

**RECREATIONAL FISHING AND BOATING
IN THE BLACKWOOD ESTUARY,
WESTERN AUSTRALIA**

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Bachelor of Science (Honours) Marine Science

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ABSTRACT

The Blackwood Estuary, located in southwestern Australia, is a popular location for water-based recreational activities. In this study, the spatial and temporal distribution of boating usage was determined and detailed questionnaires covering demographic, socio-economic and fishing-related information were conducted with 131 boat-based and 102 shore-based recreational anglers over 40 days in the estuary in 2005.

In total, 958 boats were counted, of which 30% were fishing. Recreational boating occurred throughout the estuary, although each of the particular activities such as fishing, crabbing, waterskiing, picnicking and paddling had unique spatial distributions. Peak usage of the estuary occurred in summer and autumn, and was higher throughout the year on weekends and public holidays than weekdays.

Most angling parties comprised two or more people and 77% of anglers were male. Anglers originated from Augusta (13%), Bunbury (9%), Margaret River (8%), Mandurah (6%), and Busselton (5%), with half of the visiting anglers staying overnight in local caravan parks. Residents of Augusta were the most frequent anglers in the Blackwood Estuary, however, a large component of interviewees were infrequent visitors to the region with 24% having <1 year fishing experience in the estuary.

The main target species were Sillaginidae (combined 45%), *Acanthopagrus butcheri* (23%) and unspecified taxa (22%). *Sillago schomburgkii* (58%) and *Arripis georgiana* (17%) dominated the retained catch. Catch per unit effort was considerably lower than historical data from the estuary. Particular nodes of fishing activity were found near the estuary mouth, the town of Augusta, the Hardy Inlet basin and Molloy Island, while temporal patterns were similar to those of boating activity, except in summer, when there was a marked decrease in the afternoon because of the sea breeze.

Despite high support for biodiversity conservation sanctuaries and fisheries management measures, knowledge of recreational fishing regulations was not sound. Non-compliance with minimum size limits, largely due to species misidentification, is an issue management authorities need to address.