

APPENDIX 1: STOCK EXPLOITATION STATUS AND CATCH PROJECTIONS FOR MAJOR COMMERCIAL FISHERIES (APPENDIX 9 FROM ANNUAL REPORT 1998/99)

Fishery	Stock assessment complete	Exploitation status	Breeding stock levels	Previous catch projections (tonnes)	*Catch (tonnes) current season	Year	Catch or effort projection next season (tonnes)	Year	Comments current season catch
INVERTEBRATES									
Western rock lobster	Yes	Fully exploited	Increasing	10,000-11,000	10,463	97/98	13,000-14,000	98/99	The average catch achieved in 1998/99 was predicted from puerulus settlement three and four years previously. The breeding stock levels have improved significantly.
Esperance rock lobster	Yes	Fully exploited	Adequate	40-70	82	97/98	50-80	98/99	Catch figures and projections include the fishery's three management zones: Esperance, GAB and Albany.
Shark Bay prawn	Yes	Fully exploited	Adequate	1,155-2,063	2,185	98	1,611-2,183	99	Increased catches of king prawns may be due to variations in environmental conditions or increasing effective fishing effort.
Exmouth prawn	Yes	Fully exploited	King prawn adequate; Tiger prawn below optimum	771-1,276	1,058	98	771-1,276	99	Tiger prawn recruitment levels are responding to rebuilding measures.
Onslow prawn	No	NA	NA	30-265	61	98	61-132	99	Low summer rainfall decreased banana prawn catches.
Nickol Bay prawn	No	NA	NA	Banana prawn 10-100	89	98	Banana prawn 150-250	99	Low summer rainfall decreased banana prawn catches (rainfall relationship used to improve catch forecast).
Broome prawn	Yes	Fully exploited	Adequate	King prawn 35-140	King prawn 164	98	King prawn 36-164	99	Fishing season now extended and matched to lunar-phase-driven recruitment patterns in order to achieve the best catch rates.
Kimberley prawn	No	NA	NA	230-590	436	98	278-576	99	Higher than normal rainfall improved catches of banana prawns.
South-west trawl	NA	NA	NA	Not available	Prawns 18 Scallops 1.3	98	Not available	99	Prawn catch is mainly king prawns. Scallop catch given in meat weight.
Abalone Zone 1 (greenlip/brownlip)	Yes	Fully exploited	Adequate	108.75 (Q) (540-635 days)	100.44 (669 days)	98	108.75 (Q) (540-670 days)	99	Increased number of days to take quota may be evidence of a decline which needs to be monitored.
Abalone Zone 2 (greenlip/brownlip)	Yes	Fully exploited	Adequate	110 (Q) (650-850 days)	108.6 (658 days)	98	110 (Q) (650-850 days)	99	Stocks appear to be in good shape.
Roe's abalone	Yes	Fully exploited	Adequate	120 (Q) (750-1,100 days)	116 (789 days)	97/98	108 (Q Z3) 18 (Q Z1/2) (750-950 days Z3)	99/2000	Reported catch is for Oct 97-Sep 98. Catch projection is for Apr 99 to Mar 2000 as quota period has been aligned with Zones 1 and 2.
Shark Bay scallop	Yes	Fully exploited	Adequate	180-250	252	98	210-440	99	Annual variations in recruitment seem to be correlated inversely with the strength of the Leeuwin Current. Catch given in meat weight.
Abrolhos Islands & Mid-West trawl	No	Fully exploited	Adequate	90-150	42	98	80-120	99	Recruitment is dependent on environmental conditions each year. Catch given in meat weight.
AQUACULTURE									
Pearl oyster	Yes	Fully exploited	Increasing	572,000 oysters ¹ (Q) (total) (15,000-19,000 dive hours Zone 2)	565,322 oysters (total) (13,0352 dive hours Zone 2)	98	572,000 oysters ¹ (Q) (18,000-25,000 ² dive hours total)	99	1998 catch was close to the quota, with dive time in Zone 2 less than expected.

* Catch figures supplied for latest year available.

NA = No assessment.

Q = Quota management.

1 Pearl catch quota is in individual oysters.

2 A typographical error appeared in these figures in the identical table presented in the Fisheries WA Annual Report. These are the corrected figures.

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FINFISH									
Pilbara trawl	Yes#	Some species over exploited	Inadequate for red emperor in the west	2,300-2,700	2,512	98	2,300-2,600	99	Assessment only includes major species. 33% effort reduction in 1998.
Pilbara demersal trap & line	No	Fully exploited	Limited data	Not available	328	98	Not available	99	Low level of effort continuing.
Northern demersal	No	Fully exploited	Limited data	650	544	98	600-1,000	99	Low catch due to reduced effort.
Kimberley gillnet & barramundi	Yes#	Fully exploited#	Adequate#	28-47 (barramundi)	32 (barramundi)	97/98	25-40 (barramundi)	98/99	Barramundi catch only.
Shark Bay snapper	Yes	Fully exploited	Adequate	500-550 (Q)	567	98	550 (Q)	99	Improved markets in 1997 and 1998 led to higher than average catches.
WA salmon	Yes	Fully exploited	Adequate	1,700-5,000	2,801	98	1,800-4,900	99	Environmental factors (Leeuwin Current) influence recruitment and catch levels.
Australian herring trap	No	Fully exploited	Adequate	520-1,550	651	98	430-1,220	99	Low catch apparently due to unusual environmental impacts.
Southern demersal gillnet & longline	Yes#	Fully or over exploited	Stable	800-1,000	911	97/98	800-950	98/99	Management measures designed to reduce catch to improve breeding stocks are being progressively implemented.
West coast demersal gillnet & longline	Yes#	Fully or over exploited	Stable	350-450	477	97/98	350-450	98/99	Management measures designed to reduce catch to improve breeding stocks are being progressively implemented.
Cockburn Sound	NA	NA	Not appropriate	49-125	60	98	38-92	99	Finfish only (excludes bait fish).
Shark Bay beach seine & mesh net	Yes#	Fully exploited#	Adequate#	90-140 (whiting)	115 (whiting)	98	95-140 (whiting)	99	Whiting catch only.
Estuarine fisheries (west coast)	Yes#	Fully or over exploited	Not appropriate	Not available	490	98	Not available	99	Excludes Hardy Inlet. Includes fish and crustaceans.
Estuarine fisheries (south coast)	Yes#	Fully exploited	Not appropriate	280-480	365	98	220-480	99	Includes fish, molluscs and crustaceans.
Albany/King George Sound purse seine	Yes	Fully or over exploited	Decreasing (low)	3030 (Q) (2005-2215 boat days)	2085 (1565 boat days)	98	NA	99	These fisheries have been impacted by an exotic virus and stock levels reduced. Quotas set for 1999 are to be reviewed.
Bremer Bay purse seine	Yes	Fully exploited	Adequate	2250 (Q) (1060-1172 boat days)	2163 (1006 boat days)	98	NA	99	As for above.
Esperance purse seine	Yes	Under exploited	Adequate	1330 (Q) (490-600 boat days)	685 (543 boat days)	98	NA	99	As for above.
West coast purse seine	Yes	Fully exploited	Adequate	2000-3000	1832	98	NA	99	Catch of pilchards low due to stock availability in 1998. Virus impact makes projections for 1999 inappropriate.
Lake Argyle catfish	Yes	Fully exploited	Decreasing	101-138	141	97/98	102-142	98/99	

* Catch figures supplied for latest year available.

For key species only.

NA = No assessment.

Q = Quota management.