

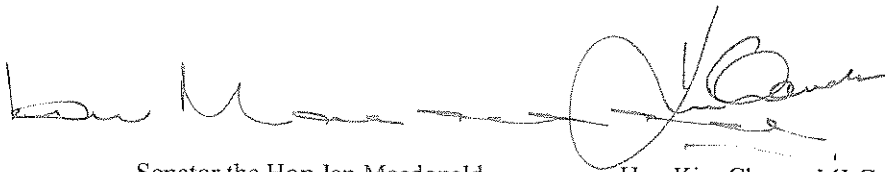
FISHERIES MANAGEMENT ACT 1991

FISH RESOURCES MANAGEMENT ACT 1994

**ANNUAL REPORT FROM THE WESTERN
AUSTRALIAN
FISHERIES JOINT AUTHORITY
1 JULY 2000 TO 30 JUNE 2001**

Presented to the Commonwealth Parliament pursuant to section 70 of the *Fisheries Management Act 1991*.

Presented to the Western Australian Parliament pursuant to section 21 of the *Fish Resources Management Act 1994*.

The image shows two handwritten signatures in black ink. The signature on the left is for Senator Ian Macdonald, and the signature on the right is for Hon Kim Chance MLC. The signatures are written in a cursive, flowing style.

Senator the Hon Ian Macdonald
COMMONWEALTH
MINISTER FOR FISHERIES,
FORESTRY AND
CONSERVATION

Hon Kim Chance MLC
MINISTER FOR AGRICULTURE,
FORESTRY AND FISHERIES

1. INTRODUCTION

This is the fourteenth report of the Western Australian Fisheries Joint Authority (WAFJA).

The WAFJA was established under provisions of the *Fisheries Act 1952* (now replaced by the *Fisheries Management Act 1991*) and the *Western Australian Fisheries Act 1905* (now replaced by the *Fish Resources Management Act 1994*).

In accordance with Offshore Constitutional Settlement Arrangements (OCS) of 1988, the WAFJA has been responsible for the management of the Joint Authority Southern Demersal Gillnet and Demersal Longline Managed Fishery (JASDGLMF) in waters south of 33° south latitude to the South Australian border (see Appendix 1).

Following the 1995 OCS agreement, the WAFJA was also given responsibility for the management of the Joint Authority Northern Shark Fishery (JANSF), which includes waters of the Australian Fishing Zone north of 17° south latitude, between 123°45' east longitude and the Northern Territory border (129° east longitude) (Appendix 2).

Routine administration of fisheries under WAFJA jurisdiction is carried out by the WA Department of Fisheries and the Australian Fisheries Management Authority (AFMA) under Western Australian fisheries law.

This report details the activities of the WAFJA in managing the above two fisheries and the condition of the fisheries under WAFJA jurisdiction during the period 1 July 2000 to 30 June 2001.

The contact officer for enquiries about this report is Mr Peter Millington, Director Fisheries Management Services, Fisheries WA, 3rd Floor SGIO Atrium, 168 St Georges Tce, Perth, WA, 6000.

2. MEMBERSHIP OF THE WAFJA

The members of the WAFJA during the reporting period were: -

For the period 1 July 2000 to 30 June 2001

Hon Warren Truss MP

Commonwealth Minister for Agriculture, Fisheries and Forestry

For the period 1 July 2000 to 15 February 2001

Hon Monty House JP, MLA

Western Australian Minister for Primary Industry, Fisheries

For the period 16 February 2001 to 30 June 2001

Hon Kim Chance MLC

Western Australian Minister for Agriculture, Forestry and Fisheries

3. RELEVANT LEGISLATION OF THE JOINT AUTHORITY

Sections 61-70 of the *Fisheries Management Act 1991* set out the establishment, functions, administration and reporting requirements of the Joint Authority.

Sections 15-21 and sections 24-28 of the Western Australian *Fish Resources Management Act 1994* sets out complementary State legislation relating to the establishment, functions, administration and reporting requirements of the Joint Authority.

There is a delegation of powers in existence, which is relevant to the WAFJA. In 1995, Mr David Beddall, Minister for Resources, delegated the powers pursuant to section 25 of the *Fish Resources Management Act 1994* to the State Minister for Fisheries and the Executive Director of the WA Department of Fisheries, as relevant.

4. WESTERN AUSTRALIAN LEGISLATION RELEVANT TO FISHERIES UNDER WAFJA JURISDICTION

In an attempt to prevent increased targeting of sharks purely for the value of their fins and due to the widespread public opposition to the practice, at sea finning and discarding of trunks was prohibited in all Western Australian waters in October 2000. All Western Australian licensed fishers are now obliged under the *Fish Resources Management Regulations 1995* to either land whole sharks, with fins attached or to land an equal number of shark trunks and sets of fins.

The *Net Hauling Restriction Notice 1991* was gazetted in April 1991. This Notice prevents those persons not endorsed from using any powered device for hauling a fishing net in the waters of the Indian Ocean, Southern Ocean and the Timor Sea.

Specific subsidiary legislation relating to the management of the JASDGDLMF and the JANSF are detailed in parts 8(f) and 9(f) of this report.

5. MEETINGS AND ACTIVITIES

The WAFJA usually holds one formal meeting per year, which is convened around the time of the annual Northern Australia Fisheries Management Workshop. However, no formal meeting of the WAFJA took place between 1 July 2000 and 30 June 2001. A meeting of the WAFJA was held in June 2000, prior to this reporting period.

6. STAFFING

The WA Department of Fisheries provides management, research and compliance staff to service the needs of the WAFJA and the fisheries for which it is responsible.

7. ADVISORY COMMITTEES

The State Minister for Fisheries appoints members to the Western Australian Demersal Gillnet and Demersal Longline Fisheries Management Advisory Committee

(‘the MAC’) on behalf of the WAFJA to advise on issues relating to the management of the JASDGDMF. Membership of this committee as at 30 June 2001 was as follows-

Mr T McNeil	Chairman	Independent
Mr T Adams	Member	Commercial Fisherman
Mr K Benson	Member	Commercial Fisherman
Mr P Dyer	Member	Commercial Fisherman
Mr N Soulos	Member	Commercial Fisherman
Mr G Campbell	Member	Commercial Fisherman
Mr J Smythe	Member	Commercial Fisherman
Mr B McCarthy	Member	Recreational Fisherman
Mr R Gould	Member	Fisheries Western Australia (Executive Director’s nominee)
Ms M Sasche	Observer	Australian Fisheries Management Authority

At this time, the small size of the JANSF, both in terms of area and the number of participants, does not warrant the establishment of a dedicated management advisory committee. However, the Minister may decide in the future to invite a licensee from the northern shark fisheries to become a member of the MAC.

The MAC met on two occasions during the 2000-2001 period. Advice and recommendations arising from those meetings was provided by the Chairman of the MAC, who reports to the State Minister for Fisheries, in his capacity as a member of the WAFJA.

AFMA provides a permanent observer to the MAC and the person filling that position receives all MAC minutes and recommendations. The Joint Authority must agree to any proposed management policy that may result in changes to State subsidiary legislation and that decision must be recorded by the Joint Authority prior to the management policy being enacted in State law.

No changes to the subsidiary legislation that manages the JASDGDMF and the JANSF occurred during this reporting period.

8. JOINT AUTHORITY SOUTHERN DEMERSAL GILLNET AND DEMERSAL LONGLINE MANAGED FISHERY

(a) BACKGROUND

Licensees using demersal gillnets and demersal longlines in the JASDGDMF mainly target three species of shark, although other sharks and a variety of scalefish species are also taken. The current management plan for the JASDGDMF is referred to as the *Joint Authority Southern Demersal Gillnet and Demersal Longline Management Plan 1992*.

The OCS arrangements for the JASDGLMF covers the take of sharks, rays and bony fish by “demersal gillnets and all other lines” (demersal longlines) from 33° south latitude to the WA/SA border and to the limit of the Australian Fishing Zone. Refer to Figure 1.

There are two main management zones within the JASDGLMF:

- | | |
|--------|---|
| Zone 1 | western zone - south of 33° south latitude to 116 30' east longitude; and |
| Zone 2 | eastern zone - east of 116 30' east longitude to the WA/SA border. |

The fishing season runs from 1 June to 31 May.

(b) ECOLOGICALLY SUSTAINABLE DEVELOPMENT OBJECTIVES

As the relevant OCS arrangements provide for the JASDGLMF to be managed under State law, it is managed in accordance with the objectives of the *Fish Resources Management Act 1994*:

“The objects of this act are to conserve, develop and share the fish resources of the State for the benefit of present and future generations.”

Specifically, the *Fish Resources Management Act 1994* has the following objectives:

- “(a) to conserve fish and to protect their environment;*
- (b) to ensure that the exploitation of fish resources is carried out in a sustainable manner;*
- (c) to enable the management of fishing, aquaculture and associated industries and aquatic eco-tourism;*
- (d) to foster the development of commercial and recreational fishing and aquaculture;*
- (e) to achieve the optimum economic, social and other benefits from the use of fish resources;*
- (f) to enable the allocation of fish resources between users of those resources;*
- (g) to provide for the control of foreign interests in fishing, aquaculture and associated industries;*
- (h) to enable the management of fish habitat protection areas and the Abrolhos Islands reserve.”*

With respect to fishery specific objectives, current management arrangements for the JASDGDLMF have been developed with a view to restoring and maintaining whiskery and gummy sharks at or above 40% of their original biomass by the year 2010 and similarly for dusky whaler sharks by the year 2040.

In an effort to ensure these biomass targets are achieved, a five-year management strategy involving gear reductions was implemented in 1997-98 and was recently completed in 2000-01. The package resulted in a 50% gear reduction in the JASDGDLMF and the State managed West Coast Demersal Gillnet and Demersal Longline Interim Managed Fishery (WCDGDLMF). However, it must be noted that any positive outcomes arising from a management response in an elasmobranch fishery will not be realised for a number of years, due to the slow growing, long-lived nature of the target species.

The primary objectives for management are to maintain acceptable and sustainable catch levels, and to continue to monitor effort, catch rates and the ability to meet agreed biomass targets. It is also an objective of researchers to ensure that stock assessment models are maintained and operating based on the most accurate data available.

Trigger points are used to initiate management changes. These trigger points include high effort levels associated with low catch rates and declining biomass estimates. Any large, unexplained variation in catch, particularly any significant and unexpected reduction in catch may be a reflection of a lack of management effectiveness and needs to be investigated.

Performance measures include acceptable catch ranges, the probability of meeting agreed biomass targets, and levels of potential effort in the Fishery. Such performance measures are used to assess management effectiveness and provide a suitable framework on which to base changes to management arrangements as required. The measures are considered to be reliable in measuring the effect of commercial shark fishing on WA shark stocks and are used to determine sustainable levels of effort. Any significant deviations from the performance measures should be investigated immediately and, if necessary, result in changes to management arrangements.

It also an objective of the Joint Authority to ensure that adequate management processes are in place that allow for the inclusive management (i.e. including a variety of stakeholders) in the fisheries managed by the WAFJA. The processes should serve as a means of facilitating debate on management arrangements that will achieve an appropriate allocation of the shark (and to a lesser extent scalefish) resource amongst the various extractive and non-extractive stakeholders.

(c) PRODUCTION

There are three major species taken in the JASDGDLMF including whiskery sharks (*Furgaleus macki*); dusky whaler sharks (often called bronze whaler) (*Carcharhinus obscurus*) and gummy sharks (*Mustelus antarcticus*). In the

northern zone of the fishery sandbar sharks (*Carcharhinus plumbeus*) are emerging as an important commercial species.

During recent seasons, there has been a continued shift in the catch composition of the fishery, with the proportion of whiskery sharks decreasing and the proportion of dusky whalers increasing. Although there are likely to be a number of factors that have influenced this shift, the price obtained for dusky whaler meat and fins and the relative scarcity of whiskery sharks are likely to have been of greatest importance.

While gummy sharks are only taken in significant quantities in the JASDGDMF, whiskery and dusky whaler sharks are also caught in the WCDGDMF. This fishery commences at the northern boundary of the JASDGDMF (33° south latitude), extends northwards to Steep Point (26° 30' south latitude) and utilises very similar gear.

Shark species are the primary target of the JASDGDMF, however a variety of scalefish are also taken. Other commercial operators and recreational fishers also catch these scalefish species. Although none of these species of scalefish are currently considered to be over-exploited, the relative catch between user groups continues to be a matter for debate.

The catches of shark and scalefish within the JASDGDMF for 1998-99, 1999-00 and 2000-01 are presented in table 1 for comparison.

Table 1 – Catches of shark and scalefish within the JASDGDMF

SPECIES	Live Weight (tonnes)		
	1998-99	1999-00	2000-01
<u>Shark</u>			
Whiskery	155	159	137
Gummy	312	240	233
Dusky whaler	264	250	234
Other shark	176	180	185
Sandbar shark*			22
Total Shark	907	829	811
<u>Scalefish</u>	125	134	147

*Note - *Sandbar shark was previously not reported separately from 'other shark', but is emerging as an important commercial species on the west coast and the northwestern area of the JASDGDMF.*

A total of 811 tonnes of shark was caught in the JASDGDMF in 2000-01, a reduction in catch of 18 tonnes from the previous year. This was due to a slightly lower catch of all three target species and a reduction in nominal effort. Dusky

whaler shark catches declined by 6.5% and gummy shark catches were marginally lower (3.1%). The catch of whiskery sharks fell by 13.7%. Fishing effort decreased in both zones of the JASDGDLMF during 2000-01. Nominal effort was 12.1% lower than in the previous fishing season.

Approximately 45% (by weight) of dusky sharks caught in the JASDGDLMF are first year fish. Gummy sharks are only caught in significant numbers in Zone 2 of the Fishery. The selectivity of the demersal gillnets means that juvenile and larger female gummy sharks are rarely caught. Demersal gillnet gear largely excludes whiskery sharks less than five years old and adult whiskery sharks are an important part of the catch in both zones of the JASDGDLMF. Adult sandbar sharks are excluded from the demersal gillnets and adults are not common in the near-shore fishing grounds.

The scalefish catch by the JASDGDLMF in 2000-01 increased by only 13 tonnes, however catches of scalefish increased from 1999-00 by 40% to 89 tonnes in Zone 1. Zone 2 catches of scalefish decreased by 16.4% to 59 tonnes. Scalefish accounted for 15.4% of the total catch by weight. Queen snapper (*Nemadactylus valenciennesi*) was the largest component of the scalefish catch at 24.9 tonnes, followed by 22.4 tonnes of blue groper (*Achoerodus gouldii*). 8.6 tonnes of dhufish (*Glaucosoma hebraicum*) was also landed.

In 2000-01, the estimated annual value of catch to fishers in the JASDGDLMF was \$2.7 million (shark and scalefish). The value of shark fins was conservatively estimated at \$830,000.

(d) RESEARCH

Staff at the Bernard Bowen Fisheries Research Institute within the WA Marine Research Laboratories carry out research on sharks. The Institute constitutes the Research Division of the WA Department of Fisheries. A major project to study the sustainability of Western Australia's commercially important shark species, funded in part by the Fisheries Research and Development Corporation (FRDC), was completed at the end of June 1999. The final report was completed in December 1999 (Simpfendorfer *et al*, 1999).

The JASDGDLMF is measured yearly against biomass estimate information obtained from stock assessment models, in particular the probability that the stocks of the main target shark species (dusky whaler sharks, gummy sharks and whiskery sharks) will reach 40% of virgin biomass by 2010, based on effort levels at that time.

Whiskery and gummy shark populations are assessed using age structured population models, which incorporate biological information (reproduction, size, age and growth, etc.) and fishery data (gillnet selectivity, catch and effort, etc.) collected since 1975. A risk assessment is used to determine the probability of the stock reaching target levels under different levels of fishing effort.

Because dusky whaler sharks may take 19 years to reach sexual maturity and live for 50 years, available time series of catch and effort data is not long enough for an age-structured model. Instead, demographic analysis is used. This technique incorporates biological information (reproduction, size, age and growth, etc.) and age-specific exploitation rates from a tagging project.

(e) CONDITION OF THE FISHERY

Outcomes from modelling are used to produce regular stock assessments for each species. It is the information obtained through the application of these models that has enabled the current management strategy to be developed. The models analyse data obtained through compulsory statutory catch and effort returns, with this information being validated by means of at-sea studies and the voluntary logbook program.

A stock assessment of whiskery sharks was conducted in 2001 and was based on 1999-00 data. The total biomass was between 2.9% and 39.9% of its unexploited level, with a best estimate of biomass of 26.0%. The stock was calculated to have declined by, on average, 1.8% each year for the past 5 years. Effort targeted at whiskery sharks ('effective effort') was calculated as being 126% of 1996-97 levels. At this level of effort, the probability of reaching the biomass target by 2010 was 6.5%. Whiskery shark landings decreased by 13.7%, which is at the lower limit of the acceptable catch range set in 1999-00. Given a decreased level of effort in the western end of Zone 2, where whiskery sharks are more common, the decline in catch is not considered a significant cause for concern. The whiskery shark stocks are considered to be stabilising and the catch rate is higher than it has been throughout most of the 1990's.

A stock assessment of gummy sharks was last conducted in 1998, based on 1996-97 data. The total biomass was between 22.6% and 60.2% of its unexploited level, with a best estimate of biomass of 42.7%. The 1999-00 effort was calculated to be 66% of the 1996-97 levels of effective effort, resulting in a greater than 70% chance of the stock being at the biomass target in 2010. The gummy shark catch was slightly below the acceptable catch range.

The assessment of dusky whaler shark stocks in 1998 indicated that the stock could sustain the then current level of fishing. However, this assessment was dependent on a less than 4% annual mortality of adults over two metres. The dusky whaler shark catch was at the lower level of the acceptable catch range and catches increased in Zone 1, but decreased by 24.1% in Zone 2. There is continued concern that the mortality of adult dusky whaler sharks, caused by an apparent increase in fishing pressure from other commercial fishing sectors, may be in excess of the level that will result in a stock decline. The unquantified catch of large dusky whaler sharks by other sectors has been a major concern in recent years.

The catch of sandbar sharks is increasing in the southern shark fisheries and a dedicated stock assessment for this species may be required in the future.

In summary, gummy and dusky whaler sharks are considered fully exploited and whiskery sharks are considered over-exploited, but stable. Dusky whaler sharks are considered to be fully exploited, however the unquantified catch of large dusky sharks by other sectors may be causing the stock to decline.

(f) MANAGEMENT MEASURES

At the core of the JASDGDLMF management plan is the use of limited entry and a management system that regulates both time and gear use into tradable units of entitlement or Individually Transferable Effort (ITE) management. The ITE management arrangements have enabled a major industry restructure to occur over the past five years. The fisheries are managed using effort controls in the form of time/gear units, with each unit allowing the use of one net of a particular length or set number of hooks for one month.

This system of management has enabled effort in the fishery to be reduced by decreasing the number of hooks and metres of net per time/gear unit. In 2000-01, Zone 1 and Zone 2 JASDGDLMF gillnet lengths per unit were reduced to 270 metres and the number of longline hooks per unit was reduced to 90. The final year of phased net length reductions has brought the two zones of the JASDGDLMF to 50% of their 1992-93 level of effort. When management was introduced in 1988, the net length per unit was 600 metres. Given the recent conclusion of the current five-year management cycle, it is essential that the status of the three key target species be re-assessed.

There were 57 managed fishery licences in the JASDGDLMF during 2000-01, however fishing effort was expended by only 29 vessels (50.8%) during this period, which was a 12% reduction from the previous year. As the reductions in net lengths have occurred, trading of effort entitlements has enabled some vessels to purchase additional effort units to become more cost effective. Latent effort continues to be a significant management issue for the fishery. The total number of gear units existing in the fishery is currently 2,515.

Management measures for the JASDGDLMF are set out in the JASDGDLMF Management Plan. This Management Plan was gazetted as Western Australian Fisheries Notice Number 323 and Amendment Notices 360, 430, 398, 560, 670, 711 and 732, notice published in the Western Australian *Government Gazette*. The following amendments the Management Plan were also published in the stated issues of the Western Australian *Government Gazette*:

- Number 27 published 23 February 1999;
- Number 86 published 28 May 1999;
- Number 184 published 21 September 1999; and
- Published 24 December 1999 (number not assigned).

(g) FINANCIAL ARRANGEMENTS

An annual fee for access to the JASDGLMF is levied under the *Fish Resources Management Act 1994*. The cost of access per time/gear unit for the 2000-01 fishing season was \$16.00 for Zones 1 and 3 and \$34.00 for Zones 2 and 4.

Funding for management of the fishery and the operation of the Management Advisory Committee is not cost-recovered and is drawn from the annual budget of the WA Department of Fisheries.

9. JOINT AUTHORITY NORTHERN SHARK FISHERY

(a) BACKGROUND

The JANSF covers waters east of Koolan Island (123° 45' east longitude) and north of 17° south latitude to the limit of the Australian Fishing Zone and the Northern Territory border (129° east longitude). The fishery includes the taking of sharks, as well as scatefish as bycatch, by pelagic and demersal gillnets and demersal longlines. Operators in the fishery most commonly use demersal longlines.

Prior to February 1995, the Commonwealth managed the take of shark using gillnets and demersal longlines seaward of three nautical miles between 120° east longitude and 129° east longitude. Part of the WA portion of the old Commonwealth Northern Shark Fishery is now known as the JANSF. At the same time, the WA North Coast Shark Fishery (WANCSF) permitted the operation of shark longlines and shark droplines in State waters between North West Cape and the WA/NT border.

Since the inception of the JANSF, the Joint Authority has developed no formal licensing arrangements. It is considered a priority of the WA Department of Fisheries to formalise access arrangements to the JANSF to ensure the sustainability of the Fishery.

Figure 2 illustrates the area of the JANSF.

(b) ECOLOGICALLY SUSTAINABLE DEVELOPMENT OBJECTIVES

Similar to the JASDGLMF, the objectives of management for the JANSF are the same as those for the *Fish Resources Management Act 1994*. A list of these objectives has previously been presented in section 7(b), as well as general management principles underpinning ecologically sustainable development.

(c) PRODUCTION

The primary target species in the JANSF are the sandbar shark (*Carcharhinus plumbeus*), the black-tip shark (*C. tilsoni*), the tiger shark (*Galeocerdo cuvier*) and the pigeye shark (*C. amboinensis*).

Owing to the small number of operators, together with the WA Department of Fisheries' policy on confidentiality, catch data for the JANSF cannot be released. However, the reported catch by the domestic fleet is below the sustainable yield estimate for the fishery.

For reporting and assessment purposes, the WA Department of Fisheries combines the data from the JANSF and the WA North Coast Shark Fishery (WANCSF). The WANCSF covers the waters between 114° 06' east longitude (North West Cape) and 123° 45' east longitude (Koolan Island).

The main fishing method in the northern shark fisheries includes shark longline and shark dropline. Pelagic gillnets are used by a small number of operators in the JANSF.

The catches of shark and scalefish within the WA northern shark fisheries (WANCSF and JANSF combined) for 2000-01 are presented in table 2.

Table 2 – Catches of shark and scalefish within the WANCSF and JANSF combined

SPECIES	Live Weight (Tonnes)
<u>Shark</u>	
Sandbar shark	79
Black-tip shark	47
Tiger shark	34
Pigeeye shark	29
Hammerhead shark	23
Other sharks	60
Total Sharks	272
<u>Scalefish</u>	
	10

Nine vessels were active in the northern shark fisheries in 2000-01, which represents an increase of 12.9% from the previous year. In terms of scalefish bycatch, three tonnes of red emperor, two tonnes of rankin cod, one tonne of mackerel and four tonnes of other scalefish were recorded by operators in the northern shark fisheries.

The combined value of the two managed sectors was approximately \$900,000 including the value of shark fins. During 2000-01, shark fins maintained their price of between \$25 and \$120 per kilogram.

(d) RESEARCH

Conclusions about the status of the JANSF are based on information on the primary target species gathered from a variety of sources including:

- catch and effort data from Taiwanese gillnetters – which illustrated a decline in catch per unit effort between 1977 and 1986;
- catch and effort data from domestic operators;
- a CSIRO study involving the then Commonwealth Department of Primary Industry and the state fisheries agencies of WA, NT and QLD; and
- a study by Prof Carl Walters and Dr Rik Buckworth utilising an analysis of historical catch data to develop an age structured population model.

In July 2000, FRDC approved funding for a three-year research project on sandbar sharks. In addition, a CSIRO collaborative project titled *Northern Australian sharks and rays: the sustainability of target and bycatch species* began in January 2001. Also, it is expected that management measures to be implemented in the fishery will include a requirement for participants to complete detailed logbooks. Together, these projects will aim to improve the understanding of the key species targeted in the fishery.

(e) CONDITION OF THE FISHERY

A recent assessment of the blacktip shark across northern Australia has suggested an annual sustainable yield for this species of 2000 tonnes. The combined catch of blacktip sharks in the JANSF and the WANCSF was 47 tonnes.

This assessment also indicated that although reported domestic catches of blacktip sharks are below the sustainable yield estimate, catch per unit effort is declining. It has been suggested that either there is a significant unreported catch of these sharks, possibly originating from sources such as prawn fisheries or other line fisheries, or alternatively, there exists an inshore and an offshore component to the stock, with the inshore stock being subject to excessive fishing pressure.

There is no stock assessment information available on the status of the other shark species taken in the JANSF at this stage.

(f) MANAGEMENT MEASURES

Beyond limiting access to the JANSF to those who held relevant Commonwealth or State authorisations prior to the change in jurisdictional arrangements, formal management arrangements have not been adopted for the JANSF.

In July 1998, a discussion paper in relation to the future management of the JANSF was released (Fisheries Management Paper 114 – *A Strategy for the*

Future Management of the Joint Authority Northern Shark Fishery) and following this, in February 1999, a meeting with key stakeholders was held to further discuss the proposed management changes outlined in the paper.

The WA Department of Fisheries is looking to address the future management arrangements and the lack of legislative basis of the JANSF, as a priority. It is expected that the proposed management arrangements will incorporate aspects of Fisheries Management Paper 114, however it is recognised that the management strategy requires updating and that there may be new issues that have arisen over the past two years.

As the JANSF is not adequately regulated at this point, realistic restrictions will be placed on operators to ensure sustainability and demonstrate the WA Department of Fisheries' commitment to responsible management and ecologically sustainable development.

The Western Australian shark fisheries will be undergoing the initial stages of an ecological sustainable development assessment during 2002. It is of utmost importance that the WA Department of Fisheries demonstrates that the WA shark fisheries are being managed in a sustainable manner, and this includes formalising arrangements in the JANSF.

(f) FINANCIAL ARRANGEMENTS

Management of the JANSF is funded from the annual budget of the WA Department of Fisheries.

FURTHER READING

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- Simpfendorfer, C.A. and Donohue, K. (1998) *Keeping the fish in fish 'n' chips: research and management of the Western Australian shark fishery*. Aust. J. Mar, Freshwater Res., 49: 593-600.
- Simpfendorfer, C.A., Lenanton, and Unsworth, P. (1996) *Stock Assessment of large coastal and demersal sharks*, Final Report to the Fisheries Research and Development Corporation for Project 93/067, 59pp September 1996 (Copies of this report can be ordered from : Fisheries Research and Development Corporation, PO Box 222, Deakin West, ACT, 2600, Australia)
- Simpfendorfer, C.A., McAuley, R., Chidlow, J., Lenanton, R., Hall, N. and Bastow, T. (1999) *Biology and Stock Assessment of Western Australia's Commercially Important Shark Species*, Final Report to the Fisheries Research and Development Corporation for Project 96/130, 105pp December 1999. (Copies of this report can be ordered from: Fisheries Research and Development Corporation, PO Box 222, Deakin West, ACT, 2600, Australia)
- Simpfendorfer, C.A. and Unsworth, P. (1998a) Reproductive biology of the whiskery shark, *Furgaleus macki*, from south-western Australia. Aust. J. Mar, Freshwater Res., 49: 687-93.

Simpfendorfer, C.A. and Unsworth, P. (1998b) *Gillnet mesh selectivity of dusky (Carcharhinus obscurus) and whiskery (Furgaleus macki) sharks from southwestern Australia*. (Aust. J. Mar, Freshwater Res., 49: 713-18.

Southern Western Australian Shark Working Group, (1986) *Interim Report by the Chairman, Mr P. Rogers*, Fisheries Department of Western Australia: Perth.

Southern Western Australian Shark Working Group, November (1986) *Report by the Chairman, Mr P. Millington*, Fisheries Department of Western Australia: Perth.

Walters, C. and Buckworth, R. (1997) *Assessment of Spanish Mackerel and Blacktip Shark Stocks in the NT*.

APPENDIX 1

ARRANGEMENT BETWEEN THE COMMONWEALTH AND THE STATE OF WESTERN AUSTRALIA IN RELATION TO THE JOINT AUTHORITY DEMERSAL GILLNET AND LONGLINE FISHERY IN WATERS SOUTH OF LATITUDE 33° SOUTH

AN ARRANGEMENT entered into between the Commonwealth of Australia (the Commonwealth) of the one part and the State of Western Australia (the State) of the other part.

WHEREAS-

- (a) paragraph 4(1)(a) of the *Acts Interpretation Act 1901* of the Commonwealth provides that where an Act is enacted on or after the date of commencement of this section that is not to come into operation immediately upon its enactment, is expressed to confer power, *inter alia*, to make an instrument of a legislative or administrative character, then, unless the contrary intention appears, the power may be exercised, and anything may be done for the purpose of enabling the exercise of the power, before the Act concerned comes into operation as if it had come into operation;
- (b) subsection 2(2) of the *Fisheries Management Act 1991* of the Commonwealth (the Management Act) provides that Part 5 of the Management Act, which provides for co-operation with the States and Northern Territory in the management of fisheries, commences upon the repeal or the ceasing to have effect (as the case may be) of Part IVA of the *Fisheries Act 1952* of the Commonwealth;
- (c) by subsection 7(3) of the *Fisheries Legislation (Consequential Provisions) Act 1991* of the Commonwealth (the Consequential Provisions Act), as amended by section 24 of the *Primary Industries and Energy Legislation Amendment Act 1993* Part IVA of the *Fisheries Act 1952*, unless sooner repealed, ceases to have effect at the end of the period of 3 years beginning on 3 February 1992, the day on which section 7 of the Consequential Provisions Act commenced;
- (d) paragraph 7(4)(a) of the Consequential Provisions Act provides that upon the commencement of Part 5 of the Management Act, the Western Australian Joint Authority, established by subsection 12D(1) of the *Fisheries Act 1952* continues in existence as if it had been established under Part 5 of the Management Act;
- (e) an Arrangement was entered into under section 12H(1) of the *Fisheries Act 1952* between the Commonwealth and the State of Western Australia in relation to the:
 - (i) Demersal Gillnet Fishery in waters south of Latitude 33° South, published in the Commonwealth of Australia Gazette No. S 109 14 April 1988;

- (ii) Demersal Longline Fishery in waters south of Latitude 33° South, published in the Commonwealth of Australia Gazette No. S109 14 April 1998;
- (f) paragraph 7(4)(b) of the Consequential Provisions Act provides that upon the commencement of Part 5 of the Management Act, any arrangement made with a State or Territory under subsection 12H(1) or (4) of the *Fisheries Act 1952* that was in force immediately before that commencement continues in force as if it had been made under Part 5 of the Management Act;
- (g) the Arrangements referred to in paragraph (e) of this Arrangement were made under Division 3 of Part IVA of the *Fisheries Act 1952*;
- (h) subsection 75(1) of the Management Act provides that an Arrangement under Division 3 of Part 5 of the Management Act may be terminated by instrument approved by the Governor-General and the Governor or Governors of the State or States concerned;
- (i) subsection 33(3) of the *Acts Interpretation Act 1901* provides *inter alia* that where an Act confers a power to make any instrument, the power shall, unless the contrary intention appears, be construed as including a power exercisable in the like manner and subject to the like conditions (if any) to repeal any such instrument;
- (j) subsection 8H(2) of the *Fisheries Act 1905* of the State (the State Act) will on the coming into operation of the *Fisheries Amendment Act 1994* of the State empower the State to terminate an arrangement as provided for by the Management Act;
- (k) subsection 71(1) of the Management Act provide that the Commonwealth may make an arrangement with a State or States represented on a Joint Authority that the Joint Authority is to have the management of a particular fishery in waters relevant to that or any of those States;
- (l) subsection 74(1) of the Management Act provides that an arrangement under, *inter alia*, subsection 71 (1) is to be made by an instrument approved by the Governor-General and the Governor or Governors of the State or States concerned;
- (m) subsection 8H(1) of the State Act will on the coming into force of the *Fisheries Amendment Act 1994* of Western Australia, empower the State to make an arrangement referred to in, *inter alia*, subsection 71(1) of the Management Act for the management of a particular fishery;
- (n) both the Commonwealth and the State are desirous of exercising their powers to make a further Arrangement in relation to the fishery referred to in clause 2 of this Arrangement.

NOW THEREFORE, in pursuance of the Management Act and the State Act and of all other powers so enabling:

1. The Arrangements entered into between the Commonwealth and the State referred to in paragraph (e) of the recitals to this Arrangement are, pursuant to subsection 75 (1) of the Management Act, and subsection 8H(2) of the State Act terminated.
2. The Commonwealth and the State hereby arrange that the fishery in waters relevant to the State, being coastal waters and waters of the Australian fishing zone that lie within the area described in Schedule 2 to the *Petroleum (Submerged Lands) Act 1967* under the heading "Area that includes the Adjacent Area in respect of Western Australia", south of Latitude 33° South for:
 - (a) all fish of the Class Osteichthyes (bony fish) and Class Chondrichthyes (cartilaginous fish) when the methods of demersal gillnets and lines of all kinds are used, other than:
 - (i) handlines;
 - (ii) troll lines;
 - (iii) drop lines; and
 - (iv) pelagic longlines used in accordance with the exercise of a right conferred by a fishing concession granted by the Australian Fisheries Management Authority under the Management Act to permit the use of pelagic longlines for the taking of tuna and tuna-like species;

but excluding fish to which this paragraph otherwise would apply taken in the exercise of a right conferred in relation to another fishery by a fishing concession granted by the Australian Fisheries Management Authority under the Management Act;

- (b) all other fish taken by the methods provided for in paragraph (a) in the exercise of a right conferred by a licence or other authority granted by the State on behalf of the Western Australian Fisheries Joint Authority for the fish to which paragraph (a) applies:

is to be managed by the Western Australian Fisheries Joint Authority in accordance with the law of Western Australia.

3. The Minister responsible for administering the Management Act and the Minister responsible for administering the State Act may agree in writing to the maximum quantity of other fish, the subject of paragraph 2(b), that may be taken from time to time under a licence or other authority referred to in that paragraph and on matters of mutual interest in relation to the fishery.
4. This Arrangement shall, upon being executed on behalf of the Commonwealth and of the State and upon being approved by the Governor-General of the Commonwealth and the Governor of the State, take effect on 3 February 1995.

5. Without affecting the construction which this Arrangement would have if no provision of this Arrangement or part thereof is invalid, it is the intention of this Arrangement that if any provision of this Arrangement or part thereof is invalid, the remainder of that provision and of this Arrangement shall be construed as if that provision or part thereof was not included in this Arrangement even if the result is to extend the fishery described by this Arrangement.

Dated the 19th day of December 1994

Signed for and on behalf of the
Commonwealth of Australia by the
Honourable DAVID PETER
BEDDALL, Minister for Resources

Signed for and on behalf of the
State of Western Australia by the
Honourable MONTAGUE GRANT
HOUSE, Minister for Fisheries

(DAVID PETER BEDDALL)
in the presence of

(MONTAGUE HOUSE)
in the presence of

I, THE GOVERNOR-GENERAL of the Commonwealth of Australia, acting with the advice of the Federal Executive Council, in pursuance of subsections 74(1) and 75 (1) of the *Fisheries Management Act 1991*, hereby approve this instrument.

Dated 24 January 1995.

By His Excellency's command

(BILL HAYDEN)
Governor-General

By His Excellency's command

(DAVID PETER BEDDALL)
Minister for Resources

I, Michael Jeffery, the governor of the State of Western Australia, acting by and with the advice of the Executive Council in pursuance of the provisions of the *Fisheries Act 1905*, hereby approve this instrument.

Given under my hand this 4th day of January 1995.

(MICHAEL JEFFERY)
Governor

By His Excellency's Command

(MONTAGUE HOUSE)
Minister for Fisheries

APPENDIX 2

ARRANGEMENT BETWEEN THE COMMONWEALTH AND THE STATE OF WESTERN AUSTRALIA IN RELATION TO THE NORTHERN SHARK FISHERY IN WATERS EAST OF KOOLAN ISLAND

An ARRANGEMENT entered into between the Commonwealth of Australia (the Commonwealth) of the one part and the State of Western Australia (the State) of the other part.

WHEREAS-

- (a) paragraph 4(1)(a) of the *Acts Interpretation Act 1901* of the Commonwealth provides that where an Act is enacted on or after the date of commencement of this section that is not to come into operation immediately upon its enactment, is expressed to confer power, *inter alia*, to make an instrument of a legislative or administrative character, then, unless the contrary intention appears, the power may be exercised, and anything may be done for the purpose of enabling the exercise of the power, before the Act concerned comes into operation as if it had come into operation;
- (b) subsection 2(2) of the *Fisheries Management Act 1991* of the Commonwealth (the Management Act) provides that Part 5 of the Management Act, which provides for co-operation with the States and Northern Territory in the management of fisheries, commences upon the repeal or the ceasing to have effect (as the case may be) of Part IVA of the *Fisheries Act 1952* of the Commonwealth;
- (c) by subsection 7(3) of the *Fisheries Legislation (Consequential Provisions) Act 1991* (the Consequential Provisions Act) of the Commonwealth as amended by section 24 of the *Primary Industries and Energy Legislation Amendment Act 1993* Part IVA of the *Fisheries Act 1952*, unless sooner repealed, ceases to have effect at the end of the period of 3 years beginning on 3 February 1992, the day on which section 7 of the Consequential Provisions Act commenced;
- (d) paragraph 7(4)(a) of the Consequential Provisions Act provides that upon the commencement of Part 5 of the Management Act, the Western Australian Joint Authority, established by subsection 12D(1) of the *Fisheries Act 1952* continues in existence as if it had been established under Part 5 of the Management Act;
- (e) Arrangements were entered into under section 12H(4) of the *Fisheries Act 1952* between the Commonwealth and Western Australia in relation to the:
 - (i) North West Pelagic Gillnet Fishery, published in the Commonwealth of Australia Gazette No. S109 on 14 April 1988;
 - (ii) Line Fishery East of 120° East, published in the Commonwealth of Australia Gazette No. S109 on 14 April 1988;

- (f) paragraph 7(4)(b) of the Consequential Provisions Act provides that upon the commencement of Part 5 of the Management Act, any arrangement made with a State or Territory under subsection 12H(1) or (4) of the *Fisheries Act 1952* that was in force immediately before that commencement continues in force as if it had been made under Part 5 of the Management Act;
- (g) the Arrangements referred to in paragraph (e) of this Arrangement were made under Division 3 of Part IVA of the *Fisheries Act 1952*;
- (h) subsection 75(1) of the Management Act provides that an Arrangement under Division 3 of Part 5 of the Management Act may be terminated by instrument approved by the Governor-General and the Governor or Governors of the State or States concerned;
- (i) subsection 33(3) of the *Acts Interpretation Act 1901* provides *inter alia* that where an Act confers a power to make any instrument, the power shall, unless the contrary intention appears, be construed as including a power exercisable in the like manner and subject to the like conditions (if any) to repeal any such instrument;
- j) subsection 8H(2) of the *Fisheries Act 1905* of the State (the State Act) will on the coming into operation of the *Fisheries Amendment Act 1994* of the State empower the State to terminate an arrangement as provided for by the Management Act;
- (k) subsection 71(1) of the Management Act provide that the Commonwealth may make an arrangement with a State or States represented on a Joint Authority that the Joint Authority is to have the management of a particular fishery in waters relevant to that or any of those States;
- (l) subsection 74(1) of the Management Act provides that an arrangement under, *inter alia*, subsection 71 (1) is to be made by an instrument approved by the Governor-General and the Governor or Governors of the State or States concerned;
- (m) subsection 8H(1) of the State Act will on the coming into force of the *Fisheries Amendment Act 1994* of the State empower the State to make an arrangement referred to in, *inter alia*, subsection 71(1) of the Management Act for the management of a particular fishery;
- (n) both the Commonwealth and the State are desirous of exercising their powers to make a further Arrangement in relation to the fishery referred to in clause 2 of this Arrangement.

NOW THEREFORE, in pursuance of the Management Act and the State Act and of all other powers so enabling:

1. The Arrangements entered into between the Commonwealth and the State referred to in paragraph (e) of the recitals to this Arrangement are, pursuant to

subsection 75 (1) of the Management Act and subsection 8H(2) of the State Act terminated.

2. The Commonwealth and State hereby arrange that the fishery in waters relevant to Western Australia, being coastal waters and waters of the Australian fishing zone that lie within the area described in Schedule 2 to the *Petroleum (Submerged Lands) Act 1967* under the heading "Area that includes the Adjacent Area in respect of the parallel latitude 17° South for:

- (a) all fish of the Class Chondrichthyes (cartilaginous fishes) when any methods of pelagic gillnetting, demersal gillnetting and demersal longlining are used;

but excluding fish to which this paragraph otherwise would apply taken in the exercise of a right conferred by a fishing concession granted by the Australian Fisheries Management Authority under the Management Act;

- (b) all fish of the Class Osteichthyes (bony fishes) taken in the exercise of a right conferred by a licence or other authority granted by the State on behalf of the Western Australian Fisheries Joint Authority for the fish to which paragraph (a) applies;

is to be managed by the Western Australian Fisheries Joint Authority in accordance with the law of Western Australia.

3. The Minister responsible for administering the Management Act and the Minister responsible for administering the State Act may agree in writing to the maximum quantity of other fish, the subject of paragraph 2(b), that may be taken from time to time under a licence or other authority referred to in that paragraph and on matters of mutual interest in relation to the fishery.
4. This Arrangement shall, upon being executed on behalf of the Commonwealth and of the State and upon being approved by the Governor-General of the Commonwealth the Governor of the State, take effect on 3 February 1995.
5. Without affecting the construction which this Arrangement would have if no provision of this Arrangement or part thereof is invalid, it is the intention of this Arrangement that if any provision of this Arrangement or part thereof is invalid, the remainder of that provision and of this Arrangement shall be construed as if that provision or part thereof was not included in this Arrangement even if the result is to extend the fishery described by this Arrangement.

Dated the 19th day of December 1994

Signed for and on behalf of the
Commonwealth of Australia by the
Honourable DAVID PETER
BEDDALL, Minister for Resources

(DAVID PETER BEDDALL)
in the presence of

Signed for and on behalf of the
State of Western Australia by the
Honourable MONTAGUE GRANT
HOUSE, Minister for Fisheries

(MONTAGUE HOUSE)
in the presence of

I, THE GOVERNOR-GENERAL of the Commonwealth of Australia, acting with the
advice of the Federal Executive Council, in pursuance of subsections 74(1) and 75 (1)
of the *Fisheries Management Act 1991*, hereby approve this instrument.

Dated 24 January 1995.

By His Excellency's command

(BILL HAYDEN)
Governor-General

By His Excellency's command

(DAVID PETER BEDDALL)
Minister for Resources

I, Michael Jeffery, the governor of the State of Western Australia, acting by and with
the advice of the Executive Council in pursuance of the provisions of the *Fisheries
Act 1905*, hereby approve this instrument.

Given under my hand this 4th day of January 1995.

(MICHAEL JEFFERY)
Governor

By His Excellency's Command

(MONTAGUE HOUSE)
Minister for Fisheries

FIGURE 1

JOINT AUTHORITY SOUTHERN DEMERSAL GILLNET AND DEMERSAL
LONGLINE MANAGED FISHERY

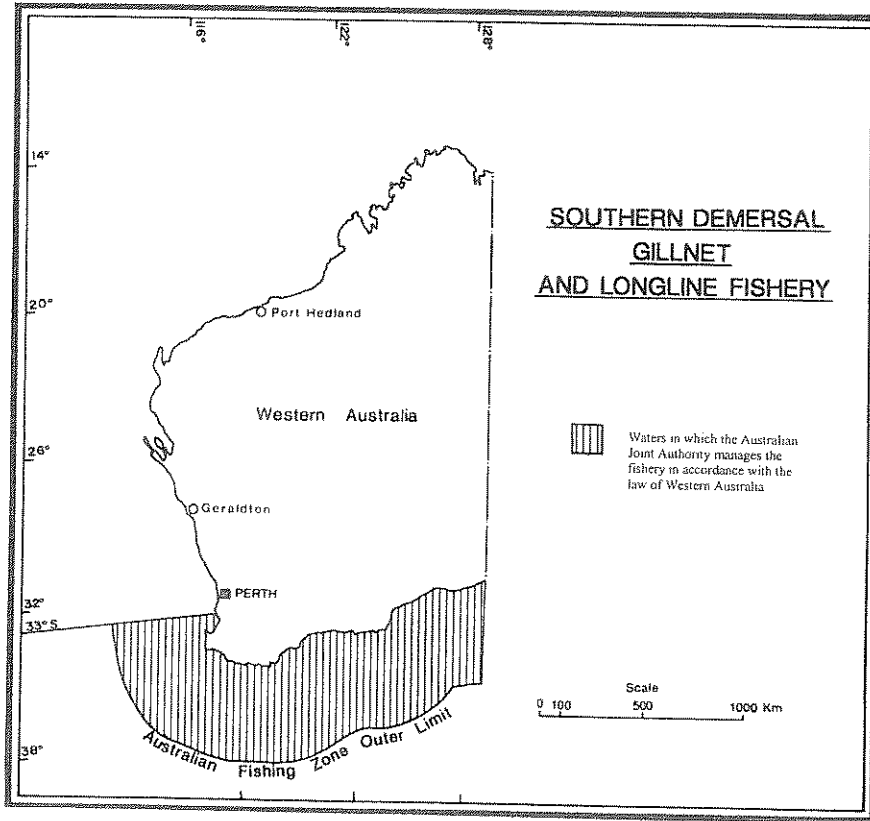


FIGURE 2

JOINT AUTHORITY NORTHERN SHARK FISHERY

