



April last year, teams led by Dr Garrey Maxwell and Mr Peter Brown, of the CSIRO Division of Fisheries and Oceanography, studied the fishing potential of the western half of the Bight. The information they acquired provides baseline data against which scientists will be able to measure changes produced by future fishing.

During the study, the teams completed more than 100 trawls in the Division's chartered fishing vessel *Courageous*. The area covered extended from the coast to the 350-metre-depth contour line, and from longitude 124°E at the western end of the Bight to longitude 129°E, the line of the South Australian - Western Australian border.

They found the greatest concentrations of commercial fish species along the edge of the continental shelf, where it begins to drop away from a depth of about 100 m. Conditions for trawling were also best in these deeper areas; snagging of nets on the bottom showed up as a serious problem in some areas closer to shore.

Of the important commercial species, the

jackass fish, knife jaw, red snapper and ruby fish were all found mainly near the 200-m contour line. Some others, notably the blue morwong and Chinaman leatherjacket, were found both there and in shallower water. But the specimens caught in the deeper water were generally the largest, indicating that the fish tend to move outward over the shelf as they grow older.

If trawling takes place only in the deeper locations, juvenile populations of those species will not be affected and should continue to replenish the shelf-edge stocks. The scientists expect that seasonal migration would also tend to replenish stocks of some species.

The areas where the main concentrations of commercially valuable species were found make up only 5% or less of the 500 000-sq-km area surveyed. The map shows their approximate locations. The scientists expect that good trawling grounds further east in the Bight will prove to be restricted to the edge of the continental shelf, as they are in the western portion surveyed in this study.

CSIRO investigation of the demersal fish community of the western Great Australian Bight. J. G. H. Maxwell and P. A. Brown. *Australian Fisheries*, 1978, 37, 2-9.

Fishing the Bight

Around the Great Australian Bight, the continental shelf extends 100-200 km from the shore, making a vast area accessible to trawling along the ocean bottom. So far, the fish of the Bight have not been

subjected to heavy commercial exploitation. However, this situation may change as a result of a new venture that has brought three large and well-equipped vessels to the area.

Between February and