

## APPENDICES

## APPENDIX 1 – PUBLICATIONS

## SCIENTIFIC PAPERS

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## BOOK CHAPTERS

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<sup>35</sup> Note- this report includes multiple chapters with WA participation.

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## APPENDIX 2

The following tables contain data reported for commercial catches, estimated recreational and charter catches, aquaculture production, reported bycatch of protected and listed species from commercial fisheries and fish prices reported from land based processors. The reporting period is dependent on the most recent data available.

### Table of catches from commercial fishers' statutory returns for 2014/15

This table contains the landed<sup>1</sup> and estimated live weight<sup>2</sup> of species recorded in the compulsory catch and fishing effort returns provided by commercial fishers each month. These data include the catch taken as by-product as well as the targeted catch.

These catch data may differ slightly from some of the catch estimates presented for specific fisheries as the latter may include additional data from other sources, such as research log books and processors. The figures may also differ slightly from previously reported figures, as additional data may have been received by the Department of Fisheries. The table represents the latest year for which a complete set of data is available.

While scientific names have been included wherever possible, it should be noted that many fish recorded under a common name cannot be identified as belonging to a particular single species and therefore must be reported as being part of a commercial grouping of several species. For example, the common name 'Redfish' may be used for several species of the genus *Centroberyx*.

Data for species with live weight catches of less than 500 kg have been combined into the general or 'other' category within each class. Data for the Marine Aquarium fish Fishery, Specimen Shell Fishery and Hermit Crab Fishery are presented in the next table. Data for the Indian Ocean Territories Fishery have not been included.

Common Name	Scientific Name	Landed Weight (tonnes)	Live Weight (tonnes)
<b>FISH</b>			
<i>Carcharhinidae</i>			
Bronze Whaler	<i>Carcharhinus brachyurus</i>	31	48
Dusky Whaler	<i>Carcharhinus obscurus</i>	94	149
Sandbar Shark	<i>Carcharhinus plumbeus</i>	29	46
Spinner Shark	<i>Carcharhinus brevipinna</i>	24	39
Tiger Shark	<i>Galeocerdo cuvier</i>	3	4
<i>Lamnidae</i>			
Shortfin Mako	<i>Isurus oxyrinchus</i>	1	2
<i>Orectolobidae</i>			
Wobbegong	<i>Orectolobidae</i>	18	29
<i>Pristiophoridae</i>			
Common Sawshark	<i>Pristiphorus cirratus</i>	3	8
<i>Rajidae</i>			
Skates	<i>Rajidae</i>	4	10
<i>Sphyrnidae</i>			
Hammerhead Sharks	<i>Sphyrnidae</i>	38	61
<i>Triakidae</i>			
Gummy Shark	<i>Mustelus antarcticus</i>	310	492
Pencil Shark	<i>Hypogaleus hyugaensis</i>	0	1
School Shark	<i>Galeorhinus galeus</i>	1	1
Whiskery Shark	<i>Furgaleus macki</i>	98	147

	Common Name	Scientific Name	Landed Weight (tonnes)	Live Weight (tonnes)
<b>FISH(Continued)</b>				
	Sharks, Other		5	9
	Shovelnose/Fiddler Rays	<i>Rhinobatidae &amp; Rhynchobatidae</i>	0	1
<i>Acanthuridae/Zanclidae</i>				
	Surgeonfishes	<i>Acanthuridae/Zanclidae</i>	4	4
<i>Ariidae</i>				
	Catfishes	<i>Ariidae</i>	8	8
<i>Berycidae</i>				
	Bight Redfish	<i>Centroberyx gerrardi</i>	48	49
	Redfish	<i>Centroberyx spp.</i>	10	10
	Yelloweye Redfish	<i>Centroberyx australis</i>	2	2
<i>Clupeidae</i>				
	Australian Sardine (Pilchard)	<i>Sardinops sagax</i>	1763	1763
	Perth Herring	<i>Nematalosa vlaminghi</i>	4	4
	Sandy Sprat (Whitebait)	<i>Hyperlophus vittatus</i>	97	97
	Scaly Mackerel	<i>Sardinella lemuru</i>	1073	1073
<i>Hemiramphidae</i>				
	Southern Garfish	<i>Hyporhamphus melanochir</i>	9	9
<i>Platycephalidae</i>				
	Flatheads	<i>Platycephalidae</i>	20	20
<i>Plotosidae</i>				
	Estuary Cobbler	<i>Cnidoglanis macrocephalus</i>	38	53
<i>Latidae</i>				
	Barramundi	<i>Lates calcarifer</i>	26	46
<i>Polyprionidae</i>				
	Bass Groper	<i>Polyprion americanus</i>	1	1
	Hapuku	<i>Polyprion oxygeneios</i>	20	20
<i>Epinephelidae</i>				
	Banded Grouper	<i>Epinephelus amblycephalus</i>	10	10
	Barcheek Coral Trout	<i>Plectropomus maculatus</i>	16	16
	Birdwire Rockcod	<i>Epinephelus merra</i>	1	1
	Blackspotted Rockcod	<i>Epinephelus malabaricus</i>	15	15
	Breaksea Cod	<i>Epinephelides armatus</i>	5	5
	Chinaman Rockcod	<i>Epinephelus rivulatus</i>	1	1
	Common Coral Trout	<i>Plectropomus leopardus</i>	2	2
	Duskytail Grouper	<i>Epinephelus bleekeri</i>	14	14
	Eightbar Grouper	<i>Hyporthodus octofasciatus</i>	12	12
	Flowery Rockcod	<i>Epinephelus fuscoguttatus</i>	57	57
	Goldspotted Rockcod	<i>Epinephelus coioides</i>	31	31
	Rankin Cod	<i>Epinephelus multinotatus</i>	112	112
	Tomato Rockcod	<i>Cephalopholis sonnerati</i>	1	1
	Cods	<i>Epinephelus/Cephalopholis</i>	54	54
<i>Glaucosomatidae</i>				
	Northern Pearl Perch	<i>Glaucosoma buergeri</i>	24	24
	West Australian Dhufish	<i>Glaucosoma hebraicum</i>	59	61
<i>Priacanthidae</i>				
	Bigeyes	<i>Priacanthidae</i>	38	38

## APPENDICES

	Common Name	Scientific Name	Landed Weight (tonnes)	Live Weight (tonnes)
<b>FISH(Continued)</b>				
<i>Terapontidae</i>				
	Trumpeters	<i>Terapontidae</i>	3	3
	Yellowtail Grunter	<i>Amniataba caudavittata</i>		
<i>Sillaginidae</i>				
	King George Whiting	<i>Sillaginodes punctatus</i>	25	25
	Whittings	<i>Sillaginidae</i>	73	73
	Yellowfin Whiting	<i>Sillago schomburgkii</i>	104	104
<i>Pomatomidae</i>				
	Tailor	<i>Pomatomus saltatrix</i>	21	21
<i>Rachycentridae</i>				
	Cobia	<i>Rachycentron canadum</i>	11	11
<i>Carangidae</i>				
	Amberjack	<i>Seriola dumerili</i>	22	22
	Black Pomfret	<i>Parastromateus niger</i>	2	2
	Golden Trevally	<i>Gnathanodon speciosus</i>	4	4
	Queenfish	<i>Scomberoides commersonianus</i>		
	Samsonfish	<i>Seriola hippos</i>	36	37
	Silver Trevally	<i>Pseudocaranx spp.</i>	6	6
	Trevallies	<i>Carangidae</i>	122	122
	Yellowtail Kingfish	<i>Seriola lalandi</i>	1	1
	Yellowtail Scad	<i>Trachurus novaezelandiae</i>	21	21
<i>Arripidae</i>				
	Australian Herring	<i>Arripis georgianus</i>	66	66
	Western Australian Salmon	<i>Arripis truttaceus</i>	191	191
<i>Lutjanidae</i>				
	Brownstripe Snapper	<i>Lutjanus vitta</i>	70	70
	Chinamanfish	<i>Symphorus nematophorus</i>	7	7
	Crimson Snapper	<i>Lutjanus erythropterus</i>	165	165
	Darktail Snapper	<i>Lutjanus lemniscatus</i>	14	14
	Flagfish/Spanish Flag	<i>Lutjanus vitta/quinquelineatus/carponotatus/lutjan</i>	35	35
	Goldband Snapper	<i>Pristipomoides multidentis</i>	813	813
	Mangrove Jack	<i>Lutjanus argentimaculatus</i>	10	10
	Moses' Snapper	<i>Lutjanus russelli</i>	33	33
	Red Emperor	<i>Lutjanus sebae</i>	261	261
	Rosy Snapper	<i>Pristipomoides filamentosus</i>	3	3
	Ruby Snapper	<i>Etelis carbunculus</i>	21	21
	Saddletail Snapper	<i>Lutjanus malabaricus</i>	179	179
	Sharptooth Snapper	<i>Pristipomoides typus</i>	2	2
	Stripey Snapper	<i>Lutjanus carponotatus</i>	1	1
	Tropical Snappers	<i>Lutjanidae</i>	2	2
<i>Nemipteridae</i>				
	Monocle Bream	<i>Scolopsis spp.</i>	4	4
	Threadfin Breams	<i>Nemipteridae</i>	87	87
<i>Lobotidae</i>				
	Tripletail	<i>Lobotes surinamensis</i>		

	Common Name	Scientific Name	Landed Weight (tonnes)	Live Weight (tonnes)
<b>FISH(Continued)</b>				
<i>Haemulidae</i>				
	Javelin Fish	<i>Pomadasys spp.</i>	9	9
	Painted Sweetlips	<i>Diagramma labiosum</i>	32	32
<i>Haemulidae</i>				
	Sweetlips	<i>Haemulidae</i>	37	37
<i>Lethrinidae</i>				
	Bluespotted Emperor	<i>Lethrinus punctulatus</i>	221	221
	Drab Emperor	<i>Lethrinus ravus</i>	4	4
	Emperors	<i>Lethrinidae</i>	0	0
	Grass Emperor	<i>Lethrinus laticaudis</i>	4	4
	Longnose Emperor	<i>Lethrinus olivaceus</i>	14	14
	Mozambique Seabream	<i>Wattsia mossambica</i>	10	10
	Redspot Emperor	<i>Lethrinus lentjan</i>	20	20
	Redthroat Emperor	<i>Lethrinus miniatus</i>	64	64
	Robinson's Seabream	<i>Gymnocranius grandoculis</i>	24	24
	Spangled Emperor	<i>Lethrinus nebulosus</i>	69	69
	Yellowtail Emperor	<i>Lethrinus atkinsoni</i>	1	1
<i>Sparidae</i>				
	Black Bream	<i>Acanthopagrus butcheri</i>	32	32
	Frypan Bream	<i>Argyrops spinifer</i>	27	27
	Snapper (Pink Snapper)	<i>Chrysophrys auratus</i>	354	357
	Tarwhine	<i>Rhabdosargus sarba</i>	7	7
	Western Yellowfin Bream	<i>Acanthopagrus morrisoni</i>	20	20
<i>Sciaenidae</i>				
	Black Jewfish	<i>Protonibea diacanthus</i>	1	2
	Mulloway	<i>Argyrosomus japonicus</i>	27	28
<i>Mullidae</i>				
	Red Mullet	<i>Mullidae</i>	20	20
<i>Kyphosidae</i>				
	Sweep	<i>Scorpis aequipinnis</i>		
<i>Pentacerotidae</i>				
	Boarfishes	<i>Pentacerotidae</i>	5	6
<i>Oplegnathidae</i>				
	Knifejaw	<i>Oplegnathus woodwardi</i>	1	1
<i>Cheilodactylidae</i>				
	Blue Morwong	<i>Nemadactylus valenciennesi</i>	43	46
<i>Mugilidae</i>				
	Mullets	<i>Mugilidae</i>		
	Sea Mullet	<i>Mugil cephalus</i>	204	204
	Yelloweye Mullet	<i>Aldrichetta forsteri</i>	20	20
<i>Sphyraenidae</i>				
	Pikes	<i>Sphyraenidae</i>	3	3
	Snook	<i>Sphyraena novaehollandiae</i>	3	3
<i>Polynemidae</i>				
	King Threadfin	<i>Polydactylus macrochir</i>	13	22
	Threadfin	<i>Polynemidae</i>	1	1

## APPENDICES

	Common Name	Scientific Name	Landed Weight (tonnes)	Live Weight (tonnes)
<b>FISH(Continued)</b>				
<i>Labridae</i>				
	Baldchin Groper	<i>Choerodon rubescens</i>	10	10
<i>Labridae</i>				
	Blue Groper	<i>Achoerodus gouldii</i>	37	43
	Bluespotted Tuskfish	<i>Choerodon cauteroma</i>	2	2
	Parrotfishes	<i>Scarinae</i>	3	3
	Pigfishes	<i>Bodianus spp.</i>	1	1
	Tuskfishes	<i>Choerodon spp.</i>	3	3
	Wrasses	<i>Labrinae</i>	1	1
<i>Scombridae</i>				
	Bonito	<i>Sarda australis</i>	11	11
	Grey Mackerel	<i>Scomberomorus semifasciatus</i>	3	3
	Mackerels, Other	<i>Scombridae</i>	0	0
	Spanish Mackerel	<i>Scomberomorus commerson</i>	216	299
	Spotted Mackerel	<i>Scomberomorus munroi</i>	1	1
	Tuna, Other	<i>Scombridae</i>	1	1
<i>Centrolophidae</i>				
	Blue-Eye Trevalla	<i>Hyperoglyphe antarctica</i>	5	5
<i>Bothidae</i>				
	Flounders	<i>Bothidae</i>	10	10
<i>Monacanthidae</i>				
	Leather Jacket	<i>Monacanthidae</i>	11	18
	Fish, other		132	151
	TOTAL FISH		8386	8946
<b>CRABS</b>				
	Crystal Crab	<i>Chaceon albus</i>	155	155
	Champagne Crab	<i>Hypothalassia acerba</i>	2	2
	Giant Crab	<i>Pseudocarcinus gigas</i>	10	10
	Blue Swimmer Crab	<i>Portunus armatus</i>	519	519
	Mud Crab	<i>Scylla spp.</i>	18	18
	TOTAL CRABS		704	704
<b>PRAWNS</b>				
	Banana Prawn	<i>Penaeus merguensis</i>	446	446
	Brown Tiger Prawn	<i>Penaeus esculentus</i>	662	662
	Coral Prawn	<i>Metapenaeopsis spp.</i>	92	92
	Endeavour Prawn	<i>Metapenaeus endeavouri</i>	199	199
	Western King Prawn	<i>Penaeus latisulcatus</i>	1569	1569
	Prawns, Other	<i>Penaeidae</i>	11	11
	TOTAL PRAWNS		2979	2979
<b>LOBSTERS</b>				
	Southern Rock Lobster	<i>Jasus edwardsii</i>	44	44

Common Name	Scientific Name	Landed Weight (tonnes)	Live Weight (tonnes)
<b>LOBSTERS (continued)</b>			
Western Rock Lobster	<i>Panulirus cygnus</i>	6083	6083
Bugs/ Slipper lobster	<i>Scyllaridae</i>	14	14
TOTAL LOBSTERS		6141	6141
<b>MOLLUSCS</b>			
Squid	<i>Sepioteuthis spp./Loligo spp.</i>	36	36
Octopus	<i>Octopus (cf.) tetricus</i>	169	219
Cuttlefish	<i>Sepiidae</i>	50	50
Saucer scallop	<i>Amusium balloti</i>	88	438
Brownlip Abalone	<i>Haliotis conicopora</i>	12	31
Greenlip Abalone	<i>Haliotis laevigata</i>	62	165
Roe's Abalone	<i>Haliotis roei</i>	52	52
TOTAL MOLLUSCS		469	991
OTHER INVERTEBRATES		12	37
<b>GRAND TOTAL</b>		<b>18222</b>	<b>18807</b>

1. *Landed weight*: refers to the mass (or weight) of a product at the time of landing, regardless of the state in which it is landed. That is, the fish may be whole, gutted or filleted etc. This unit is of limited use for further analysis except where it is known that the product is very homogenous in nature. Where more detailed analysis of the data is required the landed weight is generally converted to a more meaningful measure, the most frequently used being termed live or whole weight or 'nominal catch'.
2. *Live weight*: refers to the landings converted to a live weight basis. This is often referred to as the 'live weight equivalent of the landings', shortened to the 'live weight'. Although live weight may be the preferred unit it is rarely obtained as a direct measure. This is because it would usually have to be made on board a fishing vessel where the practical difficulties associated with the working conditions render it impossible. Live weight has to be derived and this is usually done by applying a conversion factor to the landed weight.
3. Weight figures are round off to the nearest tonnage.
4. Common names are from the CAAB – Codes for Australian Biota database.

More information may be obtained from the 'CWP Handbook of Fishery Statistical Standards' at the website <http://www.fao.org/fishery/cwp/handbook/B/en>.

## Table of catches from marine aquarium fish, specimen shell and hermit crab commercial fishers' statutory returns for 2014/15

Common Name	Quantity (numbers)	Weight (kg)	Volume (litres)
<b>MARINE AQUARIUM FISH FISHERY</b>			
Fish	17,854		
Syngnathidae (not included in Fish)	232		
Invertebrates (not including Corals)	40,587		
Hard Coral		3,256.50	
Soft Coral <sup>1</sup>		5,447.00	
Living Rock & Living Sand		14,008.00	
Sponges	1,990		
Algae/Seagrasses			317
<b>SPECIMEN SHELL FISHERY</b>			
Specimen Shells - Mollusca	18,391		
<b>HERMIT CRAB FISHERY</b>			
Land Hermit Crabs only - <i>Coenobita variabilis</i>	80,654		

<sup>1</sup> The 'Soft coral' category for the Marine Aquarium Fish Fishery includes 4,400 kg of coral like anemone groups such as corallimorphs and zoanths in the Class Anthozoa. These are harvested under an invertebrate Ministerial Exemption and are not part of the annual coral TAC.

<sup>2</sup> Due to confidentiality provisions the reported catch of 'Live Feed' cannot be shown for the Marine Aquarium Fish Fishery in the Collection Fisheries Appendix Table 1.

## Table of catches from boat-based recreational fishers and charter returns for 2013/14

This table contains the estimated number<sup>1</sup> and weight<sup>2</sup> of species retained in the state-wide survey of boat-based recreational fishers and charter returns for 2013/14 (May 2013–April 2014). These estimates include catch from targeted and non-targeted recreational fishing. Estimates are reported at species level where adequate sample size and precision were obtained. Species were then grouped to general or 'other' categories within each class and where > 2,500 (by number) are included in this table. Uncertainty around estimates from the state-wide survey is not included in this table (refer to Ryan et al. (2015) for this information). Estimates of shore-based recreational catches are not included in this table. The table represents the latest year for which a complete set of data is available.

Family	Common Name	Scientific Name	Est Kept Catch (number)	Est Kept Catch (tonnes)	Charter Kept Catch (number)	Charter Est Kept Catch (tonnes)	
<b>FISH</b>							
Carcharhinidae	Bronze Whaler	<i>Carcharhinus brachyurus</i>	657	N/A	3	N/A	
	Dusky Whaler	<i>Carcharhinus obscurus</i>	211	N/A	0	N/A	
Triakidae	Gummy Shark	<i>Mustelus antarcticus</i>	834	N/A	23	N/A	
Arripidae	Australian Herring	<i>Arripis georgianus</i>	132,155	16	86	Neg	
	Western Australian Salmon	<i>Arripis truttaceus</i>	2,317	6	8	Neg	
Berycidae	Bight Redfish	<i>Centroberyx gerrardi</i>	9,891	11	3,154	4	
	Swallowtail	<i>Centroberyx lineatus</i>	1,749	< 1	1,054	< 1	
Carangidae	Amberjack	<i>Seriola dumerili</i>	id	id	97	< 1	
	Giant Trevally	<i>Caranx ignobilis</i>	688	3	48	< 0.5	
	Golden Trevally	<i>Gnathanodon speciosus</i>	1,994	5	105	< 1	
	Queenfish	<i>Scomberoides commersonnianus</i>	581	N/A	253	N/A	
	Samsonfish	<i>Seriola hippos</i>	2,737	16	606	5	
	Silver Trevally	<i>Pseudocaranx</i> spp.	34,948	17	1,746	2	
	Yellowtail Kingfish	<i>Seriola lalandi</i>	1,144	3	51	< 0.5	
	Trevally – Other	Carangidae – undifferentiated	3,157	N/A	476	N/A	
	Cheilodactylidae	Blue Morwong	<i>Nemadactylus valenciennesi</i>	3,906	11	619	2
	Glaucosomatidae	Northern Pearl Perch	<i>Glaucosoma buergeri</i>	641	1	636	1
West Australian Dhufish		<i>Glaucosoma hebraicum</i>	18,907	84	2,258	13	
Haemulidae	Painted Sweetlips	<i>Diagramma labiosum</i>	3,083	7	268	< 1	
Hemiramphidae	Southern Garfish	<i>Hyporhamphus melanochir</i>	2,809	< 0.5	0	N/A	
	Garfish – Other	Hemiramphidae – undifferentiated	3,224	N/A	8	N/A	
Labridae	Baldchin Groper	<i>Choerodon rubescens</i>	11,968	27	3,303	10	
	Blackspot Tuskfish	<i>Choerodon schoenleinii</i>	3,615	10	121	< 0.5	
	Blue Tuskfish	<i>Choerodon cyanodus</i>	1,975	6	0	N/A	
	Brownspeckled Wrasse	<i>Notolabrus parilus</i>	2,616	< 1	17	N/A	
	Foxfish	<i>Bodianus frenchii</i>	1,437	1	680	< 1	
	Western King Wrasse	<i>Coris auricularis</i>	9,075	3	96	Neg	
	Wrasse – Other	Labridae – undifferentiated	2,170	N/A	377	N/A	
Latidae	Barramundi	<i>Lates calcarifer</i>	1,676	7	1,077	4	
Lethrinidae	Bluespotted Emperor	<i>Lethrinus punctulatus</i>	1,233	< 1	447	< 0.5	
	Grass Emperor	<i>Lethrinus laticaudis</i>	21,060	29	2,391	3	

## APPENDICES

Family	Common Name	Scientific Name	Est Kept Catch (number)	Est Kept Catch (tonnes)	Charter Kept Catch (number)	Charter Est Kept Catch (tonnes)
	Redthroat Emperor	<i>Lethrinus miniatus</i>	6,055	5	2,824	3
	Robinson's Seabream	<i>Gymnocranius grandoculis</i>	1,495	3	1,093	3
	Spangled Emperor	<i>Lethrinus nebulosus</i>	12,364	24	3,620	8
	Emperor – Other	Lethrinidae – undifferentiated	715	N/A	2,584	N/A
Lutjanidae	Chinamanfish	<i>Symphorus nematophorus</i>	828	4	567	3
	Crimson Snapper	<i>Lutjanus erythropterus</i>	1,646	3	1,360	2
	Goldband Snapper	<i>Pristipomoides multidentis</i>	3,499	7	2,097	9
	Golden Snapper	<i>Lutjanus johnii</i>	1,384	2	2,524	4
	Mangrove Jack	<i>Lutjanus argentimaculatus</i>	4,361	3	1,522	1
	Moses' Snapper	<i>Lutjanus russellii</i>	1,114	< 1	417	N/A
	Red Emperor	<i>Lutjanus sebae</i>	5,290	19	2,229	8
	Rosy Snapper	<i>Pristipomoides filamentosus</i>	id	id	1,429	3
	Ruby Snapper	<i>Etelis carbunculus</i>	id	id	274	2
	Saddletail Snapper	<i>Lutjanus malabaricus</i>	1,294	2	1,790	4
	Sharptooth Snapper	<i>Pristipomoides typus</i>	id	id	620	1
	Stripey Snapper	<i>Lutjanus carponotatus</i>	7,437	4	667	< 1
Mugilidae	Sea Mullet	<i>Mugil cephalus</i>	id	id	1,308	Neg
	Mullet – Other	Mugilidae – undifferentiated	4,656	N/A	178	N/A
Nemipteridae	Western Butterfish	<i>Pentapodus vitta</i>	6,209	1	8	N/A
Platycephalidae	Flathead – Other	Platycephalidae – undifferentiated	5,193	N/A	211	N/A
Polynemidae	Blue Threadfin	<i>Eleutheronema tetradactylum</i>	2,006	3	822	2
	King Threadfin	<i>Polydactulus macrochir</i>	id	id	16	N/A
Pomatomidae	Tailor	<i>Pomatomus saltatrix</i>	8,370	6	33	Neg
Rachycentridae	Cobia	<i>Rachycentron canadum</i>	905	7	406	3
Scaridae	Parrotfish	Scaridae – undifferentiated	3,827	N/A	26	N/A
Sciaenidae	Black Jewfish	<i>Protonibea diacanthus</i>	562	2	163	< 1
	Mulloway	<i>Argyrosomus japonicus</i>	1,620	7	214	< 1
Scombridae	Bonitos	<i>Sarda australis</i>	1,513	N/A	6	N/A
	Longtail Tuna	<i>Thunnus tonggol</i>	509	3	149	< 1
	Mackerel Tuna	<i>Euthynnus affinis</i>	1,526	4	80	< 0.5
	School Mackerel	<i>Scomberomorus queenslandicus</i>	2,906	6	183	< 0.5
	Shark Mackerel	<i>Grammatorcynus bicarinatus</i>	304	N/A	31	N/A
	Southern Bluefin Tuna	<i>Thunnus maccoyii</i>	460	2	8	Neg
	Spanish Mackerel	<i>Scomberomorus commerson</i>	9,067	74	2,236	21
	Spotted Mackerel	<i>Scomberomorus munroi</i>	499	3	59	< 0.5
	Yellowfin Tuna	<i>Thunnus albacares</i>	1,151	8	223	2
	Mackerel/Tuna – Other	Scombridae – undifferentiated	2,914	N/A	286	N/A
Scorpididae	Sea Sweep	<i>Scorpius aequipinnis</i>	2,270	3	900	1
Serranidae	Barcheek Coral Trout	<i>Plectropomus maculatus</i>	4,111	11	1,018	3
	Breaksea Cod	<i>Epinephelides armatus</i>	16,449	15	3,044	4
	Common Coral Trout	<i>Plectropomus leopardus</i>	1,371	4	720	2
	Goldspotted Rockcod	<i>Epinephelus coioides</i>	4,096	11	553	3
	Rankin Cod	<i>Epinephelus multinotatus</i>	4,173	16	2,970	12

Family	Common Name	Scientific Name	Est Kept Catch (number)	Est Kept Catch (tonnes)	Charter Kept Catch (number)	Charter Est Kept Catch (tonnes)
	Rockcod – Other	Serranidae – undifferentiated	13,874	N/A	1,690	N/A
Sillaginidae	King George Whiting	<i>Sillaginodes punctatus</i>	74,329	17	662	< 0.5
	School Whiting	<i>Sillago bassensis, vittata &amp; schombirgkii</i>	276,229	26	2	N/A
	Whiting – Other	Sillaginidae – undifferentiated	1,992	N/A	922	N/A
Sparidae	Black Bream	<i>Acanthopagrus butcheri</i>	11,653	3	6	Neg
	Snapper (Pink Snapper)	<i>Chrysophrys auratus</i>	25,200	59	11,443	26
	Tarwhine	<i>Rhabdosargus sarba</i>	1,978	< 1	27	Neg
	Western Yellowfin Bream	<i>Acanthopagrus morrisoni</i>	1,089	< 1	0	N/A
Sphyraenidae	Snook	<i>Sphyraena novaehollandiae</i>	5,065	2	2	Neg
	Pike/Barracuda – Other	Sphyraenidae – undifferentiated	5,910	N/A	11	N/A
<b>CRAB</b>						
	Blue Swimmer Crab	<i>Portunus armatus</i>	285,202	72	35	N/A
	Mud Crab	<i>Scylla</i> spp.	11,172	N/A	1,063	N/A
<b>MOLLUSCS</b>						
	Cuttlefish	Sepiidae	1,477	N/A	28	N/A
	Octopus	Octopodidae - undifferentiated	2,767	N/A	48	N/A
	Squid	Order Teuthoidea - undifferentiated	73,197	N/A	430	N/A

1. *Kept catch (number)*: refers to the estimated number of retained fish in the state-wide survey of boat-based recreational fishing, or reported number of retained fish in the Tour Operator Returns (Charter Logbooks). “id” indicates insufficient data where relative standard error > 40% (i.e. standard error > 40% of estimate) and < 30 diarists recorded catches of the species.
2. *Kept catch (tonnes)*: refers to the kept catch (number) converted to a weight from estimates of average weight based on state-wide biological surveys or the Tour Operator Returns. Weight estimates are round off to the nearest tonnage. N/A indicates estimate of average weight is unavailable. “Neg” indicates negligible catch (< 0.1 tonnes).
3. Common names are from the CAAB – Codes for Australian Biota database.
4. More information can be obtained from Ryan *et al.* (2015).<sup>36</sup>

<sup>36</sup> Ryan, K.L., Hall, N.G., Lai, E.K., Smallwood, C.B., Taylor, S.M., Wise, B.S. 2015. State-wide survey of boat-based recreational fishing in Western Australia 2013/14. Fisheries Research Report No. 268, Department of Fisheries, Western Australia. 208 pp.

## Table of growout production for the Western Australian aquaculture industry in 2014/15

This table contains the data collected on quarterly production returns received from all Western Australian aquaculture licence holders.

Some species produced in Western Australian aquaculture have been grouped together and reported under 'Other' as they are produced by less than three contributing licences, so making the data confidential. Species in this category produced in the last ten years include artemia, abalone, black bream, Mahi mahi, live rock, mulloway, Murray cod, pink snapper, prawns, rotifers, western rock oysters and yellowtail kingfish.

Common name	Productive licences	Quantity	Units*	Average price/ kg or individual	Value
Barramundi	5	779	Tonnes	\$11.06	\$8,615,958
Marron	181	51	Tonnes	\$30.46	\$1,562,908
Mussels	5	147	Tonnes	\$4.32	\$632,839
Yabbies	8	17	Tonnes	\$25.87	\$432,042
Silver Perch	11	15	Tonnes	\$21.13	\$312,943
Goldfish & Koi carp	7	92,671	No.	n/a	\$206,898
Ornamental Invertebrates	7	17,276	No.	n/a	\$188,834
Ornamental Fish	5	17,825	No.	n/a	\$84,463
Rainbow Trout	4	6	Tonnes	\$8.97	\$50,733
Other Species**	< 3	38	Tonnes	n/a	\$1,235,373
Algae	< 3	**			**
<b>Total (not including algae or pearls)</b>					<b>\$13,322,991</b>

\* Tonnes refer to whole weight.

\*\* Industry figures have not been included to protect the confidentiality of individual producers, as there are less than five productive licensees.

## Table of Fish Prices for 2014/15

This table contains the average price per kilogram paid for each marine species caught in Western Australia in 2014/15. The prices are based on prices reported by WA land based processors; the average prices reported are weighted and are based on whole weight. The prices have been adjusted to reflect the beach price paid. Beach price is the price paid per kilogram to commercial fishers for their catch when they first land and excludes any marketing, transport or handling costs.

Family	Common Name	Scientific Name	Price per Kilogram
<b>FISH</b>			
Carcharhinidae	Bronze Whaler	<i>Carcharhinus brachyurus</i>	\$2.20
	Blacktip Whaler	<i>Carcharhinus tilstoni/Carcharhinus limbatus/Carcharhinus spp.</i>	\$1.26
	Bull Shark	<i>Carcharhinus leucas</i>	\$0.75
	Dusky Whaler	<i>Carcharhinus obscurus</i>	\$4.02
	Sandbar Shark	<i>Carcharhinus plumbeus</i>	\$2.83
	Spinner Shark	<i>Carcharhinus brevipinna</i>	\$1.14
	Tiger Shark	<i>Galeocerdo cuvier</i>	\$0.65
Hexanchidae	Sevengill Shark	<i>Heptranchias spp.</i>	\$1.00
Lamnidae	Shortfin Mako	<i>Isurus oxyrinchus</i>	\$0.53
Orectolobidae	Wobbegong Shark	<i>Orectolobidae</i>	\$1.64
Pristiophoridae	Common Sawshark	<i>Pristiphorus cirratus</i>	\$0.60
Rajidae	Skates	<i>Rajidae</i>	\$4.66
Sphyrnidae	Hammerhead Shark	<i>Sphyrnidae</i>	\$0.94
Squalidae/Centrophoridae/Etmopteridae	Dogfishes, Gulper Sharks & Lantern Sharks	<i>Squalidae/Centrophoridae/Etmopteridae</i>	\$2.00
Squatinae	Angel Shark	<i>Squatina spp.</i>	\$0.90
Triakidae	Gummy Shark	<i>Mustelus antarcticus</i>	\$4.28
	Pencil Shark	<i>Hypogaleus hyugaensis</i>	\$1.23
	School Shark	<i>Galeorhinus galeus</i>	\$2.00
	Whiskery Shark	<i>Furgaleus macki</i>	\$3.77
	Shark Fins		\$15.07
	Shark, Other		\$2.35
	Rays & Skates		\$2.00
	Shovelnose/Fiddler Rays	<i>Rhinobatidae &amp; Rhynchobatidae</i>	\$0.38
Acanthuridae/Zanclidae	Surgeonfishes	<i>Acanthuridae/Zanclidae</i>	\$2.00
Ariidae	Catfishes	<i>Ariidae</i>	\$2.24
	Silver Cobbler	<i>Neoarius midgleyi</i>	\$4.68
Arripidae	Australian Herring	<i>Arripis georgianus</i>	\$2.46
	Western Australian Salmon	<i>Arripis truttaceus</i>	\$0.49
Belonidae	Long Tom	<i>Belonidae</i>	\$2.00
Berycidae	Bight Redfish	<i>Centroberyx gerrardi</i>	\$6.47
	Redfish	<i>Centroberyx spp.</i>	\$7.52
	Swallowtail	<i>Centroberyx lineatus</i>	\$3.02

Family	Common Name	Scientific Name	Price per Kilogram
	Yelloweye Redfish	<i>Centroberyx australis</i>	\$4.30
Bothidae	Flounder	<i>Bothidae</i>	\$14.43
Carangidae	Amberjack	<i>Seriola dumerili</i>	\$2.26
	Black Pomfret	<i>Parastromateus niger</i>	\$7.99
	Common Dart	<i>Trachinotus botla</i>	\$2.50
	Golden Trevally	<i>Gnathanodon speciosus</i>	\$3.38
	Queenfish	<i>Scomberoides commersonnianus</i>	\$5.10
	Samson Fish	<i>Seriola hippos</i>	\$2.48
	Silver Trevally	<i>Pseudocaranx spp.</i>	\$2.41
	Trevallies	<i>Carangidae</i>	\$3.16
	Turrum (Goldspot Trevally)	<i>Carangoides fulvoguttatus</i>	\$1.07
	Yellowtail Kingfish	<i>Seriola lalandi</i>	\$3.94
	Yellowtail Scad	<i>Trachurus novaezelandiae</i>	\$0.53
Centrolophidae	Blue-Eye Trevalla	<i>Hyperoglyphe antarctica</i>	\$5.22
Cheilodactylidae	Blue Morwong	<i>Nemadactylus valenciennesi</i>	\$3.76
	Morwong	<i>Cheilodactylidae</i>	\$2.58
Clupeidae	Australian Sardine (Pilchard)	<i>Sardinops sagax</i>	\$0.86
	Blue Sprat	<i>Spratelloides robustus</i>	\$4.25
	Maray	<i>Etrumeus teres</i>	\$0.95
	Perth Herring	<i>Nematalosa vlaminghi</i>	\$2.98
	Sandy Sprat (Whitebait)	<i>Hyperlophus vittatus</i>	\$4.15
	Scaly Mackerel	<i>Sardinella lemuru</i>	\$0.94
Coryphaenidae	Mahi Mahi	<i>Coryphaena hippurus</i>	\$5.90
Engraulidae	Australian Anchovy	<i>Engraulis australis</i>	\$0.64
Elopidae	Hawaiian Giant Herring	<i>Elops hawaiiensis</i>	\$2.00
Epinephedae	Banded Grouper	<i>Epinephelus amblycephalus</i>	\$2.00
	Barramundi Cod	<i>Cromileptes altivelis</i>	\$2.00
	Birdwire Rockcod	<i>Epinephelus merra</i>	\$5.36
	Blackspotted Rockcod	<i>Epinephelus malabaricus</i>	\$7.65
	Breaksea Cod	<i>Epinephelides armatus</i>	\$7.86
	Chinaman Rockcod	<i>Epinephelus rivulatus</i>	\$5.36
	Cods	<i>Epinephelus/Cephalopholis</i>	\$6.57
	Comet Grouper	<i>Epinephelus morrhua</i>	\$5.36
	Coral Rockcod	<i>Cephalopholis miniata</i>	\$5.36
	Duskytail Grouper	<i>Epinephelus bleekeri</i>	\$7.29
	Eightbar Grouper	<i>Hyporthodus octofasciatus</i>	\$8.15
	Flowery Rockcod	<i>Epinephelus fuscoguttatus</i>	\$6.19
	Goldspotted Rockcod	<i>Epinephelus coioides</i>	\$6.88
	Harlequin Fish	<i>Othos dentex</i>	\$2.00
	Radiant Rockcod	<i>Epinephelus radiatus</i>	\$6.59
	Rankin Cod	<i>Epinephelus multinotatus</i>	\$8.43
	Tomato Rockcod	<i>Cephalopholis sonnerati</i>	\$7.14
	Yellowedge Coronation Trout	<i>Variola louti</i>	\$16.23
	Yellowspotted Rockcod	<i>Epinephelus areolatus</i>	\$2.00

Family	Common Name	Scientific Name	Price per Kilogram
Gempylidae	Barracouta	<i>Thyrsites atun</i>	\$2.50
Gempylidae	Gemfish	<i>Rexea solandri</i>	\$2.18
Gerreidae	Common Silverbiddy	<i>Gerres subfasciatus</i>	\$3.28
Glaucosomatidae	Northern Pearl Perch	<i>Glaucosoma buergeri</i>	\$7.09
	West Australian Dhufish	<i>Glaucosoma hebraicum</i>	\$14.60
Haemulidae	Barcheek Coral Trout	<i>Plectropomus maculatus</i>	\$15.09
	Common Coral Trout	<i>Plectropomus leopardus</i>	\$2.00
	Coral Trouts	<i>Plectropomus spp./Variola spp.</i>	\$15.09
	Javelin Fish	<i>Pomadasyd spp.</i>	\$2.15
	Painted Sweetlips	<i>Diagramma labiosum</i>	\$4.75
	Sweetlips	<i>Haemulidae</i>	\$4.79
Hemiramphidae	Southern Garfish	<i>Hyporhamphus melanochir</i>	\$7.37
Kyphosidae	Banded Sweep	<i>Scorpiis georgianus</i>	\$1.14
	Buffalo Bream	<i>Kyphosidae</i>	\$2.00
	Moonlighter	<i>Tilodon sexfasciatum</i>	\$2.00
	Sea Sweep	<i>Scorpiis aequipinnis</i>	\$7.87
Labridae	Baldchin Groper	<i>Choerodon rubescens</i>	\$10.90
	Blue Groper	<i>Achoerodus gouldii</i>	\$5.28
	Bluespotted Tuskfish	<i>Choerodon cauteroma</i>	\$7.02
	Parrotfishes	<i>Scarinae</i>	\$5.68
	Pigfish	<i>Bodianus spp.</i>	\$7.21
	Tuskfishes	<i>Choerodon spp.</i>	\$6.89
	Wrasses	<i>Labrinae</i>	\$4.75
Latidae	Barramundi	<i>Lates calcarifer</i>	\$7.54
Lethrinidae	Bluespotted Emperor	<i>Lethrinus punctulatus</i>	\$4.37
	Drab Emperor	<i>Lethrinus ravus</i>	\$4.43
	Emperors	<i>Lethrinidae</i>	\$5.38
	Grass Emperor	<i>Lethrinus laticaudis</i>	\$7.33
	Longnose Emperor	<i>Lethrinus olivaceus</i>	\$5.93
	Mozambique Seabream	<i>Wattisia mossambica</i>	\$5.92
	Redspot Emperor	<i>Lethrinus lentjan</i>	\$4.87
	Redthroat Emperor	<i>Lethrinus miniatus</i>	\$7.49
	Robinson's Seabream	<i>Gymnocranius grandoculis</i>	\$4.39
	Sea Bream	<i>Gymnocranius spp.</i>	\$6.38
	Spangled Emperor	<i>Lethrinus nebulosus</i>	\$5.41
	Spotcheek Emperor	<i>Lethrinus rubrioperculatus</i>	\$4.42
	Yellowtail Emperor	<i>Lethrinus atkinsoni</i>	\$7.50
Lobotidae	Tripletail	<i>Lobotes surinamensis</i>	\$2.00
Lutjanidae	Brownstripe Snapper	<i>Lutjanus vitta</i>	\$3.61
	Chinaman Fish	<i>Symphorus nematophorus</i>	\$5.38
	Crimson Snapper	<i>Lutjanus erythropterus</i>	\$5.18
	Darktail Snapper	<i>Lutjanus lemniscatus</i>	\$5.54
	Five Line Snapper	<i>Lutjanus quinquelineatus</i>	\$3.58
	Flagfish/Spanish Flag	<i>Lutjanus</i>	\$3.61

Family	Common Name	Scientific Name	Price per Kilogram
		<i>vitta/quinquelineatus/carponotatus/lutjan</i>	
	Flame Snapper	<i>Etelis coruscans</i>	\$6.64
	Goldband Snapper	<i>Pristipomoides multidentis</i>	\$8.81
	Golden Snapper	<i>Lutjanus johnii</i>	\$7.29
	Indonesian Snapper	<i>Lutjanus bitaeniatus</i>	\$4.76
	Jobfish	<i>Pristipomoides spp.</i>	\$9.30
	Mangrove Jack	<i>Lutjanus argentimaculatus</i>	\$5.40
	Moses Snapper	<i>Lutjanus russelli</i>	\$5.07
	Red Emperor	<i>Lutjanus sebae</i>	\$11.62
	Rosy Snapper	<i>Pristipomoides filamentosus</i>	\$7.94
	Ruby Snapper	<i>Etelis carbunculus</i>	\$6.64
	Saddletail Snapper	<i>Lutjanus malabaricus</i>	\$5.36
	Sharptooth Snapper	<i>Pristipomoides typus</i>	\$6.58
	Stripey Snapper	<i>Lutjanus carponotatus</i>	\$3.58
	Tang's Snapper	<i>Lipocheilus carnolabrum</i>	\$7.58
	Tropical Snappers	<i>Lutjanidae</i>	\$3.95
Monacanthidae	Leather Jacket	<i>Monacanthidae</i>	\$3.98
Mugilidae	Mulletts	<i>Mugilidae</i>	\$1.74
	Sea Mullet	<i>Mugil cephalus</i>	\$2.41
	Yellow-Eye Mullet	<i>Aldrichetta forsteri</i>	\$1.27
Mullidae	Red Mullet	<i>Mullidae</i>	\$2.64
Nemipteridae	Blue Mackerel	<i>Scomber australasicus</i>	\$2.50
	Monocle Bream	<i>Scolopsis spp.</i>	\$1.75
	Threadfin Breems	<i>Nemipteridae</i>	\$3.62
Ophidiidae	Ling, Pink Or Rock Ling	<i>Genypterus tigerinus</i>	\$1.70
Oplegnathidae	Knifejaw	<i>Oplegnathus woodwardi</i>	\$1.73
Pentacerotidae	Boarfish	<i>Pentacerotidae</i>	\$4.14
Platycephalidae	Flatheads	<i>Platycephalidae</i>	\$6.77
	Rock Flathead	<i>Platycephalus laevigatus</i>	\$9.04
Plotosidae	Estuary Cobbler	<i>Cnidoglanis macrocephalus</i>	\$4.83
Polynemidae	King Threadfin	<i>Polydactulus macrochir</i>	\$7.14
	Threadfin	<i>Polynemidae</i>	\$7.14
Polyprionidae	Bass Groper	<i>Polyprion americanus</i>	\$8.42
	Hapuku	<i>Polyprion oxygeneios</i>	\$7.43
Pomatomidae	Tailor	<i>Pomatomus saltatrix</i>	\$5.45
Priacanthidae	Bigeyes	<i>Priacanthidae</i>	\$1.37
Psettodidae	Australian Halibut	<i>Psettodes erumei</i>	\$4.22
Rachycentridae	Cobia	<i>Rachycentron canadum</i>	\$3.21
Scatophagidae	Butterfish (Striped Scat)	<i>Selenotoca multifasciata</i>	\$2.00
Sciaenidae	Black Jewfish	<i>Protonibea diacanthus</i>	\$3.20
	Mulloway	<i>Argyrosomus japonicus</i>	\$4.77
Scombridae	Bigeye Tuna	<i>Thunnus obesus</i>	\$10.52
	Bonito	<i>Sarda australis</i>	\$6.61
	Grey Mackerel	<i>Scomberomorus semifasciatus</i>	\$7.56

Family	Common Name	Scientific Name	Price per Kilogram
	Longtail Tuna	<i>Thunnus tonggol</i>	\$2.86
	Mackerel Tuna	<i>Euthynnus affinis</i>	\$2.52
	Mackerel, Other	<i>Scombridae</i>	\$1.95
	Shark Mackerel	<i>Grammatorcynus bicarinatus</i>	\$2.71
	Skipjack Tuna	<i>Katsuwonus pelamis</i>	\$2.69
	Spanish Mackerel (Narrow-barred)	<i>Scomberomorus commerson</i>	\$8.21
	Spotted Mackerel	<i>Scomberomorus munroi</i>	\$4.35
	Tuna, Other	<i>Scombridae</i>	\$3.31
	Wahoo	<i>Acanthocybium solandri</i>	\$4.73
	Yellowfin Tuna	<i>Thunnus albacares</i>	\$10.56
Scorpaenidae	Scorpionfishes	<i>Scorpaenidae</i>	\$5.51
Siganidae	Goldlined Rabbitfish	<i>Siganus lineatus</i>	\$2.00
	Rabbitfish	<i>Siganus spp.</i>	\$2.00
Sillaginidae	Goldenline Whiting	<i>Sillago analis</i>	\$1.37
	King George Whiting	<i>Sillaginodes punctatus</i>	\$13.23
	Whitings	<i>Sillaginidae</i>	\$4.11
	Yellowfin Whiting	<i>Sillago schomburgkii</i>	\$7.09
Sparidae	Black Bream	<i>Acanthopagrus butcheri</i>	\$8.28
	Frypan Bream	<i>Argyrops spinifer</i>	\$4.80
	Snapper (Pink Snapper)	<i>Chrysophrys auratus</i>	\$7.63
	Tarwhine	<i>Rhabdosargus sarba</i>	\$5.62
	Western Yellowfin Bream	<i>Acanthopagrus latus</i>	\$4.46
	Yellowback Bream	<i>Dentex tumifrons</i>	\$7.31
Sphyraenidae	Pikes	<i>Sphyraenidae</i>	\$3.03
	Snook	<i>Sphyraena novaehollandiae</i>	\$3.54
Terapontidae	Trumpeters	<i>Terapontidae</i>	\$1.70
Triglidae	Gurnard	<i>Triglidae</i>	\$2.06
Zeidae	John Dory	<i>Zeus faber</i>	\$8.64
	General Fish		\$4.11
<b>CRABS</b>			
	Blue swimmer Crab	<i>Portunus armatus</i>	\$5.36
	Champagne Crab	<i>Hypothalassia acerba</i>	\$8.50
	Crystal Crab	<i>Chaceon albus</i>	\$21.11
	Giant Crab	<i>Pseudocarcinus gigas</i>	\$46.50
	Giant Mud crab	<i>Scylla serrata</i>	\$30.97
	Orange Mud Crab	<i>Scylla olivacea</i>	\$30.97
<b>PRAWNS</b>			
	Banana Prawn	<i>Penaeus merguensis</i>	\$11.42
	Black Tiger Prawn	<i>Penaeus monodon</i>	\$18.00
	Brown Tiger Prawn	<i>Penaeus esculentus</i>	\$14.25
	Coral Prawn	<i>Metapenaeopsis spp.</i>	\$3.53
	Endeavour Prawn	<i>Metapenaeus endeavouri</i>	\$9.48

## APPENDICES

Family	Common Name	Scientific Name	Price per Kilogram
	Prawns, Other	<i>Penaeidae</i>	\$2.00
	Western King Prawn	<i>Penaeus latisulcatus</i>	\$13.11
<b>LOBSTERS</b>			
	Bugs/ Slipper lobster	<i>Scyllaridae</i>	\$11.40
	Southern Rock Lobster	<i>Jasus edwardsii</i>	\$60.00
	Western Rock Lobster	<i>Panulirus cygnus</i>	\$63.00
<b>MOLLUSCS</b>			
	Brownlip Abalone	<i>Haliotis conicopora</i>	\$33.54
	Cuttlefish	<i>Sepiidae</i>	\$3.38
	Greenlip Abalone	<i>Haliotis laevigata</i>	\$40.09
	Octopus	<i>Octopus (cf.) tetricus</i>	\$8.13
	Roe's Abalone	<i>Haliotis roei</i>	\$23.69
	Saucer scallop	<i>Amusium balloti</i>	\$7.10
	Squid	<i>Sepioteuthis spp./Loligo spp.</i>	\$13.18
<b>ECHINODERMS</b>			
	Sea Cucumbers	<i>Holothuroidea</i>	\$3.00

## APPENDIX 3

## Table of reported bycatch of protected and listed species from commercial fisheries for 2015

This table contains the numbers of accidental captures of protected and listed animals by commercial fishers, as reported in statutory fishing returns and Catch Disposal Records, during calendar year 2015<sup>1</sup>. To the extent possible, other types of recorded interactions with protected and listed species<sup>2</sup> have been excluded. For the purpose of this report, protected and listed species (or taxa) are defined as those listed as: Totally Protected Fish<sup>3</sup> under the WA Fish Resources Management Act 1994 (FRMA); Specially Protected Fauna under the WA Wildlife Conservation Act 1950 (WCA) and Threatened species and cetaceans for which it is an offence to harm under the Australian Environment Protection and Biodiversity Conservation Act 1999 (EPBC). These data do not include interactions with species that may be afforded other forms of general protection or conditions under these (or other) Acts, international agreements or conventions<sup>4</sup>. As other reports may include records that do not meet these definitions, these data may differ from other accounts.

Class	Common Name	Scientific Name	Release Condition		
			ALIVE (number)	DEAD (number)	UNKNOWN (number)
<b>Birds</b>	Shearwater (unspecified)		178	18	-
<b>Fishes</b>	Sawfish (unspecified)	Family Pristidae	11	3	-
	Green sawfish	<i>Pristis zijsron</i>	28	13	-
	Narrow sawfish	<i>Anoxypristis cuspidata</i>	9	7	-
	White shark	<i>Carcharodon carcharias</i>	9	2	-
	Grey nurse shark	<i>Carcharias taurus</i>	12	3	-
	Seahorses, seadragons & pipefish	Family Syngnathidae	28	45	-
<b>Reptiles</b>	Crocodile (unspecified)	<i>Crocodylus</i> spp.	8	2	-
	Freshwater crocodile	<i>Crocodylus johnstoni</i>	6	4	-
	Freshwater turtle (unspecified)		9	10	-
	Sea snake (unspecified)		2174	255	-
	Turtle (unspecified)		37	-	-
	Green turtle	<i>Chelonia mydas</i>	12	-	-
	Loggerhead turtle	<i>Caretta caretta</i>	8	-	-
	Olive Ridley turtle	<i>Lepidochelys olivacea</i>	1	-	-
<b>Mammals</b>	Bottlenose dolphin	<i>Tursiops</i> spp.	2	16	-
	Australian sea lion	<i>Neophoca cinerea</i>	2	-	-
	<b>Total all species</b>		<b>2534</b>	<b>378</b>	<b>-</b>

1. *Reports by other sources (eg. members of public and Departments of Fisheries and Parks and Wildlife officers) of whale entanglements in fishing gear, dead seabirds that have washed ashore, etc. are usually not attributable to particular fishers, fisheries, dates or locations. Although these interactions are reported in Annual Reports to Parliament and elsewhere, they are inconsistent with the more-detailed information in statutory fishing records presented here and therefore not included.*
2. *e.g. shark sightings by abalone divers, dugong interactions with trap fisheries, etc.*
3. *Except those listed as Totally Protected Fish in reference to their sex, size, weight, reproductive cycle, area from which they are taken or specific period of time.*
4. *For example, unless listed under Schedule 5 of the WCA, these include: listed migratory species under the EPBC Act and international agreements: the Convention on the Conservation of Migratory Species of Wild Animals 1979 (CMS; Bonn Convention); the Agreement between the Government of Australia and the Government of Japan for the Protection of Migratory Birds in Danger of Extinction and their Environment, 1974; the Agreement between the Government of Australia and the Government of the People's Republic of China for the Protection of Migratory Birds and their Environment, 1986; the Agreement between the Government of Australia and the Government of the Republic of Korea on the Protection of Migratory Birds, 2007; the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES); for which special conditions may also apply.*

