

Northern Shark Fisheries Status Report

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FISHERY DESCRIPTION

The 'northern shark fisheries' comprise the state-managed WA North Coast Shark Fishery (WANCSF) in the Pilbara and western Kimberley, and the Joint Authority Northern Shark Fishery (JANSF) in the eastern Kimberley. The primary method employed in these fisheries is demersal longline with a relatively small amount of pelagic gillnetting in the JANSF. The northern shark fisheries target a variety of species including sandbar, blacktip, tiger and lemon sharks. As the principal method and some target species are common to the WANCSF and JANSF, these data have been combined and the two regions are considered as a single fishery for reporting purposes.

Governing legislation/fishing authority
Fisheries Notice no. 476 (Section 43 Order)
Fisheries Notice no. 602 (Section 43 Order)
Fisheries Notice no. 601 (Section 43 Order)
Offshore Constitutional Settlement 1995
Condition 127 on a Fishing Boat Licence

Consultation process
WA Demersal Net and Hook Fisheries Management
Advisory Committee
Department–industry meetings

Boundaries
The WANCSF extends from longitude 114°06' E (North West Cape) to 123°45' E (Koolan Island), and the JANSF from longitude 123°45' E to the WA/NT border.

Management arrangements
The northern shark fisheries are input-controlled, with limited numbers of operators authorised to fish in each fishery.

The Western Australian-controlled sector of the northern shark fishery is managed by orders under Section 43 of the *Fish Resources Management Act 1994*. Those permitted to fish in the WANCSF with shark gear do so under a fishing boat licence condition and are permitted to use longlines with metal traces and powered hauling gear.

The commercial take of shark in Western Australian waters east of 123°45' E longitude is controlled by a joint authority arrangement between the Australian Government and the State of Western Australia, which was gazetted in February 1995. Under this arrangement, the state was given control of the JANSF on behalf of the WA Fisheries Joint Authority, whose members include the state and Australian Ministers

for Fisheries. Permitted fishing methods are longlines and gillnets, though gillnet fishing is not permitted within 12 nautical miles of the coast.

There are 14 licences in the northern shark fisheries, 9 allowing access to the WANCSF and 5 to the JANSF. However, not all of these are fished full-time and there is therefore considerable scope for mobilisation of latent effort under the existing management arrangements. There are currently no limits on the amount of gear these licences can use or on the amount of time they can fish. New management arrangements for the WANCSF and JANSF will be developed in 2004/05 (see 'New management initiatives' below) which, once implemented, will greatly reduce the level of access to these fisheries. The new management arrangements will also rectify existing legislative inadequacies and are expected to prevent increased shark fishing effort on the north coast outside of the managed shark fisheries.

Research summary

Research to monitor the status of northern shark stocks was initiated as an extension of the south and west coast shark research project. A three-year research project funded by the FRDC has provided an age-structured demographic assessment of the status of the fisheries' principal target species, the sandbar (thickskin) shark. Data collected from the northern shark fisheries during this project have also provided an improved understanding of the fisheries and of northern shark stocks generally. Additional information on these fisheries and those which take sharks as bycatch on the north coast was collected during a series of Department of Environment and Heritage and FRDC-funded research projects, beginning in 1999, to examine the sustainability of Australia's tropical sharks and rays. Results from these projects have further improved our understanding of the impacts of the various fishing sectors that exploit elasmobranchs across the northern half of Australia. This work involves shark researchers from the Department of Fisheries, CSIRO, and the Northern Territory and Queensland fisheries agencies. Phase 2 of the latest FRDC-funded component is scheduled for completion in June 2005.

This status report is prepared based on research data from these projects, CAES data supplied by industry and additional knowledge of tropical shark stocks obtained from the scientific literature. CAES data from the northern shark fisheries are available from 1994/95, although the reliability of early records is uncertain due to species identification and related issues. Since July 2000, catch identification and reporting in the northern fisheries has been validated by at-sea observation of catches and voluntary research logbooks.

Future research will involve monitoring the catch and effort of the northern shark fisheries and will also need to focus on the biology of secondary target species.