

**Scallop Figure 1** Annual scallop landings by fleet for the Shark Bay Scallop Managed Fishery, 1983–1998.

## Other Scallop Fisheries

### MANAGEMENT OVERVIEW

Several smaller fisheries also contribute to Western Australia’s scallop catch, primarily the Abrolhos Islands and Mid-West Trawl Managed Fishery and the South-West Trawl Managed Fishery (Fremantle-Geographe Bay). Scallop landings also result from a small amount of trawl activity that takes place off the south coast.

Each fishery takes saucer scallops (*Amusium balloti*) by otter trawling and, as is the case with the Shark Bay Scallop Managed Fishery, recruitment is highly variable and catch in these fisheries varies greatly from year to year.

All scallop fisheries operate under input controls, with restrictions on boat numbers, gear restrictions and restrictions on times and areas of fishing.

### COMPLIANCE AND COMMUNITY EDUCATION OVERVIEW

**Abrolhos Islands:** There were no significant compliance issues during the 1999 Abrolhos scallop season. Vessels operated for the first four weeks of the season.

**South-West Trawl:** Compliance monitoring of this fishery was conducted in the Mandurah district and in Geographe Bay. No infringements were detected.

## RESEARCH OVERVIEW

Research monitoring of the scallop stocks in each fishery is undertaken utilising fishers’ monthly return data, and an industry-based pre-season survey in the case of the Abrolhos sector.

Advice on the status of stocks and season opening and closing dates is provided to industry advisory bodies.

The following status reports summarise the research findings for these smaller scallop fisheries.

### Abrolhos Islands and Mid-West Trawl Managed Fishery Status Report

**Main Features**

**Stock assessment complete:**  
*Not assessed*

**Exploitation status:**  
*Fully exploited*

**Breeding stock levels:**  
*Adequate*

**Previous catch projections for year 1998:**  
*90-150 tonnes (meat weight) based on October 1997 survey*

**Catch current season (1998):**  
*42 tonnes (meat weight)*

*continued over*

**Estimated annual value (to fishers) for year 1998:***\$0.9 million***Catch projection next year (1999):***Based on October 1998 survey, 80-120 tonnes (meat weight)***Recreational component:***Not applicable***Boundaries and Access**

The boundaries of this fishery are *'all the waters of the Indian Ocean adjacent to Western Australia between 27°51' south latitude and 29°03' south latitude on the landward side of the 200 m isobath'*.

There are 17 vessels licensed to fish for scallops in this limited entry fishery. The permitted fishing area opened on 7 April and was closed on 30 June 1998.

The Port Gregory trawl fishery operates as part of the Abrolhos Islands and Mid-West Trawl Managed Fishery (AIMWTMF). The permitted fishing area opened on 1 March for prawns and 7 April for scallops, and was closed on 31 October 1998.

**Annual Production****Main fishing method**

Otter trawl.

**Landings**

The total landings for the 1998 season were 42 tonnes meat weight (or 210 tonnes whole weight) (Other Scallop Figure 1).

**Fishing effort**

A total of 1,600 trawl hours or 179 fishing days, derived from logbook data, were recorded for the 1998 season.

**Catch rate**

30.7 kg (meat weight)/hour.

**Stock Assessment**

As with the Shark Bay scallop fishery, this fishery is highly variable, being dependent on sporadic recruitment which is strongly influenced by environmental conditions, e.g. the Leeuwin Current. A pre-season survey has occurred in the last two seasons and is planned to continue. More detailed assessments are not undertaken.

**Breeding Stock Levels**

The annual fishing season is managed so that the majority of the mature scallops are able to spawn before fishing occurs. Breeding stocks are therefore adequate, and recruitment is dependent only on environmental conditions each year.

**Catch Projection for Year 1999**

Under current effort levels, the catch projection for the 1999 season is 9-527 tonnes (meat weight), based on the five-year range. Using the October 1998 survey data, however, the catch range is likely to be 80-120 tonnes (meat weight).

**Product Value for Year 1998**

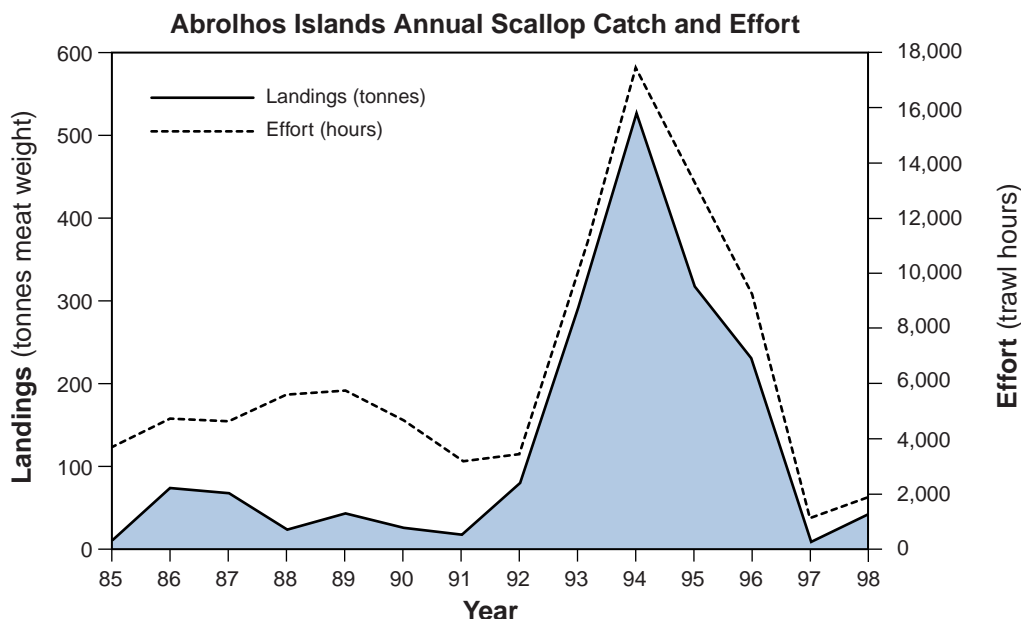
The estimated value of the catch has been based on the average wholesale price per kilogram obtained in the Shark Bay fishery, that is \$4.40/kg (whole weight) or \$22/kg (meat weight).

The estimated value of the AIMWTMF for 1998 was \$0.9 million.

**General Comments**

During October 1998, a research survey was carried out on board a commercial fishing vessel. The purpose of the survey was to gauge scallop recruitment so that industry might organise their fishing operations for the 1999 season. It is anticipated that this survey will continue around this period each year and form the basis of a stock assessment and forthcoming season catch projection for this fishery.

The catch of king prawns from the Port Gregory area is minor and regarded as an incidental catch of the AIMWTMF. There is no stock assessment or catch projection for this portion of the AIMWTMF.



**Other Scallop Figure 1** Annual scallop landings for the Abrolhos Islands and Mid-West Trawl Managed Fishery, 1985-1998.

### South-West Trawl Managed Fishery Status Report

#### Main Features

**Stock assessment complete:**

Not assessed

**Exploitation status:**

Not assessed

**Breeding stock levels:**

Not assessed

**Previous catch projections for year 1998:**

No previous catch projections made

**Catch current season (1998):**

Prawns 18 tonnes

Scallops 1.3 tonnes (meat weight)

**Estimated annual value (to fishers) for year 1998:**

Prawns \$0.3 million

Scallops \$28,600

**Catch projection next year (1999):**

Not available

**Recreational component:**

Not applicable

#### Boundaries and Access

The boundaries of this fishery are ‘all the waters of the Indian Ocean adjacent to Western Australia between 31°43’27” south latitude and 115°08’ east longitude where it intersects the high water mark at Cape Leeuwin, and on the landward side of the 200 m isobath’.

The area is further divided into four management zones, with a limited number of operators (indicated in brackets) permitted access to fish within each zone as follows:

- Zone A from 31°43’27” S to 32°16’ S (3 vessels);
- Zone B from 32°16’ S to 115°08’ E (12 vessels);
- Zone C north-east of Cape Naturaliste (4 vessels);
- Zone D Comet Bay off Mandurah (3 vessels).

A total of 14 vessels are licensed to operate in this fishery, some in more than one zone. Zone A, B and D vessels may fish all year round. Seasonal access to Zone C occurs between 1 July and 30 September.

## Annual Production

### Main fishing method

Otter trawl.

### Landings

Prawns 18 tonnes.

Scallops 1.3 tonnes meat weight (or 6.5 tonnes whole weight).

### Fishing effort

Not assessed.

### Catch rate

Not available.

## Stock Assessment

Not assessed.

## Breeding Stock Levels

Not assessed.

## Catch Projection for Year 1999

Not available.

## Product Value for Year 1998

*Prawns:* Wholesale prices for prawns vary depending on the type of product and the market forces operating at any one time. Generally, prices for king prawns averaged \$14.50/kg.

*Scallops:* The estimated value of the catch has been based on the average wholesale price per kilogram obtained in the Shark Bay fishery, that is \$4.40/kg (whole weight) or \$22/kg (meat weight).

## General Comments

The level of fishing activity and quantity of catch within the South-West Trawl Managed Fishery is variable. This variability has largely been driven by the level of scallop recruitment to these grounds and also the product price paid to fishers. Owing to a significant latent fishing effort, there is a need to continue to monitor catch and effort within this fishery. Effort levels can only be assessed, however, by the number of days fished, which is derived from the CAESS records. This catch and effort data cannot be used to assess the stock, but does provide a source of information from which management decisions for this fishery can be made.

## West Coast Blue Swimmer Crab Stocks

### MANAGEMENT OVERVIEW

Blue swimmer crabs, which comprise the major proportion of inshore crab catches in Western Australia, are found along the entire coast of the State. These crab stocks are managed under specific legislated arrangements in Cockburn and Warnbro Sounds, and in the south and lower west coast estuaries. Blue crabs are also taken by licensed fishing vessels in Exmouth Gulf and Shark Bay, off Mandurah, and in Geographe Bay, under a variety of management measures under the *Fish Resources Management Act 1994*.

Crabs are targeted by a variety of fishing gear. Predominantly, crabs taken by commercial fishers are captured by either crab traps or drop nets. In fisheries such as the Exmouth Gulf Prawn and the Shark Bay Prawn and Scallop Managed Fisheries, trawl-caught crabs account for a significant proportion of the crab catch. Recreational fishers may take blue swimmer crabs by hand, non-piercing wire hook, wire scoop net and drop net.

The total annual commercial catch of crabs is continually monitored through information provided on monthly catch and effort returns. Data on recreational crab catches are collected through creel surveys conducted in response to funding availability and relative priorities. During 1998/99, competition for access to blue swimmer crabs in south-west estuaries and south-west oceanic waters continued to be a source of contention both between and within the commercial and recreational sectors.

The Inshore Crab Review process, commenced in 1996, continued throughout 1998/99. Two further discussion papers were released during the year, one addressing (specifically) a proposal for the management of inshore crab fishing in Geographe Bay, and the other containing recommendations for the future management of inshore crab fishing across the State.

Comprehensive advice and recommendations relating to the three-year review will be submitted to the Minister in 1999/2000, addressing crab fishing issues in estuarine and ocean waters. In the meantime, the review has resulted in interim arrangements being introduced for Geographe Bay and Shark Bay.

*Geographe Bay:* As a result of the consultation process, interim management arrangements for commercial crab fishing in Geographe Bay (statistical fishing block no. 96010) were introduced in June 1999.