group	Common Name	Scientific Name	Bioregion	n	Av L	se	Min	Max
Whiting	Blue Weed Whiting	<i>Haletta semifasciata</i>	South Coast	2	310	19	291	329
Whiting	King George Whiting	<i>Sillaginodes punctata</i>	Statewide	2699	337	1	207	595
Whiting	King George Whiting	<i>Sillaginodes punctata</i>	West Coast	444	397	4	207	595
Whiting	King George Whiting	<i>Sillaginodes punctata</i>	South Coast	2255	325	1	212	542
Whiting	Stout Whiting	<i>Sillago robusta</i>	Statewide	6	238	24	173	315
Whiting	Stout Whiting	<i>Sillago robusta</i>	West Coast	6	238	24	173	315
Whiting	Western Trumpeter Whiting	<i>Sillago berrus</i>	Statewide	10	195	10	152	253
Whiting	Western Trumpeter Whiting	<i>Sillago berrus</i>	West Coast	10	195	10	152	253
Whiting	School Whiting	Sillaginidae	Statewide	3074	224	1	114	385
Whiting	School Whiting	Sillaginidae	North Coast	1	320	NA	320	320
Whiting	School Whiting	Sillaginidae	Gascoyne Coast	6	295	4	278	307
Whiting	School Whiting	Sillaginidae	West Coast	2503	222	1	114	385
Whiting	School Whiting	Sillaginidae	South Coast	564	230	1	129	366
Wirrah	Leopard Wirrah	<i>Acanthistius pardalotus</i>	Statewide	1	393	NA	393	393
Wirrah	Leopard Wirrah	<i>Acanthistius pardalotus</i>	West Coast	1	393	NA	393	393
Wirrah	Western Wirrah	<i>Acanthistius serratus</i>	Statewide	12	360	11	292	435
Wirrah	Western Wirrah	<i>Acanthistius serratus</i>	West Coast	9	347	9	292	374
Wirrah	Western Wirrah	<i>Acanthistius serratus</i>	South Coast	3	400	22	358	435
Southern Blue Devil	Southern Blue Devil	<i>Paraplesiops meleagris</i>	Statewide	18	302	6	261	342
Southern Blue Devil	Southern Blue Devil	<i>Paraplesiops meleagris</i>	West Coast	1	280	NA	280	280
Southern Blue Devil	Southern Blue Devil	<i>Paraplesiops meleagris</i>	South Coast	17	304	6	261	342
Small Baitfish	Silverbelly	<i>Parequula melbournensis</i>	Statewide	1	146	NA	146	146
Small Baitfish	Silverbelly	<i>Parequula melbournensis</i>	South Coast	1	146	NA	146	146

Appendix 4. State-wide and Bioregion weight parameters for fish species across years; derived from Boat Ramp Surveys. Note: SW = state-wide. Species with <10 measurements highlighted in bold to indicate small sample size.

n is the number of weight measurements; Av W is the average weight (measured in grams); se is standard error; Min is the minimum weight (measured in grams); Max is the maximum weight (measured in grams).

Reporting Group	Common Name	Scientific Name	Bioregion	n	Av W	se	Min	Max
Gastropod	Abalone	<i>Haliotis</i> spp.	Statewide	122	154	18	33	833
Gastropod	Abalone	<i>Haliotis</i> spp.	West Coast	66	200	30	33	833
Gastropod	Abalone	<i>Haliotis</i> spp.	South Coast	56	100	13	33	744
Cephalopods	Cuttlefish	<i>Sepia</i> spp.	Statewide	7	1535	371	749	3396
Cephalopods	Cuttlefish	<i>Sepia</i> spp.	West Coast	5	1444	494	749	3396
Cephalopods	Cuttlefish	<i>Sepia</i> spp.	South Coast	2	1763	613	1150	2376
Cephalopods	Octopuses	Octopodidae	Statewide	8	560	215	92	1540
Cephalopods	Octopuses	Octopodidae	West Coast	8	560	215	92	1540
Cephalopods	Squid	Order Teuthoidea	Statewide	83	426	32	70	1542
Cephalopods	Squid	Order Teuthoidea	Gascoyne Coast	20	643	75	227	1542
Cephalopods	Squid	Order Teuthoidea	West Coast	47	336	36	75	1120
Cephalopods	Squid	Order Teuthoidea	South Coast	16	419	59	70	790
Lobster	Painted Rock Lobster	<i>Panulirus versicolor</i>	Statewide	1	1681	NA	1681	1681
Lobster	Painted Rock Lobster	<i>Panulirus versicolor</i>	North Coast	1	1681	NA	1681	1681
Lobster	Southern Rock Lobster	<i>Jasus edwardsii</i>	Statewide	5	1928	708	501	4640
Lobster	Southern Rock Lobster	<i>Jasus edwardsii</i>	West Coast	3	1233	374	501	1734
Lobster	Southern Rock Lobster	<i>Jasus edwardsii</i>	South Coast	2	2970	1670	1300	4640
Lobster	Western Rock Lobster	<i>Panulirus cygnus</i>	Statewide	1577	636	10	310	3800
Lobster	Western Rock Lobster	<i>Panulirus cygnus</i>	Gascoyne Coast	17	1399	84	520	1920
Lobster	Western Rock Lobster	<i>Panulirus cygnus</i>	West Coast	1560	628	10	310	3800
Lobster	General Rock Lobster	<i>Panulirus</i> spp.	Statewide	3	1075	151	900	1375
Lobster	General Rock Lobster	<i>Panulirus</i> spp.	North Coast	3	1075	151	900	1375
Crab	Blue Swimmer Crab	<i>Portunus armatus</i>	Statewide	1363	240	2	119	732
Crab	Blue Swimmer Crab	<i>Portunus armatus</i>	North Coast	2	228	49	179	277
Crab	Blue Swimmer Crab	<i>Portunus armatus</i>	Gascoyne Coast	22	280	12	180	390

Reporting Group	Common Name	Scientific Name	Bioregion	n	Av W	se	Min	Max
Crab	Blue Swimmer Crab	<i>Portunus armatus</i>	West Coast	1254	233	1	119	650
Crab	Blue Swimmer Crab	<i>Portunus armatus</i>	South Coast	85	332	13	130	732
Crab	Swimming Crabs	Portunidae	Statewide	1	233	NA	233	233
Crab	Swimming Crabs	Portunidae	North Coast	1	233	NA	233	233
Crab	Mud Crab	<i>Scylla</i> spp.	Statewide	63	629	21	349	1360
Crab	Mud Crab	<i>Scylla</i> spp.	North Coast	61	618	20	349	1360
Crab	Mud Crab	<i>Scylla</i> spp.	Gascoyne Coast	2	944	125	819	1069
Sharks	Grey Carpetshark	<i>Chiloscyllium punctatum</i>	Statewide	1	1580	NA	1580	1580
Sharks	Grey Carpetshark	<i>Chiloscyllium punctatum</i>	Gascoyne Coast	1	1580	NA	1580	1580
Sharks	Gummy Shark	<i>Mustelus antarcticus</i>	Statewide	12	4179	557	2005	9650
Sharks	Gummy Shark	<i>Mustelus antarcticus</i>	North Coast	1	2005	NA	2005	2005
Sharks	Gummy Shark	<i>Mustelus antarcticus</i>	West Coast	9	3808	264	2440	5383
Sharks	Gummy Shark	<i>Mustelus antarcticus</i>	South Coast	2	6936	2714	4222	9650
Sharks	School Shark	<i>Galeorhinus galeus</i>	Statewide	1	3215	NA	3215	3215
Sharks	School Shark	<i>Galeorhinus galeus</i>	West Coast	1	3215	NA	3215	3215
Sharks	Whiskery Shark	<i>Furgaleus macki</i>	Statewide	2	3705	1385	2320	5090
Sharks	Whiskery Shark	<i>Furgaleus macki</i>	West Coast	2	3705	1385	2320	5090
Sharks	Whaler & Weasel Sharks	Carcharhinidae & Hemigaleidae	Statewide	11	5429	1577	617	18660
Sharks	Whaler & Weasel Sharks	Carcharhinidae & Hemigaleidae	Gascoyne Coast	4	3170	869	617	4417
Sharks	Whaler & Weasel Sharks	Carcharhinidae & Hemigaleidae	West Coast	7	6721	2353	1300	18660
Sharks	Wobbegong	Orectolobidae	Statewide	8	6760	1278	827	12200
Sharks	Wobbegong	Orectolobidae	West Coast	7	5983	1172	827	10956
Sharks	Wobbegong	Orectolobidae	South Coast	1	12200	NA	12200	12200
Rays	Stingarees	Urolophidae & Plesiobatidae	Statewide	5	481	25	383	527
Rays	Stingarees	Urolophidae & Plesiobatidae	West Coast	5	481	25	383	527
Barramundi	Barramundi	<i>Lates calcarifer</i>	Statewide	1	2440	NA	2440	2440
Barramundi	Barramundi	<i>Lates calcarifer</i>	North Coast	1	2440	NA	2440	2440
Bass Groper	Bass Groper	<i>Polyprion americanus</i>	Statewide	1	344	NA	344	344
Bass Groper	Bass Groper	<i>Polyprion americanus</i>	West Coast	1	344	NA	344	344
Beardfish	Beardfishes	Polymixiidae	Statewide	1	1267	NA	1267	1267

Reporting Group	Common Name	Scientific Name	Bioregion	n	Av W	se	Min	Max
Beardfish	Beardfishes	Polymixiidae	Gascoyne Coast	1	1267	NA	1267	1267
Bigeye	Lunartail Bigeye	<i>Priacanthus hamrur</i>	Statewide	1	672	NA	672	672
Bigeye	Lunartail Bigeye	<i>Priacanthus hamrur</i>	Gascoyne Coast	1	672	NA	672	672
Boarfish	Giant Boarfish	<i>Paristiopterus labiosus</i>	Statewide	1	4392	NA	4392	4392
Boarfish	Giant Boarfish	<i>Paristiopterus labiosus</i>	West Coast	1	4392	NA	4392	4392
Boarfish	Longsnout Boarfish	<i>Pentaceropsis recurvirostris</i>	Statewide	6	1293	198	946	2211
Boarfish	Longsnout Boarfish	<i>Pentaceropsis recurvirostris</i>	West Coast	2	1834	377	1457	2211
Boarfish	Longsnout Boarfish	<i>Pentaceropsis recurvirostris</i>	South Coast	4	1022	35	946	1113
Boarfish	Boarfishes	Pentacerotidae	Statewide	1	1340	NA	1340	1340
Boarfish	Boarfishes	Pentacerotidae	South Coast	1	1340	NA	1340	1340
Bonito	Leaping Bonito	<i>Cybiosarda elegans</i>	Statewide	17	854	42	369	1136
Bonito	Leaping Bonito	<i>Cybiosarda elegans</i>	Gascoyne Coast	1	369	NA	369	369
Bonito	Leaping Bonito	<i>Cybiosarda elegans</i>	West Coast	16	884	31	702	1136
Bonito	Oriental Bonito	<i>Sarda orientalis</i>	Statewide	163	2080	48	1244	5279
Bonito	Oriental Bonito	<i>Sarda orientalis</i>	Gascoyne Coast	3	3896	695	3085	5279
Bonito	Oriental Bonito	<i>Sarda orientalis</i>	West Coast	5	1638	106	1244	1874
Bonito	Oriental Bonito	<i>Sarda orientalis</i>	South Coast	155	2059	44	1266	5180
Bonito	Bonitos	<i>S. australis</i> & <i>C. elegans</i>	Statewide	5	3841	1064	966	6071
Bonito	Bonitos	<i>S. australis</i> & <i>C. elegans</i>	West Coast	5	3841	1064	966	6071
Boxfish	Western Smooth Boxfish	<i>Anoplocapros amygdaloides</i>	Statewide	1	535	NA	535	535
Boxfish	Western Smooth Boxfish	<i>Anoplocapros amygdaloides</i>	West Coast	1	535	NA	535	535
Bream	Black Bream	<i>Acanthopagrus butcheri</i>	Statewide	51	298	13	203	631
Bream	Black Bream	<i>Acanthopagrus butcheri</i>	West Coast	2	489	25	464	514
Bream	Black Bream	<i>Acanthopagrus butcheri</i>	South Coast	49	290	12	203	631
Bream	Frypan Bream	<i>Argyrops spinifer</i>	Statewide	30	683	34	255	1114
Bream	Frypan Bream	<i>Argyrops spinifer</i>	North Coast	3	453	115	255	655
Bream	Frypan Bream	<i>Argyrops spinifer</i>	Gascoyne Coast	27	708	32	412	1114
Bream	Northwest Black Bream	<i>Acanthopagrus palmaris</i>	Statewide	8	436	53	300	750
Bream	Northwest Black Bream	<i>Acanthopagrus palmaris</i>	North Coast	8	436	53	300	750
Bream	Pink Snapper	<i>Chrysophrys auratus</i>	Statewide	458	2591	74	100	11086

Reporting Group	Common Name	Scientific Name	Bioregion	n	Av W	se	Min	Max
Bream	Pink Snapper	<i>Chrysophrys auratus</i>	Gascoyne Coast	35	2328	119	880	4370
Bream	Pink Snapper	<i>Chrysophrys auratus</i>	West Coast	336	2473	79	100	8173
Bream	Pink Snapper	<i>Chrysophrys auratus</i>	South Coast	87	3154	228	152	11086
Bream	Tarwhine	<i>Rhabdosargus sarba</i>	Statewide	44	399	23	190	840
Bream	Tarwhine	<i>Rhabdosargus sarba</i>	West Coast	29	410	30	190	840
Bream	Tarwhine	<i>Rhabdosargus sarba</i>	South Coast	15	377	37	210	704
Bream	Western Yellowfin Bream	<i>Acanthopagrus morrisoni</i>	Statewide	29	523	29	234	930
Bream	Western Yellowfin Bream	<i>Acanthopagrus morrisoni</i>	North Coast	25	523	25	318	880
Bream	Western Yellowfin Bream	<i>Acanthopagrus morrisoni</i>	Gascoyne Coast	4	521	154	234	930
Bream	Breams	Sparidae	Statewide	3	3576	2007	567	7380
Bream	Breams	Sparidae	North Coast	2	5080	2300	2780	7380
Bream	Breams	Sparidae	Gascoyne Coast	1	567	NA	567	567
Catfish	Estuary Cobbler	<i>Cnidoglanis macrocephalus</i>	Statewide	1	236	NA	236	236
Catfish	Estuary Cobbler	<i>Cnidoglanis macrocephalus</i>	West Coast	1	236	NA	236	236
Catfish	Giant Sea Catfish	<i>Netuma thalassina</i>	Statewide	6	1004	358	597	2792
Catfish	Giant Sea Catfish	<i>Netuma thalassina</i>	Gascoyne Coast	6	1004	358	597	2792
Catfish	Catfishes	<i>Arius</i> spp.	Statewide	2	2700	300	2400	3000
Catfish	Catfishes	<i>Arius</i> spp.	West Coast	2	2700	300	2400	3000
Catfish	Forktail Catfishes	Ariidae	Statewide	4	4480	934	1860	5840
Catfish	Forktail Catfishes	Ariidae	North Coast	4	4480	934	1860	5840
Cobia	Cobia	<i>Rachycentron canadum</i>	Statewide	54	7827	438	2300	18561
Cobia	Cobia	<i>Rachycentron canadum</i>	North Coast	7	5362	634	2908	7160
Cobia	Cobia	<i>Rachycentron canadum</i>	Gascoyne Coast	36	7907	558	2300	18561
Cobia	Cobia	<i>Rachycentron canadum</i>	West Coast	11	9135	837	3318	14000
Cod	Banded Grouper	<i>Epinephelus amblycephalus</i>	Statewide	3	2641	689	1491	3872
Cod	Banded Grouper	<i>Epinephelus amblycephalus</i>	Gascoyne Coast	3	2641	689	1491	3872
Cod	Barramundi Cod	<i>Chromileptes altivelis</i>	Statewide	2	891	150	741	1041
Cod	Barramundi Cod	<i>Chromileptes altivelis</i>	Gascoyne Coast	2	891	150	741	1041
Cod	Birdwire Rockcod	<i>Epinephelus merra</i>	Statewide	4	673	159	400	1050
Cod	Birdwire Rockcod	<i>Epinephelus merra</i>	North Coast	2	410	10	400	420

Reporting Group	Common Name	Scientific Name	Bioregion	n	Av W	se	Min	Max
Cod	Birdwire Rockcod	<i>Epinephelus merra</i>	Gascoyne Coast	2	935	115	820	1050
Cod	Blackspotted Rockcod	<i>Epinephelus malabaricus</i>	Statewide	48	1948	199	704	6536
Cod	Blackspotted Rockcod	<i>Epinephelus malabaricus</i>	North Coast	40	1620	171	704	6536
Cod	Blackspotted Rockcod	<i>Epinephelus malabaricus</i>	Gascoyne Coast	7	3987	455	1742	5320
Cod	Blackspotted Rockcod	<i>Epinephelus malabaricus</i>	West Coast	1	759	NA	759	759
Cod	Blacktip Rockcod	<i>Epinephelus fasciatus</i>	Statewide	2	296	131	165	426
Cod	Blacktip Rockcod	<i>Epinephelus fasciatus</i>	Gascoyne Coast	2	296	131	165	426
Cod	Breaksea Cod	<i>Epinephelides armatus</i>	Statewide	864	972	15	201	2694
Cod	Breaksea Cod	<i>Epinephelides armatus</i>	West Coast	513	936	18	201	2285
Cod	Breaksea Cod	<i>Epinephelides armatus</i>	South Coast	351	1024	26	363	2694
Cod	Camouflage Grouper	<i>Epinephelus polyphkadion</i>	Statewide	7	3097	614	1080	5537
Cod	Camouflage Grouper	<i>Epinephelus polyphkadion</i>	North Coast	1	1080	NA	1080	1080
Cod	Camouflage Grouper	<i>Epinephelus polyphkadion</i>	Gascoyne Coast	6	3433	607	1190	5537
Cod	Chinaman Rockcod	<i>Epinephelus rivulatus</i>	Statewide	475	438	7	57	1249
Cod	Chinaman Rockcod	<i>Epinephelus rivulatus</i>	North Coast	1	300	NA	300	300
Cod	Chinaman Rockcod	<i>Epinephelus rivulatus</i>	Gascoyne Coast	459	437	6	103	819
Cod	Chinaman Rockcod	<i>Epinephelus rivulatus</i>	West Coast	15	449	78	57	1249
Cod	Comet Grouper	<i>Epinephelus morrhua</i>	Statewide	2	1357	287	1070	1643
Cod	Comet Grouper	<i>Epinephelus morrhua</i>	Gascoyne Coast	2	1357	287	1070	1643
Cod	Convict Grouper	<i>Epinephelus septemfasciatus</i>	Statewide	1	5300	NA	5300	5300
Cod	Convict Grouper	<i>Epinephelus septemfasciatus</i>	West Coast	1	5300	NA	5300	5300
Cod	Coral Rockcod	<i>Cephalopholis miniata</i>	Statewide	8	853	102	441	1215
Cod	Coral Rockcod	<i>Cephalopholis miniata</i>	North Coast	1	485	NA	485	485
Cod	Coral Rockcod	<i>Cephalopholis miniata</i>	Gascoyne Coast	7	905	101	441	1215
Cod	Duskytail Grouper	<i>Epinephelus bleekeri</i>	Statewide	4	818	389	290	1951
Cod	Duskytail Grouper	<i>Epinephelus bleekeri</i>	North Coast	3	440	130	290	700
Cod	Duskytail Grouper	<i>Epinephelus bleekeri</i>	West Coast	1	1951	NA	1951	1951
Cod	Eightbar Grouper	<i>Epinephelus octofasciatus</i>	Statewide	16	7332	1848	950	22548
Cod	Eightbar Grouper	<i>Epinephelus octofasciatus</i>	Gascoyne Coast	11	9733	2362	1256	22548
Cod	Eightbar Grouper	<i>Epinephelus octofasciatus</i>	West Coast	2	1088	138	950	1225

Reporting Group	Common Name	Scientific Name	Bioregion	n	Av W	se	Min	Max
Cod	Eightbar Grouper	<i>Epinephelus octofasciatus</i>	South Coast	3	2689	66	2609	2821
Cod	Flowery Rockcod	<i>Epinephelus fuscoguttatus</i>	Statewide	1	13444	NA	13444	13444
Cod	Flowery Rockcod	<i>Epinephelus fuscoguttatus</i>	Gascoyne Coast	1	13444	NA	13444	13444
Cod	Frostback Rockcod	<i>Epinephelus bilobatus</i>	Statewide	14	1806	264	621	4580
Cod	Frostback Rockcod	<i>Epinephelus bilobatus</i>	Gascoyne Coast	14	1806	264	621	4580
Cod	Goldspotted Rockcod	<i>Epinephelus coioides</i>	Statewide	92	2929	343	330	15290
Cod	Goldspotted Rockcod	<i>Epinephelus coioides</i>	North Coast	57	2416	329	565	15000
Cod	Goldspotted Rockcod	<i>Epinephelus coioides</i>	Gascoyne Coast	27	2760	631	330	13700
Cod	Goldspotted Rockcod	<i>Epinephelus coioides</i>	West Coast	8	7151	1893	980	15290
Cod	Greasy Rockcod	<i>Epinephelus tauvina</i>	Statewide	15	1416	121	765	2201
Cod	Greasy Rockcod	<i>Epinephelus tauvina</i>	Gascoyne Coast	15	1416	121	765	2201
Cod	Harlequin Fish	<i>Othos dentex</i>	Statewide	130	1424	51	379	3107
Cod	Harlequin Fish	<i>Othos dentex</i>	West Coast	53	1282	59	505	2610
Cod	Harlequin Fish	<i>Othos dentex</i>	South Coast	77	1521	75	379	3107
Cod	Leopard Rockcod	<i>Cephalopholis leopardus</i>	Statewide	2	12772	5135	7637	17907
Cod	Leopard Rockcod	<i>Cephalopholis leopardus</i>	North Coast	2	12772	5135	7637	17907
Cod	Orange Basslet	<i>Pseudanthias squamipinnis</i>	Statewide	1	501	NA	501	501
Cod	Orange Basslet	<i>Pseudanthias squamipinnis</i>	Gascoyne Coast	1	501	NA	501	501
Cod	Radiant Rockcod	<i>Epinephelus radiatus</i>	Statewide	2	769	344	425	1112
Cod	Radiant Rockcod	<i>Epinephelus radiatus</i>	Gascoyne Coast	2	769	344	425	1112
Cod	Rankin Cod	<i>Epinephelus multinotatus</i>	Statewide	129	3419	183	481	10237
Cod	Rankin Cod	<i>Epinephelus multinotatus</i>	North Coast	37	2936	204	910	5580
Cod	Rankin Cod	<i>Epinephelus multinotatus</i>	Gascoyne Coast	92	3614	241	481	10237
Cod	Striped Grouper	<i>Epinephelus latifasciatus</i>	Statewide	1	2941	NA	2941	2941
Cod	Striped Grouper	<i>Epinephelus latifasciatus</i>	Gascoyne Coast	1	2941	NA	2941	2941
Cod	Tomato Rockcod	<i>Cephalopholis sonnerati</i>	Statewide	33	1277	112	516	3240
Cod	Tomato Rockcod	<i>Cephalopholis sonnerati</i>	North Coast	2	1030	235	795	1265
Cod	Tomato Rockcod	<i>Cephalopholis sonnerati</i>	Gascoyne Coast	31	1293	118	516	3240
Cod	Wirenet Rockcod	<i>Epinephelus hexagonatus</i>	Statewide	1	1830	NA	1830	1830
Cod	Wirenet Rockcod	<i>Epinephelus hexagonatus</i>	Gascoyne Coast	1	1830	NA	1830	1830

Reporting Group	Common Name	Scientific Name	Bioregion	n	Av W	se	Min	Max
Cod	Yellowspotted Rockcod	<i>Epinephelus areolatus</i>	Statewide	67	747	42	194	2410
Cod	Yellowspotted Rockcod	<i>Epinephelus areolatus</i>	North Coast	6	1094	279	570	2410
Cod	Yellowspotted Rockcod	<i>Epinephelus areolatus</i>	Gascoyne Coast	61	712	35	194	1775
Cod	Temperate Bass & Rockcod	Percichthyidae & Serranidae	Statewide	22	3903	1072	177	21890
Cod	Temperate Bass & Rockcod	Percichthyidae & Serranidae	North Coast	20	4214	1158	177	21890
Cod	Temperate Bass & Rockcod	Percichthyidae & Serranidae	Gascoyne Coast	2	793	350	443	1142
Coral Trout	Barcheek Coral Trout	<i>Plectropomus maculatus</i>	Statewide	129	2347	108	865	6800
Coral Trout	Barcheek Coral Trout	<i>Plectropomus maculatus</i>	North Coast	81	1914	87	865	4200
Coral Trout	Barcheek Coral Trout	<i>Plectropomus maculatus</i>	Gascoyne Coast	45	3105	227	1012	6800
Coral Trout	Barcheek Coral Trout	<i>Plectropomus maculatus</i>	West Coast	3	2673	396	2150	3450
Coral Trout	Bluespotted Coral Trout	<i>Plectropomus laevis</i>	Statewide	1	4097	NA	4097	4097
Coral Trout	Bluespotted Coral Trout	<i>Plectropomus laevis</i>	Gascoyne Coast	1	4097	NA	4097	4097
Coral Trout	Common Coral Trout	<i>Plectropomus leopardus</i>	Statewide	29	2058	162	1186	5286
Coral Trout	Common Coral Trout	<i>Plectropomus leopardus</i>	Gascoyne Coast	2	3169	849	2320	4018
Coral Trout	Common Coral Trout	<i>Plectropomus leopardus</i>	West Coast	27	1976	156	1186	5286
Coral Trout	Passionfruit Coral Trout	<i>Plectropomus areolatus</i>	Statewide	1	485	NA	485	485
Coral Trout	Passionfruit Coral Trout	<i>Plectropomus areolatus</i>	Gascoyne Coast	1	485	NA	485	485
Coral Trout	Yellowedge Coronation	<i>Variola louti</i>	Statewide	23	1890	236	326	4580
Coral Trout	Yellowedge Coronation	<i>Variola louti</i>	Gascoyne Coast	23	1890	236	326	4580
Coral Trout	Coral Trout	<i>Plectropomus</i> spp. & <i>Variola</i> spp.	Statewide	1	1650	NA	1650	1650
Coral Trout	Coral Trout	<i>Plectropomus</i> spp. & <i>Variola</i> spp.	West Coast	1	1650	NA	1650	1650
Damselfish	Western Gregory	<i>Stegastes obreptus</i>	Statewide	1	492	NA	492	492
Damselfish	Western Gregory	<i>Stegastes obreptus</i>	West Coast	1	492	NA	492	492
Damselfish	Western Scalyfin	<i>Parma occidentalis</i>	Statewide	1	459	NA	459	459
Damselfish	Western Scalyfin	<i>Parma occidentalis</i>	West Coast	1	459	NA	459	459
Dart	Smallspotted Dart	<i>Trachinotus baillonii</i>	Statewide	1	445	NA	445	445
Dart	Smallspotted Dart	<i>Trachinotus baillonii</i>	North Coast	1	445	NA	445	445
Dory	John Dory	<i>Zeus faber</i>	Statewide	1	2010	NA	2010	2010
Dory	John Dory	<i>Zeus faber</i>	South Coast	1	2010	NA	2010	2010
Dottyback	Lined Dottyback	<i>Labracinus lineatus</i>	Statewide	5	65	5	55	81

Reporting Group	Common Name	Scientific Name	Bioregion	n	Av W	se	Min	Max
Dottyback	Lined Dottyback	<i>Labracinus lineatus</i>	West Coast	5	65	5	55	81
Drummer	Brassy Drummer	<i>Kyphosus vaigiensis</i>	Statewide	1	2582	NA	2582	2582
Drummer	Brassy Drummer	<i>Kyphosus vaigiensis</i>	Gascoyne Coast	1	2582	NA	2582	2582
Drummer	Silver Drummer	<i>Kyphosus sydneyanus</i>	Statewide	1	4012	NA	4012	4012
Drummer	Silver Drummer	<i>Kyphosus sydneyanus</i>	West Coast	1	4012	NA	4012	4012
Drummer	Western Buffalo Bream	<i>Kyphosus cornelii</i>	Statewide	2	915	52	863	967
Drummer	Western Buffalo Bream	<i>Kyphosus cornelii</i>	West Coast	2	915	52	863	967
Drummer	Western Rock Blackfish	<i>Girella tephraeops</i>	Statewide	13	1583	166	445	2959
Drummer	Western Rock Blackfish	<i>Girella tephraeops</i>	West Coast	4	1454	59	1301	1569
Drummer	Western Rock Blackfish	<i>Girella tephraeops</i>	South Coast	9	1641	241	445	2959
Drummer	Zebrafish	<i>Girella zebra</i>	Statewide	2	739	261	478	1000
Drummer	Zebrafish	<i>Girella zebra</i>	South Coast	2	739	261	478	1000
Emperor	Bluespotted Emperor	<i>Lethrinus sp.</i>	Statewide	13	507	43	215	810
Emperor	Bluespotted Emperor	<i>Lethrinus sp.</i>	North Coast	11	489	49	215	810
Emperor	Bluespotted Emperor	<i>Lethrinus sp.</i>	Gascoyne Coast	2	608	1	607	609
Emperor	Drab Emperor	<i>Lethrinus ravus</i>	Statewide	2	744	182	562	925
Emperor	Drab Emperor	<i>Lethrinus ravus</i>	Gascoyne Coast	2	744	182	562	925
Emperor	Grass Emperor	<i>Lethrinus laticaudis</i>	Statewide	421	1224	27	375	3088
Emperor	Grass Emperor	<i>Lethrinus laticaudis</i>	North Coast	213	1582	34	450	3088
Emperor	Grass Emperor	<i>Lethrinus laticaudis</i>	Gascoyne Coast	207	855	23	375	2110
Emperor	Grass Emperor	<i>Lethrinus laticaudis</i>	West Coast	1	1210	NA	1210	1210
Emperor	Longnose Emperor	<i>Lethrinus olivaceus</i>	Statewide	9	3798	747	1283	7250
Emperor	Longnose Emperor	<i>Lethrinus olivaceus</i>	North Coast	2	2920	1580	1340	4500
Emperor	Longnose Emperor	<i>Lethrinus olivaceus</i>	Gascoyne Coast	7	4049	889	1283	7250
Emperor	Redspot Emperor	<i>Lethrinus lentjan</i>	Statewide	23	690	106	312	2680
Emperor	Redspot Emperor	<i>Lethrinus lentjan</i>	Gascoyne Coast	23	690	106	312	2680
Emperor	Redthroat Emperor	<i>Lethrinus miniatus</i>	Statewide	198	919	32	350	2540
Emperor	Redthroat Emperor	<i>Lethrinus miniatus</i>	North Coast	2	688	98	590	785
Emperor	Redthroat Emperor	<i>Lethrinus miniatus</i>	Gascoyne Coast	126	922	37	354	2360
Emperor	Redthroat Emperor	<i>Lethrinus miniatus</i>	West Coast	70	920	59	350	2540

Reporting Group	Common Name	Scientific Name	Bioregion	n	Av W	se	Min	Max
Emperor	Robinson's Seabream	<i>Gymnocranius grandoculis</i>	Statewide	85	1638	87	379	4601
Emperor	Robinson's Seabream	<i>Gymnocranius grandoculis</i>	Gascoyne Coast	85	1638	87	379	4601
Emperor	Spangled Emperor	<i>Lethrinus nebulosus</i>	Statewide	385	1994	44	398	5746
Emperor	Spangled Emperor	<i>Lethrinus nebulosus</i>	North Coast	17	1546	172	785	3195
Emperor	Spangled Emperor	<i>Lethrinus nebulosus</i>	Gascoyne Coast	355	2007	45	398	5746
Emperor	Spangled Emperor	<i>Lethrinus nebulosus</i>	West Coast	13	2207	403	925	5450
Emperor	Spotcheek Emperor	<i>Lethrinus rubrioperculatus</i>	Statewide	27	515	21	300	773
Emperor	Spotcheek Emperor	<i>Lethrinus rubrioperculatus</i>	Gascoyne Coast	27	515	21	300	773
Emperor	Yellowtail Emperor	<i>Lethrinus atkinsoni</i>	Statewide	79	537	20	311	1243
Emperor	Yellowtail Emperor	<i>Lethrinus atkinsoni</i>	North Coast	5	726	18	680	785
Emperor	Yellowtail Emperor	<i>Lethrinus atkinsoni</i>	Gascoyne Coast	74	525	20	311	1243
Emperor	Emperors	Lethrinidae	Statewide	8	1498	178	765	2320
Emperor	Emperors	Lethrinidae	North Coast	8	1498	178	765	2320
Flathead	Bigtooth Flathead	<i>Platycephalus chauliodous</i>	Statewide	2	643	195	448	837
Flathead	Bigtooth Flathead	<i>Platycephalus chauliodous</i>	West Coast	1	837	NA	837	837
Flathead	Bigtooth Flathead	<i>Platycephalus chauliodous</i>	South Coast	1	448	NA	448	448
Flathead	Fringe-Eye Flathead	<i>Cymbacephalus nematophthalmus</i>	Statewide	3	1040	247	645	1495
Flathead	Fringe-Eye Flathead	<i>Cymbacephalus nematophthalmus</i>	North Coast	1	645	NA	645	645
Flathead	Fringe-Eye Flathead	<i>Cymbacephalus nematophthalmus</i>	Gascoyne Coast	1	980	NA	980	980
Flathead	Fringe-Eye Flathead	<i>Cymbacephalus nematophthalmus</i>	West Coast	1	1495	NA	1495	1495
Flathead	Longhead Flathead	<i>Leviprora inops</i>	Statewide	3	546	163	377	872
Flathead	Longhead Flathead	<i>Leviprora inops</i>	West Coast	3	546	163	377	872
Flathead	Longspine Flathead	<i>Platycephalus longispinis</i>	Statewide	10	118	25	37	230
Flathead	Longspine Flathead	<i>Platycephalus longispinis</i>	West Coast	10	118	25	37	230
Flathead	Northern Sand Flathead	<i>Platycephalus endrachtensis</i>	Statewide	7	167	60	35	494
Flathead	Northern Sand Flathead	<i>Platycephalus endrachtensis</i>	Gascoyne Coast	1	494	NA	494	494
Flathead	Northern Sand Flathead	<i>Platycephalus endrachtensis</i>	West Coast	6	113	29	35	228
Flathead	Rock Flathead	<i>Platycephalus laevigatus</i>	Statewide	1	429	NA	429	429
Flathead	Rock Flathead	<i>Platycephalus laevigatus</i>	South Coast	1	429	NA	429	429
Flathead	Sthn Bluespotted Flathead	<i>Platycephalus speculator</i>	Statewide	183	575	25	141	1873

Reporting Group	Common Name	Scientific Name	Bioregion	n	Av W	se	Min	Max
Flathead	Sthn Bluespotted Flathead	<i>Platycephalus speculator</i>	West Coast	96	676	34	160	1671
Flathead	Sthn Bluespotted Flathead	<i>Platycephalus speculator</i>	South Coast	87	464	33	141	1873
Flathead	Yellowtail Flathead	<i>Platycephalus westraliae</i>	Statewide	12	461	120	143	1609
Flathead	Yellowtail Flathead	<i>Platycephalus westraliae</i>	North Coast	1	760	NA	760	760
Flathead	Yellowtail Flathead	<i>Platycephalus westraliae</i>	Gascoyne Coast	5	352	57	270	579
Flathead	Yellowtail Flathead	<i>Platycephalus westraliae</i>	West Coast	6	503	237	143	1609
Flathead	Flatheads	Platycephalidae	Statewide	13	761	132	180	1806
Flathead	Flatheads	Platycephalidae	North Coast	1	180	NA	180	180
Flathead	Flatheads	Platycephalidae	West Coast	1	843	NA	843	843
Flathead	Flatheads	Platycephalidae	South Coast	11	806	146	314	1806
Flounder	Largeetooth Flounder	<i>Pseudorhombus arsius</i>	Statewide	1	537	NA	537	537
Flounder	Largeetooth Flounder	<i>Pseudorhombus arsius</i>	West Coast	1	537	NA	537	537
Flounder	Smalltooth Flounder	<i>Pseudorhombus jenynsii</i>	Statewide	18	426	38	167	690
Flounder	Smalltooth Flounder	<i>Pseudorhombus jenynsii</i>	West Coast	12	434	51	167	690
Flounder	Smalltooth Flounder	<i>Pseudorhombus jenynsii</i>	South Coast	6	409	53	243	574
Flutemouth	Flutemouths	Fistulariidae	Statewide	1	255	NA	255	255
Flutemouth	Flutemouths	Fistulariidae	North Coast	1	255	NA	255	255
Fusilier	False Fusilier	<i>Paracaesio xanthura</i>	Statewide	2	2662	1207	1455	3868
Fusilier	False Fusilier	<i>Paracaesio xanthura</i>	Gascoyne Coast	2	2662	1207	1455	3868
Fusilier	Yellowtail Fusilier	<i>Caesio cuning</i>	Statewide	3	700	53	606	791
Fusilier	Yellowtail Fusilier	<i>Caesio cuning</i>	Gascoyne Coast	3	700	53	606	791
Garfish	Garfishes	Hemiramphidae	Statewide	163	105	3	42	267
Garfish	Garfishes	Hemiramphidae	Gascoyne Coast	4	51	2	46	54
Garfish	Garfishes	Hemiramphidae	West Coast	131	112	4	42	267
Garfish	Garfishes	Hemiramphidae	South Coast	28	84	5	49	165
Goatfish	Blacksaddle Goatfish	<i>Parupeneus spilurus</i>	Statewide	14	862	65	360	1267
Goatfish	Blacksaddle Goatfish	<i>Parupeneus spilurus</i>	West Coast	14	862	65	360	1267
Goatfish	Bluespotted Goatfish	<i>Upeneichthys vlamingii</i>	Statewide	29	351	58	68	1079
Goatfish	Bluespotted Goatfish	<i>Upeneichthys vlamingii</i>	West Coast	16	494	91	68	1079
Goatfish	Bluespotted Goatfish	<i>Upeneichthys vlamingii</i>	South Coast	13	174	11	134	280

Reporting Group	Common Name	Scientific Name	Bioregion	n	Av W	se	Min	Max
Goatfish	Rosy Goatfish	<i>Parupeneus chrysopleuron</i>	Statewide	2	257	95	162	352
Goatfish	Rosy Goatfish	<i>Parupeneus chrysopleuron</i>	West Coast	2	257	95	162	352
Goatfish	Yellowspot Goatfish	<i>Parupeneus indicus</i>	Statewide	1	188	NA	188	188
Goatfish	Yellowspot Goatfish	<i>Parupeneus indicus</i>	Gascoyne Coast	1	188	NA	188	188
Goatfish	Goatfishes	Mullidae	Statewide	4	289	90	186	559
Goatfish	Goatfishes	Mullidae	Gascoyne Coast	1	559	NA	559	559
Goatfish	Goatfishes	Mullidae	South Coast	3	199	9	186	216
Grunter	Sea Trumpeter	<i>Pelsartia humeralis</i>	Statewide	8	310	38	166	486
Grunter	Sea Trumpeter	<i>Pelsartia humeralis</i>	West Coast	4	244	34	166	310
Grunter	Sea Trumpeter	<i>Pelsartia humeralis</i>	South Coast	4	377	52	236	486
Grunter	Western Striped Grunter	<i>Pelates octolineatus</i>	Statewide	82	118	4	34	210
Grunter	Western Striped Grunter	<i>Pelates octolineatus</i>	West Coast	47	120	5	52	210
Grunter	Western Striped Grunter	<i>Pelates octolineatus</i>	South Coast	35	114	7	34	199
Grunter Bream	Goldspotted Sweetlips	<i>Plectorhinchus flavomaculatus</i>	Statewide	36	1533	85	822	2487
Grunter Bream	Goldspotted Sweetlips	<i>Plectorhinchus flavomaculatus</i>	West Coast	36	1533	85	822	2487
Grunter Bream	Lined Javelinfinh	<i>Hapalogenys dampieriensis</i>	Statewide	1	1446	NA	1446	1446
Grunter Bream	Lined Javelinfinh	<i>Hapalogenys dampieriensis</i>	Gascoyne Coast	1	1446	NA	1446	1446
Grunter Bream	Manylines Sweetlips	<i>Plectorhinchus multivittatus</i>	Statewide	5	919	115	623	1252
Grunter Bream	Manylines Sweetlips	<i>Plectorhinchus multivittatus</i>	North Coast	3	906	104	700	1030
Grunter Bream	Manylines Sweetlips	<i>Plectorhinchus multivittatus</i>	Gascoyne Coast	2	938	315	623	1252
Grunter Bream	Painted Sweetlips	<i>Diagramma labiosum</i>	Statewide	63	2251	142	685	5636
Grunter Bream	Painted Sweetlips	<i>Diagramma labiosum</i>	North Coast	18	2044	208	780	3905
Grunter Bream	Painted Sweetlips	<i>Diagramma labiosum</i>	Gascoyne Coast	38	2068	164	685	4621
Grunter Bream	Painted Sweetlips	<i>Diagramma labiosum</i>	West Coast	7	3776	482	1568	5636
Grunter Bream	Grunter Brems	Haemulidae	Statewide	8	3280	1068	1679	10650
Grunter Bream	Grunter Brems	Haemulidae	North Coast	7	3505	1206	1679	10650
Grunter Bream	Grunter Brems	Haemulidae	West Coast	1	1706	NA	1706	1706
Gurnard	Bighead Gurnard Perch	<i>Neosebastes pandus</i>	Statewide	22	761	29	511	1010
Gurnard	Bighead Gurnard Perch	<i>Neosebastes pandus</i>	West Coast	20	769	31	511	1010
Gurnard	Bighead Gurnard Perch	<i>Neosebastes pandus</i>	South Coast	2	682	34	648	715

Reporting Group	Common Name	Scientific Name	Bioregion	n	Av W	se	Min	Max
Gurnard	Blackspotted Gurnard Perch	<i>Neosebastes nigropunctatus</i>	Statewide	1	387	NA	387	387
Gurnard	Blackspotted Gurnard Perch	<i>Neosebastes nigropunctatus</i>	West Coast	1	387	NA	387	387
Hapuku	Hapuku	<i>Polyprion oxygeneios</i>	Statewide	6	8000	1955	3424	16504
Hapuku	Hapuku	<i>Polyprion oxygeneios</i>	West Coast	4	9492	2628	4220	16504
Hapuku	Hapuku	<i>Polyprion oxygeneios</i>	South Coast	2	5015	1591	3424	6606
Herring	Dorab Wolf Herring	<i>Chirocentrus dorab</i>	Statewide	1	610	NA	610	610
Herring	Dorab Wolf Herring	<i>Chirocentrus dorab</i>	North Coast	1	610	NA	610	610
Herring	Hawaiian Giant Herring	<i>Elops hawaiiensis</i>	Statewide	1	3290	NA	3290	3290
Herring	Hawaiian Giant Herring	<i>Elops hawaiiensis</i>	Gascoyne Coast	1	3290	NA	3290	3290
Herring	Sandy Sprat	<i>Hyperlophus vittatus</i>	Statewide	25	45	2	34	84
Herring	Sandy Sprat	<i>Hyperlophus vittatus</i>	West Coast	25	45	2	34	84
Herring	Scaly Mackerel	<i>Sardinella lemuru</i>	Statewide	2	51	3	48	53
Herring	Scaly Mackerel	<i>Sardinella lemuru</i>	West Coast	2	51	3	48	53
Herring	Maray	<i>Etrumeus teres</i>	Statewide	1	49	NA	49	49
Herring	Maray	<i>Etrumeus teres</i>	West Coast	1	49	NA	49	49
Javelinfinch	Barred Javelin	<i>Pomadasys kaakan</i>	Statewide	2	575	175	400	749
Javelinfinch	Barred Javelin	<i>Pomadasys kaakan</i>	North Coast	1	400	NA	400	400
Javelinfinch	Barred Javelin	<i>Pomadasys kaakan</i>	Gascoyne Coast	1	749	NA	749	749
Javelinfinch	Javelinfinches	<i>Pomadasys spp.</i>	Statewide	2	2010	1640	370	3650
Javelinfinch	Javelinfinches	<i>Pomadasys spp.</i>	North Coast	2	2010	1640	370	3650
Jawfish	Blotched Jawfish	<i>Opistognathus latitabundus</i>	Statewide	1	1302	NA	1302	1302
Jawfish	Blotched Jawfish	<i>Opistognathus latitabundus</i>	North Coast	1	1302	NA	1302	1302
Jewfish	Black Jewfish	<i>Protonibea diacanthus</i>	Statewide	16	8080	1067	3314	19230
Jewfish	Black Jewfish	<i>Protonibea diacanthus</i>	North Coast	14	8445	1191	3314	19230
Jewfish	Black Jewfish	<i>Protonibea diacanthus</i>	Gascoyne Coast	2	5526	214	5312	5740
Jewfish	Mulloway	<i>Argyrosomus hololepidotus</i>	Statewide	13	7561	1219	1100	18000
Jewfish	Mulloway	<i>Argyrosomus hololepidotus</i>	Gascoyne Coast	1	9600	NA	9600	9600
Jewfish	Mulloway	<i>Argyrosomus hololepidotus</i>	West Coast	11	7963	1294	2467	18000
Jewfish	Mulloway	<i>Argyrosomus hololepidotus</i>	South Coast	1	1100	NA	1100	1100
Knifejaw	Knifejaw	<i>Oplegnathus woodwardi</i>	Statewide	1	2250	NA	2250	2250

Reporting Group	Common Name	Scientific Name	Bioregion	n	Av W	se	Min	Max
Knifejaw	Knifejaw	<i>Oplegnathus woodwardi</i>	South Coast	1	2250	NA	2250	2250
Leatherjacket	Bluelined Leatherjacket	<i>Meuschenia galii</i>	Statewide	12	396	32	235	621
Leatherjacket	Bluelined Leatherjacket	<i>Meuschenia galii</i>	West Coast	11	398	35	235	621
Leatherjacket	Bluelined Leatherjacket	<i>Meuschenia galii</i>	South Coast	1	375	NA	375	375
Leatherjacket	Horseshoe Leatherjacket	<i>Meuschenia hippocrepis</i>	Statewide	21	812	72	310	1650
Leatherjacket	Horseshoe Leatherjacket	<i>Meuschenia hippocrepis</i>	West Coast	17	774	87	310	1650
Leatherjacket	Horseshoe Leatherjacket	<i>Meuschenia hippocrepis</i>	South Coast	4	971	14	944	1010
Leatherjacket	Ocean Jacket	<i>Nelusetta ayraud</i>	Statewide	6	1153	428	223	2557
Leatherjacket	Ocean Jacket	<i>Nelusetta ayraud</i>	South Coast	6	1153	428	223	2557
Leatherjacket	Rough Leatherjacket	<i>Scobinichthys granulatus</i>	Statewide	7	290	18	212	349
Leatherjacket	Rough Leatherjacket	<i>Scobinichthys granulatus</i>	West Coast	3	317	25	268	349
Leatherjacket	Rough Leatherjacket	<i>Scobinichthys granulatus</i>	South Coast	4	269	21	212	316
Leatherjacket	Spinytail Leatherjacket	<i>Acanthaluteres brownii</i>	Statewide	5	502	101	246	862
Leatherjacket	Spinytail Leatherjacket	<i>Acanthaluteres brownii</i>	South Coast	5	502	101	246	862
Leatherjacket	Toothbrush Leatherjacket	<i>Acanthaluteres vittiger</i>	Statewide	1	207	NA	207	207
Leatherjacket	Toothbrush Leatherjacket	<i>Acanthaluteres vittiger</i>	South Coast	1	207	NA	207	207
Leatherjacket	Yellowstriped Leatherjacket	<i>Meuschenia flavolineata</i>	Statewide	4	479	92	323	690
Leatherjacket	Yellowstriped Leatherjacket	<i>Meuschenia flavolineata</i>	West Coast	4	479	92	323	690
Leatherjacket	Sixspine Leatherjacket	<i>Meuschenia freycineti</i>	Statewide	26	629	101	182	1804
Leatherjacket	Sixspine Leatherjacket	<i>Meuschenia freycineti</i>	West Coast	8	950	251	230	1804
Leatherjacket	Sixspine Leatherjacket	<i>Meuschenia freycineti</i>	South Coast	18	486	79	182	1690
Leatherjacket	Bluespotted Leatherjacket	<i>Eubalichthys caeruleoguttatus</i>	Statewide	2	644	27	617	670
Leatherjacket	Bluespotted Leatherjacket	<i>Eubalichthys caeruleoguttatus</i>	West Coast	2	644	27	617	670
Leatherjacket	Triggerfish & Leatherjackets	Balistidae & Monacanthidae	Statewide	18	500	81	260	1415
Leatherjacket	Triggerfish & Leatherjackets	Balistidae & Monacanthidae	Gascoyne Coast	1	473	NA	473	473
Leatherjacket	Triggerfish & Leatherjackets	Balistidae & Monacanthidae	West Coast	5	387	42	310	531
Leatherjacket	Triggerfish & Leatherjackets	Balistidae & Monacanthidae	South Coast	12	550	119	260	1415
Lizardfish & Grinners	Largescale Saury	<i>Saurida undosquamis</i>	Statewide	2	435	210	225	645
Lizardfish & Grinners	Largescale Saury	<i>Saurida undosquamis</i>	North Coast	2	435	210	225	645
Lizardfish & Grinners	Lizardfishes	Bathysauridae & Synodontidae	Statewide	1	248	NA	248	248

Reporting Group	Common Name	Scientific Name	Bioregion	n	Av W	se	Min	Max
Lizardfish & Grinners	Lizardfishes	Bathysauridae & Synodontidae	Gascoyne Coast	1	248	NA	248	248
Longtom	Stout Longtom	<i>Tylosurus gavialoides</i>	Statewide	1	627	NA	627	627
Longtom	Stout Longtom	<i>Tylosurus gavialoides</i>	Gascoyne Coast	1	627	NA	627	627
Mackerel	Bigeye Tuna	<i>Thunnus obesus</i>	Statewide	1	9023	NA	9023	9023
Mackerel	Bigeye Tuna	<i>Thunnus obesus</i>	Gascoyne Coast	1	9023	NA	9023	9023
Mackerel	Blue Mackerel	<i>Scomber australasicus</i>	Statewide	60	154	12	57	469
Mackerel	Blue Mackerel	<i>Scomber australasicus</i>	West Coast	11	302	38	108	469
Mackerel	Blue Mackerel	<i>Scomber australasicus</i>	South Coast	49	121	5	57	226
Mackerel	Grey Mackerel	<i>Scomberomorus semifasciatus</i>	Statewide	10	6809	920	4340	12062
Mackerel	Grey Mackerel	<i>Scomberomorus semifasciatus</i>	North Coast	9	6766	1027	4340	12062
Mackerel	Grey Mackerel	<i>Scomberomorus semifasciatus</i>	Gascoyne Coast	1	7200	NA	7200	7200
Mackerel	Mackerel Tuna	<i>Euthynnus affinis</i>	Statewide	38	3156	282	883	9950
Mackerel	Mackerel Tuna	<i>Euthynnus affinis</i>	North Coast	5	5533	1156	3118	9950
Mackerel	Mackerel Tuna	<i>Euthynnus affinis</i>	Gascoyne Coast	27	3015	243	883	6301
Mackerel	Mackerel Tuna	<i>Euthynnus affinis</i>	West Coast	6	1810	361	1322	3607
Mackerel	School Mackerel	<i>Scomberomorus queenslandicus</i>	Statewide	83	1949	128	433	7699
Mackerel	School Mackerel	<i>Scomberomorus queenslandicus</i>	North Coast	33	1759	193	433	6068
Mackerel	School Mackerel	<i>Scomberomorus queenslandicus</i>	Gascoyne Coast	44	1938	179	950	7699
Mackerel	School Mackerel	<i>Scomberomorus queenslandicus</i>	West Coast	6	3073	324	1750	4000
Mackerel	Shark Mackerel	<i>Grammatorcynus bicarinatus</i>	Statewide	9	4788	486	2110	7071
Mackerel	Shark Mackerel	<i>Grammatorcynus bicarinatus</i>	North Coast	1	4377	NA	4377	4377
Mackerel	Shark Mackerel	<i>Grammatorcynus bicarinatus</i>	Gascoyne Coast	6	4626	682	2110	7071
Mackerel	Shark Mackerel	<i>Grammatorcynus bicarinatus</i>	West Coast	2	5481	946	4535	6427
Mackerel	Spanish Mackerel	<i>Scomberomorus commerson</i>	Statewide	218	8406	242	1560	25660
Mackerel	Spanish Mackerel	<i>Scomberomorus commerson</i>	North Coast	41	8064	691	1560	25660
Mackerel	Spanish Mackerel	<i>Scomberomorus commerson</i>	Gascoyne Coast	150	8480	283	3513	23845
Mackerel	Spanish Mackerel	<i>Scomberomorus commerson</i>	West Coast	27	8510	536	3916	17600
Mackerel	Spotted Mackerel	<i>Scomberomorus munroi</i>	Statewide	9	1968	267	802	2762
Mackerel	Spotted Mackerel	<i>Scomberomorus munroi</i>	North Coast	1	1155	NA	1155	1155
Mackerel	Spotted Mackerel	<i>Scomberomorus munroi</i>	Gascoyne Coast	3	1216	315	802	1834

Reporting Group	Common Name	Scientific Name	Bioregion	n	Av W	se	Min	Max
Mackerel	Spotted Mackerel	<i>Scomberomorus munroi</i>	West Coast	5	2582	121	2111	2762
Mackerel	Wahoo	<i>Acanthocybium solandri</i>	Statewide	6	13983	2212	8031	21561
Mackerel	Wahoo	<i>Acanthocybium solandri</i>	Gascoyne Coast	6	13983	2212	8031	21561
Mackerel	Mackerels	Scombridae	Statewide	10	6859	2320	1250	25000
Mackerel	Mackerels	Scombridae	North Coast	10	6859	2320	1250	25000
Mahi Mahi	Mahi Mahi	<i>Coryphaena hippurus</i>	Statewide	6	3492	380	1867	4672
Mahi Mahi	Mahi Mahi	<i>Coryphaena hippurus</i>	West Coast	6	3492	380	1867	4672
Moonfish & Batfish	Batfishes	Ephippidae & Drepaneidae	Statewide	1	1491	NA	1491	1491
Moonfish & Batfish	Batfishes	Ephippidae & Drepaneidae	North Coast	1	1491	NA	1491	1491
Morwong	Blue Morwong	<i>Nemadactylus valenciennesi</i>	Statewide	294	2816	83	724	7779
Morwong	Blue Morwong	<i>Nemadactylus valenciennesi</i>	West Coast	50	2836	208	980	6860
Morwong	Blue Morwong	<i>Nemadactylus valenciennesi</i>	South Coast	244	2812	90	724	7779
Morwong	Dusky Morwong	<i>Dactylophora nigricans</i>	Statewide	2	3145	1625	1520	4769
Morwong	Dusky Morwong	<i>Dactylophora nigricans</i>	West Coast	1	4769	NA	4769	4769
Morwong	Dusky Morwong	<i>Dactylophora nigricans</i>	South Coast	1	1520	NA	1520	1520
Morwong	Jackass Morwong	<i>Nemadactylus macropterus</i>	Statewide	1	1182	NA	1182	1182
Morwong	Jackass Morwong	<i>Nemadactylus macropterus</i>	South Coast	1	1182	NA	1182	1182
Morwong	Magpie Perch	<i>Cheilodactylus nigripes</i>	Statewide	1	1245	NA	1245	1245
Morwong	Magpie Perch	<i>Cheilodactylus nigripes</i>	South Coast	1	1245	NA	1245	1245
Morwong	Redlip Morwong	<i>Cheilodactylus rubrolabiatus</i>	Statewide	4	1449	264	1005	2214
Morwong	Redlip Morwong	<i>Cheilodactylus rubrolabiatus</i>	West Coast	4	1449	264	1005	2214
Morwong	Morwongs	Cheilodactylidae	Statewide	1	720	NA	720	720
Morwong	Morwongs	Cheilodactylidae	West Coast	1	720	NA	720	720
Mullet	Bluetail Mullet	<i>Valamugil buchanani</i>	Statewide	1	285	NA	285	285
Mullet	Bluetail Mullet	<i>Valamugil buchanani</i>	North Coast	1	285	NA	285	285
Mullet	Yelloweye Mullet	<i>Aldrichetta forsteri</i>	Statewide	1	128	NA	128	128
Mullet	Yelloweye Mullet	<i>Aldrichetta forsteri</i>	South Coast	1	128	NA	128	128
Parrotfish	Blackvein Parrotfish	<i>Scarus rubroviolaceus</i>	Statewide	2	2050	453	1597	2503
Parrotfish	Blackvein Parrotfish	<i>Scarus rubroviolaceus</i>	Gascoyne Coast	2	2050	453	1597	2503
Parrotfish	Bluebarred Parrotfish	<i>Scarus ghobban</i>	Statewide	4	943	185	545	1420

Reporting Group	Common Name	Scientific Name	Bioregion	n	Av W	se	Min	Max
Parrotfish	Bluebarred Parrotfish	<i>Scarus ghobban</i>	North Coast	1	545	NA	545	545
Parrotfish	Bluebarred Parrotfish	<i>Scarus ghobban</i>	Gascoyne Coast	1	1420	NA	1420	1420
Parrotfish	Bluebarred Parrotfish	<i>Scarus ghobban</i>	West Coast	2	903	102	801	1005
Parrotfish	Surf Parrotfish	<i>Scarus rivulatus</i>	Statewide	1	5210	NA	5210	5210
Parrotfish	Surf Parrotfish	<i>Scarus rivulatus</i>	West Coast	1	5210	NA	5210	5210
Parrotfish	Parrotfishes	Scaridae	Statewide	9	1350	296	181	3092
Parrotfish	Parrotfishes	Scaridae	Gascoyne Coast	7	1682	261	847	3092
Parrotfish	Parrotfishes	Scaridae	West Coast	2	189	8	181	196
Pearl Perch	Northern Pearl Perch	<i>Glaucosoma buergeri</i>	Statewide	34	1623	99	500	3065
Pearl Perch	Northern Pearl Perch	<i>Glaucosoma buergeri</i>	North Coast	1	515	NA	515	515
Pearl Perch	Northern Pearl Perch	<i>Glaucosoma buergeri</i>	Gascoyne Coast	33	1656	96	500	3065
Pearl Perch	West Australian Dhufish	<i>Glaucosoma hebraicum</i>	Statewide	794	4861	101	1070	19963
Pearl Perch	West Australian Dhufish	<i>Glaucosoma hebraicum</i>	West Coast	777	4838	100	1070	19963
Pearl Perch	West Australian Dhufish	<i>Glaucosoma hebraicum</i>	South Coast	17	5949	1119	2201	17300
Perch	Barber Perch	<i>Caesioperca rasor</i>	Statewide	3	289	15	266	316
Perch	Barber Perch	<i>Caesioperca rasor</i>	South Coast	3	289	15	266	316
Perch	Bigeye Ocean Perch	<i>Helicolenus barathri</i>	Statewide	1	597	NA	597	597
Perch	Bigeye Ocean Perch	<i>Helicolenus barathri</i>	South Coast	1	597	NA	597	597
Pigfish	Saddleback Pigfish	<i>Bodianus bilunulatus</i>	Statewide	14	893	83	465	1482
Pigfish	Saddleback Pigfish	<i>Bodianus bilunulatus</i>	Gascoyne Coast	13	919	85	465	1482
Pigfish	Saddleback Pigfish	<i>Bodianus bilunulatus</i>	West Coast	1	550	NA	550	550
Pigfish	Western Pigfish	<i>Bodianus vulpinus</i>	Statewide	9	1041	148	497	1783
Pigfish	Western Pigfish	<i>Bodianus vulpinus</i>	Gascoyne Coast	3	878	201	497	1180
Pigfish	Western Pigfish	<i>Bodianus vulpinus</i>	West Coast	4	821	94	620	1018
Pigfish	Western Pigfish	<i>Bodianus vulpinus</i>	South Coast	2	1727	57	1670	1783
Pigfish	Pigfishes	<i>Bodianus</i> spp.	Statewide	4	648	54	537	795
Pigfish	Pigfishes	<i>Bodianus</i> spp.	Gascoyne Coast	4	648	54	537	795
Pike	Great Barracuda	<i>Sphyræna barracuda</i>	Statewide	7	4784	2069	690	14654
Pike	Great Barracuda	<i>Sphyræna barracuda</i>	Gascoyne Coast	7	4784	2069	690	14654
Pike	Longfin Pike	<i>Dinolestes lewini</i>	Statewide	1	267	NA	267	267

Reporting Group	Common Name	Scientific Name	Bioregion	n	Av W	se	Min	Max
Pike	Longfin Pike	<i>Dinolestes lewini</i>	West Coast	1	267	NA	267	267
Pike	Snook	<i>Sphyraena novaehollandiae</i>	Statewide	82	610	46	152	2729
Pike	Snook	<i>Sphyraena novaehollandiae</i>	West Coast	26	649	74	152	1765
Pike	Snook	<i>Sphyraena novaehollandiae</i>	South Coast	56	592	59	162	2729
Pike	Striped Barracuda	<i>Sphyraena pinguis</i>	Statewide	29	446	56	99	1187
Pike	Striped Barracuda	<i>Sphyraena pinguis</i>	West Coast	28	456	57	99	1187
Pike	Striped Barracuda	<i>Sphyraena pinguis</i>	South Coast	1	179	NA	179	179
Pike	Pickhandle Barracuda	<i>Sphyraena jello</i>	Statewide	2	2689	2461	228	5150
Pike	Pickhandle Barracuda	<i>Sphyraena jello</i>	Gascoyne Coast	2	2689	2461	228	5150
Pike	Yellowtail Barracuda	<i>Sphyraena obtusata</i>	Statewide	5	593	179	222	1216
Pike	Yellowtail Barracuda	<i>Sphyraena obtusata</i>	West Coast	4	438	114	222	689
Pike	Yellowtail Barracuda	<i>Sphyraena obtusata</i>	South Coast	1	1216	NA	1216	1216
Pike	Pikes	Sphyraenidae	Statewide	6	2076	1731	238	10730
Pike	Pikes	Sphyraenidae	North Coast	2	5557	5174	383	10730
Pike	Pikes	Sphyraenidae	Gascoyne Coast	1	530	NA	530	530
Pike	Pikes	Sphyraenidae	West Coast	3	272	20	238	307
Queenfish	Needleskin Queenfish	<i>Scomberoides tol</i>	Statewide	2	933	3	930	935
Queenfish	Needleskin Queenfish	<i>Scomberoides tol</i>	North Coast	1	935	NA	935	935
Queenfish	Needleskin Queenfish	<i>Scomberoides tol</i>	Gascoyne Coast	1	930	NA	930	930
Queenfish	Queenfish	<i>Scomberoides</i> spp.	Statewide	8	2108	415	390	3579
Queenfish	Queenfish	<i>Scomberoides</i> spp.	North Coast	7	1898	413	390	3340
Queenfish	Queenfish	<i>Scomberoides</i> spp.	West Coast	1	3579	NA	3579	3579
Redfish	Bight Redfish	<i>Centroberyx gerrardi</i>	Statewide	481	1223	30	406	5794
Redfish	Bight Redfish	<i>Centroberyx gerrardi</i>	West Coast	31	1203	74	561	2555
Redfish	Bight Redfish	<i>Centroberyx gerrardi</i>	South Coast	450	1224	32	406	5794
Redfish	Swallowtail	<i>Centroberyx lineatus</i>	Statewide	179	381	9	200	1050
Redfish	Swallowtail	<i>Centroberyx lineatus</i>	West Coast	10	396	29	252	525
Redfish	Swallowtail	<i>Centroberyx lineatus</i>	South Coast	169	380	10	200	1050
Redfish	Yelloweye Redfish	<i>Centroberyx australis</i>	Statewide	1	1035	NA	1035	1035
Redfish	Yelloweye Redfish	<i>Centroberyx australis</i>	South Coast	1	1035	NA	1035	1035

Reporting Group	Common Name	Scientific Name	Bioregion	n	Av W	se	Min	Max
Remora	Remora	<i>Remora remora</i>	Statewide	4	1450	402	738	2445
Remora	Remora	<i>Remora remora</i>	North Coast	2	798	60	738	858
Remora	Remora	<i>Remora remora</i>	Gascoyne Coast	2	2103	343	1760	2445
Salmon & Herring	Australian Herring	<i>Arripis georgianus</i>	Statewide	2838	130	1	27	321
Salmon & Herring	Australian Herring	<i>Arripis georgianus</i>	West Coast	1427	129	1	51	311
Salmon & Herring	Australian Herring	<i>Arripis georgianus</i>	South Coast	1411	130	1	27	321
Salmon & Herring	Beach Salmon	<i>Leptobrama muelleri</i>	Statewide	5	1458	387	210	2549
Salmon & Herring	Beach Salmon	<i>Leptobrama muelleri</i>	North Coast	5	1458	387	210	2549
Salmon & Herring	Western Australian Salmon	<i>Arripis truttaceus</i>	Statewide	269	3344	105	84	6366
Salmon & Herring	Western Australian Salmon	<i>Arripis truttaceus</i>	West Coast	124	4530	54	2883	6366
Salmon & Herring	Western Australian Salmon	<i>Arripis truttaceus</i>	South Coast	145	2329	144	84	5840
Sand Bass	Sand Bass	<i>Psammoperca waigiensis</i>	Statewide	5	1251	548	484	3418
Sand Bass	Sand Bass	<i>Psammoperca waigiensis</i>	West Coast	5	1251	548	484	3418
Sergeant Baker	Sergeant Baker	<i>Latropiscis purpurissatus</i>	Statewide	60	736	43	163	1582
Sergeant Baker	Sergeant Baker	<i>Latropiscis purpurissatus</i>	West Coast	23	695	41	352	1062
Sergeant Baker	Sergeant Baker	<i>Latropiscis purpurissatus</i>	South Coast	37	761	65	163	1582
Snappers (King)	Goldband Snapper	<i>Pristipomoides multidentis</i>	Statewide	198	1974	68	528	6442
Snappers (King)	Goldband Snapper	<i>Pristipomoides multidentis</i>	North Coast	2	2420	320	2100	2740
Snappers (King)	Goldband Snapper	<i>Pristipomoides multidentis</i>	Gascoyne Coast	196	1969	69	528	6442
Snappers (King)	Rosy Snapper	<i>Pristipomoides filamentosus</i>	Statewide	13	1372	156	815	2495
Snappers (King)	Rosy Snapper	<i>Pristipomoides filamentosus</i>	Gascoyne Coast	13	1372	156	815	2495
Snappers (King)	Sharptooth Snapper	<i>Pristipomoides typus</i>	Statewide	91	1448	64	506	4153
Snappers (King)	Sharptooth Snapper	<i>Pristipomoides typus</i>	Gascoyne Coast	91	1448	64	506	4153
Snapper (Tropical)	Blackspot Snapper	<i>Lutjanus fulviflamma</i>	Statewide	10	280	37	204	590
Snapper (Tropical)	Blackspot Snapper	<i>Lutjanus fulviflamma</i>	North Coast	1	590	NA	590	590
Snapper (Tropical)	Blackspot Snapper	<i>Lutjanus fulviflamma</i>	Gascoyne Coast	9	245	14	204	336
Snapper (Tropical)	Bluestriped Snapper	<i>Lutjanus kasmira</i>	Statewide	2	581	23	558	603
Snapper (Tropical)	Bluestriped Snapper	<i>Lutjanus kasmira</i>	North Coast	2	581	23	558	603
Snapper (Tropical)	Brownstripe Snapper	<i>Lutjanus vitta</i>	Statewide	7	546	45	440	798
Snapper (Tropical)	Brownstripe Snapper	<i>Lutjanus vitta</i>	Gascoyne Coast	7	546	45	440	798

Reporting Group	Common Name	Scientific Name	Bioregion	n	Av W	se	Min	Max
Snapper (Tropical)	Chinamanfish	<i>Symphorus nematophorus</i>	Statewide	38	4455	413	740	11278
Snapper (Tropical)	Chinamanfish	<i>Symphorus nematophorus</i>	North Coast	27	3993	442	740	9388
Snapper (Tropical)	Chinamanfish	<i>Symphorus nematophorus</i>	Gascoyne Coast	11	5588	868	1592	11278
Snapper (Tropical)	Crimson Snapper	<i>Lutjanus erythropterus</i>	Statewide	13	2025	192	1020	2930
Snapper (Tropical)	Crimson Snapper	<i>Lutjanus erythropterus</i>	North Coast	13	2025	192	1020	2930
Snapper (Tropical)	Darktail Snapper	<i>Lutjanus lemniscatus</i>	Statewide	23	718	92	180	2000
Snapper (Tropical)	Darktail Snapper	<i>Lutjanus lemniscatus</i>	North Coast	3	338	82	180	455
Snapper (Tropical)	Darktail Snapper	<i>Lutjanus lemniscatus</i>	Gascoyne Coast	19	784	104	253	2000
Snapper (Tropical)	Darktail Snapper	<i>Lutjanus lemniscatus</i>	West Coast	1	597	NA	597	597
Snapper (Tropical)	Flame Snapper	<i>Etelis coruscans</i>	Statewide	2	2187	177	2010	2364
Snapper (Tropical)	Flame Snapper	<i>Etelis coruscans</i>	Gascoyne Coast	2	2187	177	2010	2364
Snappers (Tropical)	Golden Snapper	<i>Lutjanus johnii</i>	Statewide	16	761	38	540	1023
Snappers (Tropical)	Golden Snapper	<i>Lutjanus johnii</i>	North Coast	15	776	38	590	1023
Snappers (Tropical)	Golden Snapper	<i>Lutjanus johnii</i>	Gascoyne Coast	1	540	NA	540	540
Snappers (Tropical)	Green Jobfish	<i>Aprion virescens</i>	Statewide	6	3433	1156	870	8731
Snappers (Tropical)	Green Jobfish	<i>Aprion virescens</i>	Gascoyne Coast	6	3433	1156	870	8731
Snapper (Tropical)	Indonesian Snapper	<i>Lutjanus bitaeniatus</i>	Statewide	2	964	397	567	1361
Snapper (Tropical)	Indonesian Snapper	<i>Lutjanus bitaeniatus</i>	North Coast	2	964	397	567	1361
Snapper (Tropical)	Mangrove Jack	<i>Lutjanus argentimaculatus</i>	Statewide	73	772	38	335	2075
Snapper (Tropical)	Mangrove Jack	<i>Lutjanus argentimaculatus</i>	North Coast	67	719	29	335	1340
Snapper (Tropical)	Mangrove Jack	<i>Lutjanus argentimaculatus</i>	Gascoyne Coast	5	1279	263	653	2075
Snapper (Tropical)	Mangrove Jack	<i>Lutjanus argentimaculatus</i>	West Coast	1	1820	NA	1820	1820
Snapper (Tropical)	Moses' Snapper	<i>Lutjanus russellii</i>	Statewide	48	795	58	363	2732
Snapper (Tropical)	Moses' Snapper	<i>Lutjanus russellii</i>	North Coast	11	709	24	530	840
Snapper (Tropical)	Moses' Snapper	<i>Lutjanus russellii</i>	Gascoyne Coast	37	821	74	363	2732
Snapper (Tropical)	Paddletail	<i>Lutjanus gibbus</i>	Statewide	1	954	NA	954	954
Snapper (Tropical)	Paddletail	<i>Lutjanus gibbus</i>	Gascoyne Coast	1	954	NA	954	954
Snapper (Tropical)	Pale Ruby Snapper	<i>Etelis radiosus</i>	Statewide	2	331	73	258	403
Snapper (Tropical)	Pale Ruby Snapper	<i>Etelis radiosus</i>	North Coast	2	331	73	258	403
Snapper (Tropical)	Red Bass	<i>Lutjanus bohar</i>	Statewide	5	3943	1518	996	8871

Reporting Group	Common Name	Scientific Name	Bioregion	n	Av W	se	Min	Max
Snapper (Tropical)	Red Bass	<i>Lutjanus bohar</i>	Gascoyne Coast	5	3943	1518	996	8871
Snappers (Tropical)	Red Emperor	<i>Lutjanus sebae</i>	Statewide	178	3357	154	1064	11600
Snappers (Tropical)	Red Emperor	<i>Lutjanus sebae</i>	North Coast	40	2534	193	1150	5840
Snappers (Tropical)	Red Emperor	<i>Lutjanus sebae</i>	Gascoyne Coast	136	3557	183	1064	11600
Snappers (Tropical)	Red Emperor	<i>Lutjanus sebae</i>	West Coast	2	6215	3286	2929	9500
Snapper (Tropical)	Ruby Snapper	<i>Etelis carbunculus</i>	Statewide	73	6162	451	1357	19607
Snapper (Tropical)	Ruby Snapper	<i>Etelis carbunculus</i>	Gascoyne Coast	73	6162	451	1357	19607
Snapper (Tropical)	Saddletail Snapper	<i>Lutjanus malabaricus</i>	Statewide	80	1540	149	318	7853
Snapper (Tropical)	Saddletail Snapper	<i>Lutjanus malabaricus</i>	North Coast	56	1505	173	318	6240
Snapper (Tropical)	Saddletail Snapper	<i>Lutjanus malabaricus</i>	Gascoyne Coast	24	1623	295	741	7853
Snapper (Tropical)	Stripey Snapper	<i>Lutjanus carponotatus</i>	Statewide	132	592	15	170	1233
Snapper (Tropical)	Stripey Snapper	<i>Lutjanus carponotatus</i>	North Coast	63	581	18	170	1058
Snapper (Tropical)	Stripey Snapper	<i>Lutjanus carponotatus</i>	Gascoyne Coast	69	602	24	272	1233
Snapper (Tropical)	Tang's Snapper	<i>Lipocheilus carnolabrum</i>	Statewide	2	1701	328	1373	2029
Snapper (Tropical)	Tang's Snapper	<i>Lipocheilus carnolabrum</i>	Gascoyne Coast	2	1701	328	1373	2029
Snapper (Tropical)	Fusiliers & Snappers	Caesionidae & Lutjanidae	Statewide	18	1475	86	726	2240
Snapper (Tropical)	Fusiliers & Snappers	Caesionidae & Lutjanidae	North Coast	14	1515	107	726	2240
Snapper (Tropical)	Fusiliers & Snappers	Caesionidae & Lutjanidae	Gascoyne Coast	4	1334	86	1120	1485
Squirrelfish	Squirrelfishes	Holocentridae	Statewide	1	778	NA	778	778
Squirrelfish	Squirrelfishes	Holocentridae	Gascoyne Coast	1	778	NA	778	778
Stonefish	Western Red Scorpionfish	<i>Scorpaena sumptuosa</i>	Statewide	11	638	54	362	899
Stonefish	Western Red Scorpionfish	<i>Scorpaena sumptuosa</i>	West Coast	9	589	52	362	758
Stonefish	Western Red Scorpionfish	<i>Scorpaena sumptuosa</i>	South Coast	2	859	41	818	899
Striped Grunter	Eastern Striped Grunter	<i>Pelates sexlineatus</i>	Statewide	56	93	5	41	205
Striped Grunter	Eastern Striped Grunter	<i>Pelates sexlineatus</i>	West Coast	36	83	5	41	151
Striped Grunter	Eastern Striped Grunter	<i>Pelates sexlineatus</i>	South Coast	20	111	8	61	205
Striped Grunter	Striped Grunters	Terapontidae	Statewide	8	224	91	75	859
Striped Grunter	Striped Grunters	Terapontidae	North Coast	1	153	NA	153	153
Striped Grunter	Striped Grunters	Terapontidae	Gascoyne Coast	1	859	NA	859	859
Striped Grunter	Striped Grunters	Terapontidae	West Coast	2	172	23	149	194

Reporting Group	Common Name	Scientific Name	Bioregion	n	Av W	se	Min	Max
Striped Grunter	Striped Grunters	Terapontidae	South Coast	4	110	12	75	127
Sweep	Banded Sweep	<i>Scorpis georgiana</i>	Statewide	33	783	61	227	1600
Sweep	Banded Sweep	<i>Scorpis georgiana</i>	West Coast	26	772	70	227	1569
Sweep	Banded Sweep	<i>Scorpis georgiana</i>	South Coast	7	823	132	590	1600
Sweep	Footballer Sweep	<i>Neatypus obliquus</i>	Statewide	4	200	4	190	209
Sweep	Footballer Sweep	<i>Neatypus obliquus</i>	West Coast	4	200	4	190	209
Sweep	Moonlighter	<i>Tilodon sexfasciatus</i>	Statewide	15	899	56	595	1425
Sweep	Moonlighter	<i>Tilodon sexfasciatus</i>	West Coast	10	858	41	658	1054
Sweep	Moonlighter	<i>Tilodon sexfasciatus</i>	South Coast	5	980	152	595	1425
Sweep	Sea Sweep	<i>Scorpis aequipinnis</i>	Statewide	143	1331	33	408	2322
Sweep	Sea Sweep	<i>Scorpis aequipinnis</i>	West Coast	47	1310	50	408	2322
Sweep	Sea Sweep	<i>Scorpis aequipinnis</i>	South Coast	96	1340	43	444	2287
Sweep	Sweep	Scorpididae	Statewide	5	990	185	656	1614
Sweep	Sweep	Scorpididae	South Coast	5	990	185	656	1614
Tailor	Tailor	<i>Pomatomus saltatrix</i>	Statewide	106	671	36	232	2330
Tailor	Tailor	<i>Pomatomus saltatrix</i>	Gascoyne Coast	10	835	71	520	1290
Tailor	Tailor	<i>Pomatomus saltatrix</i>	West Coast	92	668	40	232	2330
Tailor	Tailor	<i>Pomatomus saltatrix</i>	South Coast	4	327	29	275	410
Threadfin	Blue Threadfin	<i>Eleutheronema tetradactylum</i>	Statewide	21	1403	272	382	5200
Threadfin	Blue Threadfin	<i>Eleutheronema tetradactylum</i>	North Coast	20	1454	281	450	5200
Threadfin	Blue Threadfin	<i>Eleutheronema tetradactylum</i>	Gascoyne Coast	1	382	NA	382	382
Threadfin	Threadfin Salmons	Polynemidae	Statewide	3	2223	966	1160	4152
Threadfin	Threadfin Salmons	Polynemidae	North Coast	3	2223	966	1160	4152
Threadfin Bream	Purple Threadfin Bream	<i>Pentapodus emeryii</i>	Statewide	2	359	101	258	460
Threadfin Bream	Purple Threadfin Bream	<i>Pentapodus emeryii</i>	Gascoyne Coast	2	359	101	258	460
Threadfin Bream	Rainbow Monocle Bream	<i>Scolopsis monogramma</i>	Statewide	4	495	71	355	660
Threadfin Bream	Rainbow Monocle Bream	<i>Scolopsis monogramma</i>	North Coast	2	378	23	355	400
Threadfin Bream	Rainbow Monocle Bream	<i>Scolopsis monogramma</i>	Gascoyne Coast	2	612	48	564	660
Threadfin Bream	Rosy Threadfin Bream	<i>Nemipterus furcosus</i>	Statewide	2	373	18	355	390
Threadfin Bream	Rosy Threadfin Bream	<i>Nemipterus furcosus</i>	North Coast	2	373	18	355	390

Reporting Group	Common Name	Scientific Name	Bioregion	n	Av W	se	Min	Max
Threadfin Bream	Western Butterfish	<i>Pentapodus vitta</i>	Statewide	199	180	5	56	460
Threadfin Bream	Western Butterfish	<i>Pentapodus vitta</i>	Gascoyne Coast	3	130	11	109	148
Threadfin Bream	Western Butterfish	<i>Pentapodus vitta</i>	West Coast	196	180	5	56	460
Tilefish	Australian Tilefish	<i>Branchiostegus australiensis</i>	Statewide	4	872	90	641	1080
Tilefish	Australian Tilefish	<i>Branchiostegus australiensis</i>	Gascoyne Coast	4	872	90	641	1080
Toadfish	Silver Toadfish	<i>Lagocephalus sceleratus</i>	Statewide	6	1056	470	30	2360
Toadfish	Silver Toadfish	<i>Lagocephalus sceleratus</i>	West Coast	6	1056	470	30	2360
Trevalla	Blue-Eye Trevalla	<i>Hyperoglyphe antarctica</i>	Statewide	2	2089	12	2077	2101
Trevalla	Blue-Eye Trevalla	<i>Hyperoglyphe antarctica</i>	West Coast	2	2089	12	2077	2101
Trevally	Amberjack	<i>Seriola dumerili</i>	Statewide	11	6273	1659	1608	18511
Trevally	Amberjack	<i>Seriola dumerili</i>	Gascoyne Coast	3	11843	5195	1608	18511
Trevally	Amberjack	<i>Seriola dumerili</i>	West Coast	7	4454	456	2700	6300
Trevally	Amberjack	<i>Seriola dumerili</i>	South Coast	1	2302	NA	2302	2302
Trevally	Bludger Trevally	<i>Carangoides gymnostethus</i>	Statewide	22	1703	85	580	2192
Trevally	Bludger Trevally	<i>Carangoides gymnostethus</i>	North Coast	2	1190	610	580	1800
Trevally	Bludger Trevally	<i>Carangoides gymnostethus</i>	Gascoyne Coast	20	1754	73	825	2192
Trevally	Blue Trevally	<i>Carangoides ferdau</i>	Statewide	10	1105	170	243	1810
Trevally	Blue Trevally	<i>Carangoides ferdau</i>	North Coast	6	1291	234	243	1810
Trevally	Blue Trevally	<i>Carangoides ferdau</i>	Gascoyne Coast	4	826	188	426	1292
Trevally	Bluespotted Trevally	<i>Caranx bucculentus</i>	Statewide	6	430	56	300	680
Trevally	Bluespotted Trevally	<i>Caranx bucculentus</i>	North Coast	6	430	56	300	680
Trevally	Brassy Trevally	<i>Caranx papuensis</i>	Statewide	2	2200	0	2200	2200
Trevally	Brassy Trevally	<i>Caranx papuensis</i>	North Coast	2	2200	0	2200	2200
Trevally	Common Dart	<i>Trachinotus botla</i>	Statewide	1	570	NA	570	570
Trevally	Common Dart	<i>Trachinotus botla</i>	North Coast	1	570	NA	570	570
Trevally	Fringefin Trevally	<i>Pantolabus radiatus</i>	Statewide	1	120	NA	120	120
Trevally	Fringefin Trevally	<i>Pantolabus radiatus</i>	North Coast	1	120	NA	120	120
Trevally	Giant Queenfish	<i>Scomberoides commersonianus</i>	Statewide	6	867	141	480	1240
Trevally	Giant Queenfish	<i>Scomberoides commersonianus</i>	North Coast	6	867	141	480	1240
Trevally	Giant Trevally	<i>Caranx ignobilis</i>	Statewide	14	1700	386	780	6010

Reporting Group	Common Name	Scientific Name	Bioregion	n	Av W	se	Min	Max
Trevally	Giant Trevally	<i>Caranx ignobilis</i>	North Coast	9	1196	125	780	1970
Trevally	Giant Trevally	<i>Caranx ignobilis</i>	Gascoyne Coast	4	1754	650	1000	3702
Trevally	Giant Trevally	<i>Caranx ignobilis</i>	West Coast	1	6010	NA	6010	6010
Trevally	Golden Trevally	<i>Gnathanodon speciosus</i>	Statewide	97	2246	203	180	8560
Trevally	Golden Trevally	<i>Gnathanodon speciosus</i>	North Coast	69	1793	214	180	8560
Trevally	Golden Trevally	<i>Gnathanodon speciosus</i>	Gascoyne Coast	28	3363	399	518	8555
Trevally	Longnose Trevally	<i>Carangoides chrysophrys</i>	Statewide	4	1923	65	1729	2007
Trevally	Longnose Trevally	<i>Carangoides chrysophrys</i>	Gascoyne Coast	4	1923	65	1729	2007
Trevally	Rainbow Runner	<i>Elagatis bipinnulata</i>	Statewide	1	303	NA	303	303
Trevally	Rainbow Runner	<i>Elagatis bipinnulata</i>	North Coast	1	303	NA	303	303
Trevally	Redtail Scad	<i>Decapterus kurroides</i>	Statewide	2	728	21	707	748
Trevally	Redtail Scad	<i>Decapterus kurroides</i>	Gascoyne Coast	2	728	21	707	748
Trevally	Samsonfish	<i>Seriola hippos</i>	Statewide	98	6588	475	1680	28406
Trevally	Samsonfish	<i>Seriola hippos</i>	West Coast	80	6065	534	1680	28406
Trevally	Samsonfish	<i>Seriola hippos</i>	South Coast	18	8915	859	4130	18850
Trevally	Silver Trevally	<i>Pseudocaranx georgianus</i>	Statewide	1302	517	10	77	6460
Trevally	Silver Trevally	<i>Pseudocaranx georgianus</i>	West Coast	898	526	7	86	2705
Trevally	Silver Trevally	<i>Pseudocaranx georgianus</i>	South Coast	404	495	27	77	6460
Trevally	Temperate Scad	<i>Decapterus muroadsi</i>	Statewide	1	37	NA	37	37
Trevally	Temperate Scad	<i>Decapterus muroadsi</i>	South Coast	1	37	NA	37	37
Trevally	Tille Trevally	<i>Caranx tille</i>	Statewide	3	3389	2056	1295	7500
Trevally	Tille Trevally	<i>Caranx tille</i>	North Coast	1	7500	NA	7500	7500
Trevally	Tille Trevally	<i>Caranx tille</i>	Gascoyne Coast	2	1333	38	1295	1371
Trevally	Turrum	<i>Carangoides fulvoguttatus</i>	Statewide	83	2097	181	372	7669
Trevally	Turrum	<i>Carangoides fulvoguttatus</i>	North Coast	22	2777	391	454	6550
Trevally	Turrum	<i>Carangoides fulvoguttatus</i>	Gascoyne Coast	61	1851	194	372	7669
Trevally	Yellowtail Kingfish	<i>Seriola lalandi</i>	Statewide	44	3155	317	569	10998
Trevally	Yellowtail Kingfish	<i>Seriola lalandi</i>	West Coast	30	2942	361	729	10998
Trevally	Yellowtail Kingfish	<i>Seriola lalandi</i>	South Coast	14	3610	631	569	10320
Trevally	Yellowtail Scad	<i>Trachurus novaezelandiae</i>	Statewide	116	71	2	25	124

Reporting Group	Common Name	Scientific Name	Bioregion	n	Av W	se	Min	Max
Trevally	Yellowtail Scad	<i>Trachurus novaezelandiae</i>	West Coast	47	78	3	25	124
Trevally	Yellowtail Scad	<i>Trachurus novaezelandiae</i>	South Coast	69	66	2	39	110
Trevally	Trevallies	Carangidae	Statewide	22	2283	417	354	8590
Trevally	Trevallies	Carangidae	North Coast	21	2357	430	354	8590
Trevally	Trevallies	Carangidae	South Coast	1	725	NA	725	725
Triggerfish	Black Triggerfish	<i>Melichthys niger</i>	Statewide	1	612	NA	612	612
Triggerfish	Black Triggerfish	<i>Melichthys niger</i>	Gascoyne Coast	1	612	NA	612	612
Triggerfish	Bridled Triggerfish	<i>Sufflamen fraenatum</i>	Statewide	7	539	41	362	688
Triggerfish	Bridled Triggerfish	<i>Sufflamen fraenatum</i>	Gascoyne Coast	7	539	41	362	688
Triggerfish	Titan Triggerfish	<i>Balistoides viridescens</i>	Statewide	2	1685	885	800	2570
Triggerfish	Titan Triggerfish	<i>Balistoides viridescens</i>	Gascoyne Coast	2	1685	885	800	2570
Triggerfish	Yellowspotted Triggerfish	<i>Pseudobalistes fuscus</i>	Statewide	1	2216	NA	2216	2216
Triggerfish	Yellowspotted Triggerfish	<i>Pseudobalistes fuscus</i>	Gascoyne Coast	1	2216	NA	2216	2216
Tripletail	Tripletail	<i>Lobotes surinamensis</i>	Statewide	2	3418	33	3385	3450
Tripletail	Tripletail	<i>Lobotes surinamensis</i>	North Coast	2	3418	33	3385	3450
Tuna	Longtail Tuna	<i>Thunnus tonggol</i>	Statewide	61	4965	237	1760	11030
Tuna	Longtail Tuna	<i>Thunnus tonggol</i>	North Coast	3	5270	341	4736	5905
Tuna	Longtail Tuna	<i>Thunnus tonggol</i>	Gascoyne Coast	55	5046	251	2036	11030
Tuna	Longtail Tuna	<i>Thunnus tonggol</i>	West Coast	3	3169	1120	1760	5381
Tuna	Skipjack Tuna	<i>Katsuwonus pelamis</i>	Statewide	59	3426	123	1890	5956
Tuna	Skipjack Tuna	<i>Katsuwonus pelamis</i>	Gascoyne Coast	38	2986	93	1890	4181
Tuna	Skipjack Tuna	<i>Katsuwonus pelamis</i>	West Coast	12	4818	187	4100	5956
Tuna	Skipjack Tuna	<i>Katsuwonus pelamis</i>	South Coast	9	3427	257	2450	4550
Tuna	Southern Bluefin Tuna	<i>Thunnus maccoyii</i>	Statewide	102	5045	238	545	9869
Tuna	Southern Bluefin Tuna	<i>Thunnus maccoyii</i>	West Coast	18	2418	283	545	4900
Tuna	Southern Bluefin Tuna	<i>Thunnus maccoyii</i>	South Coast	84	5608	241	1720	9869
Tuna	Yellowfin Tuna	<i>Thunnus albacares</i>	Statewide	29	7010	594	3021	16900
Tuna	Yellowfin Tuna	<i>Thunnus albacares</i>	North Coast	1	6865	NA	6865	6865
Tuna	Yellowfin Tuna	<i>Thunnus albacares</i>	Gascoyne Coast	15	8004	699	3021	13200
Tuna	Yellowfin Tuna	<i>Thunnus albacares</i>	West Coast	13	5874	988	3344	16900

Reporting Group	Common Name	Scientific Name	Bioregion	n	Av W	se	Min	Max
Tuskfish & Wrasse	Baldchin Groper	<i>Choerodon rubescens</i>	Statewide	649	2364	40	618	7860
Tuskfish & Wrasse	Baldchin Groper	<i>Choerodon rubescens</i>	Gascoyne Coast	13	2702	346	1230	6020
Tuskfish & Wrasse	Baldchin Groper	<i>Choerodon rubescens</i>	West Coast	636	2357	40	618	7860
Tuskfish & Wrasse	Blackspot Tuskfish	<i>Choerodon schoenleinii</i>	Statewide	83	2818	183	420	9200
Tuskfish & Wrasse	Blackspot Tuskfish	<i>Choerodon schoenleinii</i>	North Coast	35	2641	236	790	6125
Tuskfish & Wrasse	Blackspot Tuskfish	<i>Choerodon schoenleinii</i>	Gascoyne Coast	48	2948	265	420	9200
Tuskfish & Wrasse	Blue Tuskfish	<i>Choerodon cyanodus</i>	Statewide	5	412	58	290	620
Tuskfish & Wrasse	Blue Tuskfish	<i>Choerodon cyanodus</i>	North Coast	2	315	25	290	340
Tuskfish & Wrasse	Blue Tuskfish	<i>Choerodon cyanodus</i>	Gascoyne Coast	3	476	75	367	620
Tuskfish & Wrasse	Bluespotted Tuskfish	<i>Choerodon cauteroma</i>	Statewide	7	776	131	261	1220
Tuskfish & Wrasse	Bluespotted Tuskfish	<i>Choerodon cauteroma</i>	Gascoyne Coast	7	776	131	261	1220
Tuskfish & Wrasse	Brownspotted Wrasse	<i>Notolabrus parilus</i>	Statewide	342	436	10	47	1145
Tuskfish & Wrasse	Brownspotted Wrasse	<i>Notolabrus parilus</i>	West Coast	260	426	10	47	903
Tuskfish & Wrasse	Brownspotted Wrasse	<i>Notolabrus parilus</i>	South Coast	82	467	28	48	1145
Tuskfish & Wrasse	Crimson Cleaner Wrasse	<i>Suezichthys aylingi</i>	Statewide	1	99	NA	99	99
Tuskfish & Wrasse	Crimson Cleaner Wrasse	<i>Suezichthys aylingi</i>	South Coast	1	99	NA	99	99
Tuskfish & Wrasse	Elegant Wrasse	<i>Anampses elegans</i>	Statewide	1	191	NA	191	191
Tuskfish & Wrasse	Elegant Wrasse	<i>Anampses elegans</i>	South Coast	1	191	NA	191	191
Tuskfish & Wrasse	False Senator Wrasse	<i>Pictilabrus viridis</i>	Statewide	1	297	NA	297	297
Tuskfish & Wrasse	False Senator Wrasse	<i>Pictilabrus viridis</i>	West Coast	1	297	NA	297	297
Tuskfish & Wrasse	Foxfish	<i>Bodianus frenchii</i>	Statewide	119	836	23	308	1427
Tuskfish & Wrasse	Foxfish	<i>Bodianus frenchii</i>	West Coast	79	787	26	308	1386
Tuskfish & Wrasse	Foxfish	<i>Bodianus frenchii</i>	South Coast	40	931	41	432	1427
Tuskfish & Wrasse	Goldspot Pigfish	<i>Bodianus perditio</i>	Statewide	8	680	76	437	999
Tuskfish & Wrasse	Goldspot Pigfish	<i>Bodianus perditio</i>	Gascoyne Coast	7	634	70	437	965
Tuskfish & Wrasse	Goldspot Pigfish	<i>Bodianus perditio</i>	West Coast	1	999	NA	999	999
Tuskfish & Wrasse	Redblotched Wrasse	<i>Coris aygula</i>	Statewide	1	1301	NA	1301	1301
Tuskfish & Wrasse	Redblotched Wrasse	<i>Coris aygula</i>	Gascoyne Coast	1	1301	NA	1301	1301
Tuskfish & Wrasse	Ringtail Maori Wrasse	<i>Oxycheilinus unifasciatus</i>	Statewide	4	456	55	342	603
Tuskfish & Wrasse	Ringtail Maori Wrasse	<i>Oxycheilinus unifasciatus</i>	Gascoyne Coast	4	456	55	342	603

Reporting Group	Common Name	Scientific Name	Bioregion	n	Av W	se	Min	Max
Tuskfish & Wrasse	Senator Wrasse	<i>Pictilabrus laticlavus</i>	Statewide	3	340	54	251	438
Tuskfish & Wrasse	Senator Wrasse	<i>Pictilabrus laticlavus</i>	West Coast	2	345	94	251	438
Tuskfish & Wrasse	Senator Wrasse	<i>Pictilabrus laticlavus</i>	South Coast	1	330	NA	330	330
Tuskfish & Wrasse	Southern Maori Wrasse	<i>Ophthalmolepis lineolatus</i>	Statewide	83	256	8	80	425
Tuskfish & Wrasse	Southern Maori Wrasse	<i>Ophthalmolepis lineolatus</i>	West Coast	65	254	9	80	425
Tuskfish & Wrasse	Southern Maori Wrasse	<i>Ophthalmolepis lineolatus</i>	South Coast	18	262	17	120	388
Tuskfish & Wrasse	Tripletail Maori Wrasse	<i>Cheilinus trilobatus</i>	Statewide	1	542	NA	542	542
Tuskfish & Wrasse	Tripletail Maori Wrasse	<i>Cheilinus trilobatus</i>	Gascoyne Coast	1	542	NA	542	542
Tuskfish & Wrasse	Tuskfishes	<i>Choerodon</i> spp.	Statewide	20	3662	549	530	8380
Tuskfish & Wrasse	Tuskfishes	<i>Choerodon</i> spp.	North Coast	19	3824	553	530	8380
Tuskfish & Wrasse	Tuskfishes	<i>Choerodon</i> spp.	Gascoyne Coast	1	595	NA	595	595
Tuskfish & Wrasse	Western Blue Groper	<i>Achoerodus gouldii</i>	Statewide	32	6639	762	1928	20431
Tuskfish & Wrasse	Western Blue Groper	<i>Achoerodus gouldii</i>	West Coast	11	9090	1794	2813	20431
Tuskfish & Wrasse	Western Blue Groper	<i>Achoerodus gouldii</i>	South Coast	21	5355	538	1928	11326
Tuskfish & Wrasse	Western King Wrasse	<i>Coris auricularis</i>	Statewide	395	312	7	49	900
Tuskfish & Wrasse	Western King Wrasse	<i>Coris auricularis</i>	West Coast	350	308	7	49	900
Tuskfish & Wrasse	Western King Wrasse	<i>Coris auricularis</i>	South Coast	45	339	20	129	616
Tuskfish & Wrasse	Wrasses	Labridae	Statewide	12	430	95	177	1320
Tuskfish & Wrasse	Wrasses	Labridae	Gascoyne Coast	3	778	277	403	1320
Tuskfish & Wrasse	Wrasses	Labridae	West Coast	8	266	40	177	529
Tuskfish & Wrasse	Wrasses	Labridae	South Coast	1	700	NA	700	700
Whiting	Blue Weed Whiting	<i>Haletta semifasciata</i>	Statewide	2	249	33	216	281
Whiting	Blue Weed Whiting	<i>Haletta semifasciata</i>	South Coast	2	249	33	216	281
Whiting	King George Whiting	<i>Sillaginodes punctata</i>	Statewide	2677	238	3	50	1523
Whiting	King George Whiting	<i>Sillaginodes punctata</i>	West Coast	437	446	14	50	1523
Whiting	King George Whiting	<i>Sillaginodes punctata</i>	South Coast	2240	198	2	78	1046
Whiting	Stout Whiting	<i>Sillago robusta</i>	Statewide	6	132	36	43	254
Whiting	Stout Whiting	<i>Sillago robusta</i>	West Coast	6	132	36	43	254
Whiting	Western Trumpeter Whiting	<i>Sillago burrus</i>	Statewide	10	67	9	33	112
Whiting	Western Trumpeter Whiting	<i>Sillago burrus</i>	West Coast	10	67	9	33	112

Reporting Group	Common Name	Scientific Name	Bioregion	n	Av W	se	Min	Max
Whiting	School Whiting	Sillaginidae	Statewide	3408	95	1	11	405
Whiting	School Whiting	Sillaginidae	North Coast	1	320	NA	320	320
Whiting	School Whiting	Sillaginidae	Gascoyne Coast	6	192	6	170	210
Whiting	School Whiting	Sillaginidae	West Coast	2806	93	1	11	343
Whiting	School Whiting	Sillaginidae	South Coast	595	104	2	27	405
Wirrah	Leopard Wirrah	<i>Acanthistius pardalotus</i>	Statewide	1	1262	NA	1262	1262
Wirrah	Leopard Wirrah	<i>Acanthistius pardalotus</i>	West Coast	1	1262	NA	1262	1262
Wirrah	Western Wirrah	<i>Acanthistius serratus</i>	Statewide	12	845	79	490	1478
Wirrah	Western Wirrah	<i>Acanthistius serratus</i>	West Coast	9	719	42	490	854
Wirrah	Western Wirrah	<i>Acanthistius serratus</i>	South Coast	3	1223	139	1000	1478
Southern Blue Devil	Southern Blue Devil	<i>Paraplesiops meleagris</i>	Statewide	18	455	24	277	573
Southern Blue Devil	Southern Blue Devil	<i>Paraplesiops meleagris</i>	West Coast	1	337	NA	337	337
Southern Blue Devil	Southern Blue Devil	<i>Paraplesiops meleagris</i>	South Coast	17	462	25	277	573
Small Baitfish	Silverbelly	<i>Parequula melbournensis</i>	Statewide	1	43	NA	43	43
Small Baitfish	Silverbelly	<i>Parequula melbournensis</i>	South Coast	1	43	NA	43	43