

Wetline Fishing

The catch and effort statistics (CAES) database indicates that over half (54%) of the wetline catch in 2003/04 was reported from the west coast bioregion, which includes the waters of the populous lower west coast and the Arolhos Islands. Because wetline fishing by commercial vessels in this bioregion is moving towards managed fishery status, there is considerable overlap between this wetline report and the demersal scalefish report above. Nevertheless, full wetline statistics are given here for completeness and for comparison with the other marine bioregions.

The top 12 species comprised pink snapper (*Pagrus auratus*) 322 t, West Australian dhufish (*Glaucosoma hebraicum*) 209 t, whitebait (*Hyperlophus vittatus*) 157 t, sweetlip emperor (*Lethrinus miniatus*) 124 t, nor-west snapper (*Lethrinidae*) 79 t, wobbegong (*Orectolobus* spp.) 68 t,

samson fish (*Seriola hippos*) 65 t, redfish (*Centroberyx* spp.*) 65 t, Australian herring (*Arripis geogianus*) 46 t, baldchin groper (*Choreodon rubesens*) 38 t, sea mullet (*Mugil cephalus*) 33 t and copper shark (*Carcharhinus brachyurus*) 22 t. It is interesting to note the continued prominence of wobbegong shark, and deeper-water species such as sweetlip emperor and redfish, in the wetline catch.

These catches of dhufish, pink snapper and emperor are the main product of the demersal scalefish operations reported above, noting that catches of emperors are mostly from the Arolhos Islands. Whitebait, Australian herring and sea mullet comprise most of the catch of the beach bait fishers who operate between Tim's Thicket and Augusta (see pp. 48-50).

* Expected to be Bight redfish (*C. gerrardi*).

RECREATIONAL FISHERIES

Regional Research Overview

The west coast bioregion continues to be the state's most significant recreational fishing area. During 2004/05, 85% of recreational fishers reported fishing in this region, generating an estimated 5.5 million fishing days (Baharthah 2005).

Scientific information to underpin recreational fisheries management in this bioregion is provided by dedicated research projects on specifically licensed high-value species (rock lobster and abalone), and research based on commercial fisheries in the finfish sector.

In addition, the estuarine and beach species have been the focus of a number of extensive studies, some undertaken by Department of Fisheries researchers and others in collaboration with postgraduate students, mainly of Murdoch University. These studies have provided biological data on herring, whiting (including King George whiting), blue swimmer crabs, prawns, tailor, cobbler, black bream and other minor species. For west coast offshore boat angling species – whiting (other than King George whiting), wrasse and groper (various species), Western Australian dhufish and snapper – some biological data is also available from previous Department of Fisheries studies based on the commercial fisheries, and from collaborative postgraduate research projects.

Estimates of abundance for most of these recreational species are also provided by statistical information from commercial fishing recorded in the long-run CAES database. To estimate total recreational catch and recreational/commercial catch shares in order to assess the overall status of these stocks, recreational creel survey data is required. Historically, there have been two surveys, one targeting herring in the 1970s and another which assessed beach angling for the lower west coast (Perth to Cape Leeuwin) (Ayvazian et al. 1997).

The most recent survey of recreational boat-based fishing from Augusta to Kalbarri was completed in 1997 (Sumner

and Williamson 1999). The main marine species caught by boat-based fishers were (in order of number caught) whiting species (*Sillaginidae*) other than King George whiting 564,000, Australian herring (*Arripis georgianus*) 425,000, blue swimmer crabs (*Portunus pelagicus*) 255,000, skipjack trevally (*Pseudocaranx dentex*) 123,000, King George whiting (*Sillaginodes punctata*) 94,000, squid 88,000, southern sea garfish (*Hyporhamphus melanochir*) 79,000, various species of wrasse and groper 66,000, and West Australian dhufish (*Glaucosoma hebraicum*) 29,000. The size of the recreational catch for many of these species was of a similar magnitude to the commercial catch. A repeat of the 1997 west coast recreational boat survey is programmed for 2005/06, and will provide comparative data for management purposes.

Surveys have been completed of recreational fishing in the Leschenault Estuary (Malseed et al. 2000), and in the Swan/Canning and Peel/Harvey Estuaries where the main focus was on the recreational catch of blue swimmer crabs (Sumner et al. 2000). Annual surveys of recreational rock lobster fishers are also undertaken, as reported by Melville-Smith and Anderton (2000). These combined surveys indicate that blue swimmer crabs and rock lobsters are the most commonly taken recreational species in this bioregion, followed by the finfish species reported by Sumner and Williamson (1999). These survey-based data, integrated with the long-run data sets from the commercial CAES database, provide the core information necessary for management of the most important recreational fish stocks in future.

An FRDC-funded survey to examine changing recreational shares of crab catches in Cockburn Sound and Geographe Bay following management changes has been completed and has provided data (Sumner and Malseed 2004) to underpin management of these important recreationally fished stocks.