

The Western Rock Lobster Fishery

MSC CERTIFICATION

September 2003

The West Coast Rock Lobster Fishery became the world's first fishery in March 2000 to be certified by the Marine Stewardship Council (MSC). The notion of pursuing certification under the MSC came from within the rock lobster industry and was quickly supported by the Western Australian Fishing Industry Council (WAFIC), the Western Rock Lobster Development Association and the Department of Fisheries.

This certification was provided because it was assessed that the fishery was consistent with the three core MSC principles:

1. A fishery must be conducted in a manner that does not lead to over-fishing or depletion of the exploited populations and, for those populations that are depleted, the fishery must be conducted in a manner that demonstrably leads to their recovery.

2. Fishing operations should allow for the maintenance of the structure, productivity, function and diversity of the ecosystem (including habitat and associated dependent and ecologically-related species) on which the fishery depends.

3. The fishery is subject to an effective management system that respects local, national and international laws and standards, and incorporates institutional and operational frameworks that require use of the resource to be responsible and sustainable.

The initial certification is for a five-year period, i.e. it will expire in March 2005 and maintenance of the certification within that five-year period is contingent upon demonstration by the fishery that it has met certain requirements.

Ongoing requirements to maintain West Coast Rock Lobster Fishery certification

When the West Coast Rock Lobster Fishery was initially certified, it was explicitly stated that the certifier had identified some weaknesses with respect to Principle 2, and it was these weaknesses that are at the heart of the five core requirements set down for assessment within the initial period of certification. Agreement to these requirements by the fishery was a condition of the initial certification and the five requirements are:

1. Conduct an Ecological Risk Assessment

A process designed to consider the risks of all aspects of fishing on all species, habitats and biotic communities. The process is needed to identify knowledge gaps and prioritise the risks and strategies to address them.

2. Develop an Environmental Management Strategy for public comment

A discussion document to address the impacts of the fishery on the environment, with objectives, strategies, indicators and performance measures included. These elements need to translate into an operational plan, with detail on the supporting research programs.

3. Operation of the Environmental Management Strategy

Implement the strategy (with necessary changes) following public comment.

4. Transparency of Decision-Making

Targeted at achieving an increased participation of the environmental community in the decision-making processes for the fishery.

5. Data on Bycatch of Icon Species

Creation of formal monitoring systems in the fishery to improve the recording of data on the bycatch of – or interactions with – mammals, seabirds, manta rays, dolphins or whales.

To determine and monitor the progress being made towards meeting these requirements, the MSC-accredited certifier conducts regular surveillance meetings, generally on an annual basis, and reports its findings back to the MSC. These visits have typically been very focused on particular areas of interest that are relevant to the five requirements, but after the five year period is up, a more comprehensive examination of the fishery will be required for the fishery to enter into a new period of certification.

The process to date – is the fishery still certified?

The first three years of certification have been challenging for industry, the Department and the certification team. Noting that this is the first fishery to go through this process there has been some confusion as to what is expected to meet the requirements and the nature of the audit process itself. These issues are, bit by bit, sorting themselves out and significant progress against all of the requirements has been made.

In particular the certifier has confirmed that the first requirement has been fully satisfied and the focus of the audit process has moved onto the development of an Environmental Management Strategy. Such a document was forwarded to the certifier in February 2003 for assessment and in response the certifier identified three key areas where the EMS did not meet their expectations:

1. Ecological effects of removing rock lobsters from the related ecosystem;
2. The interaction of the fishery (in particular pots) with Australian Sea Lions; and



Fish for the future

- The need for a more detailed description within the EMS as to how studies and actions to occur would be integrated into the fisheries management decision process and how ongoing evaluation of risk (including new ones) was going to occur.

These issues, in particular the first two points, had been ongoing concerns for the certifier and conservation groups such as the Conservation Council and WWF. In the Certifiers report explicit corrective actions with very tight timeframes were specified. In short, the EMS needed extensive revision in the key areas identified and the revised document had to be submitted within 46 days or by 15 August.

The Department and WAFIC met this deadline.

With reference to the Certifier’s report assessing the earlier version of the EMS it was clear to both WAFIC and the Department of Fisheries that the challenge to maintaining certification was to address the following questions:

Interaction with Sea Lions

- What is the best mix of strategies to address interaction with sea lions?
- If the overall approach includes mitigation, then what is the best practical means of mitigating sea lion mortality?
- What additional data collection and assessment activities should be undertaken to assist in mitigating sea lion mortality?
- What additional data collection and assessment activities should be undertaken to assess the impact of mortality associated with rock lobster potting on sea lion population(s)?

Removing Rock Lobster Biomass from Ecosystem

- What are the ecological effects of removing lobster biomass?
- How do we improve our measure and better assess the risk to the environment from the removal lobster biomass in a manner that is typical of this fishery?
- What experimental designs / techniques should be considered to gather data for analysis that can address these questions?

Scientific Reference Groups

To tackle these questions WAFIC and the Department of Fisheries also realised the importance of directly engaging external expertise. To do this, two independent Scientific Reference Groups (SRGs) were established with the express purpose of providing independent expert advice on how best to meet the requirements of ongoing certification.

Meetings were held in late July (sea lions) and early August (ecosystem) so that the SRGs advice could be incorporated within the EMS before the deadline as provided by the Certifier. A key focus of the SRGs was to ensure that the advice provided was justified, defensible and based on best practice science. The meetings were highly successful at achieving this objective and the EMS document has been re-written accordingly.

Effects of Fishing on the Ecosystem Scientific Reference Group

Composition	
Ron Edwards	Independent Chair (RLIAC Chairman)
Tim Bray	Executive Officer (RLIAC Executive Officer)
Alistar Robertson	Dean - Faculty of Natural and Agricultural Sciences - UWA
Simon Thrush	Principal Scientist - Marine Benthic Ecology – NIWA
Andrew Heyward	Australian Institute of Marine Science
John Keesing	Strategic Research Fund for the Marine Environment
Colin Buxton	Director – Tasmanian Aquaculture & Fisheries Institute, Uni. Tas
Chris Simpson	Department of Conservation and Land Management
Jim Penn	Director -Department of Fisheries Research Division

Summary of Recommendations from the Ecosystem Effects SRG

Resolution 1

There is a paucity of data from the deep water such that, the SRG was not able to determine the impact on the ecosystem of removing lobsters from deep-water habitats and that this should be a priority focus for research.

Resolution 2

The SRG accepted the evidence presented to justify the statement that there was a lower risk of an unacceptable effect on the ecosystem associated with the exploitation of lobsters in shallow water under the present management regime. Noting that there is not sufficient data for a prescriptive shallow water assessment the SRG recommended that opportunities to study the effects of lobster removal on the ecosystem in shallow water through collaborative studies in the Jurien Bay Marine Park and as part of the SRFME initiative should be vigorously pursued. The SRG also recommended that it be consulted during the development of any such projects.

Resolution 3

The SRG advises that at this point in time, and based on current available knowledge for the deep-water, it could not design an experimental approach equivalent to a fished versus unfished study with any certainty that the study would produce results that determine the effects of fishing on the ecosystem.

Resolution 4

The SRG recommends that the strategic framework illustrated in Figure 1 be adopted.

Resolution 5

The SRG recommends that an operational plan of research be developed that, through its implementation, will establish the necessary understanding of the critical natural history elements. The key elements of this operational plan should include: habitat mapping; size and structure of lobster; trophic dynamic; and lobster behaviour.

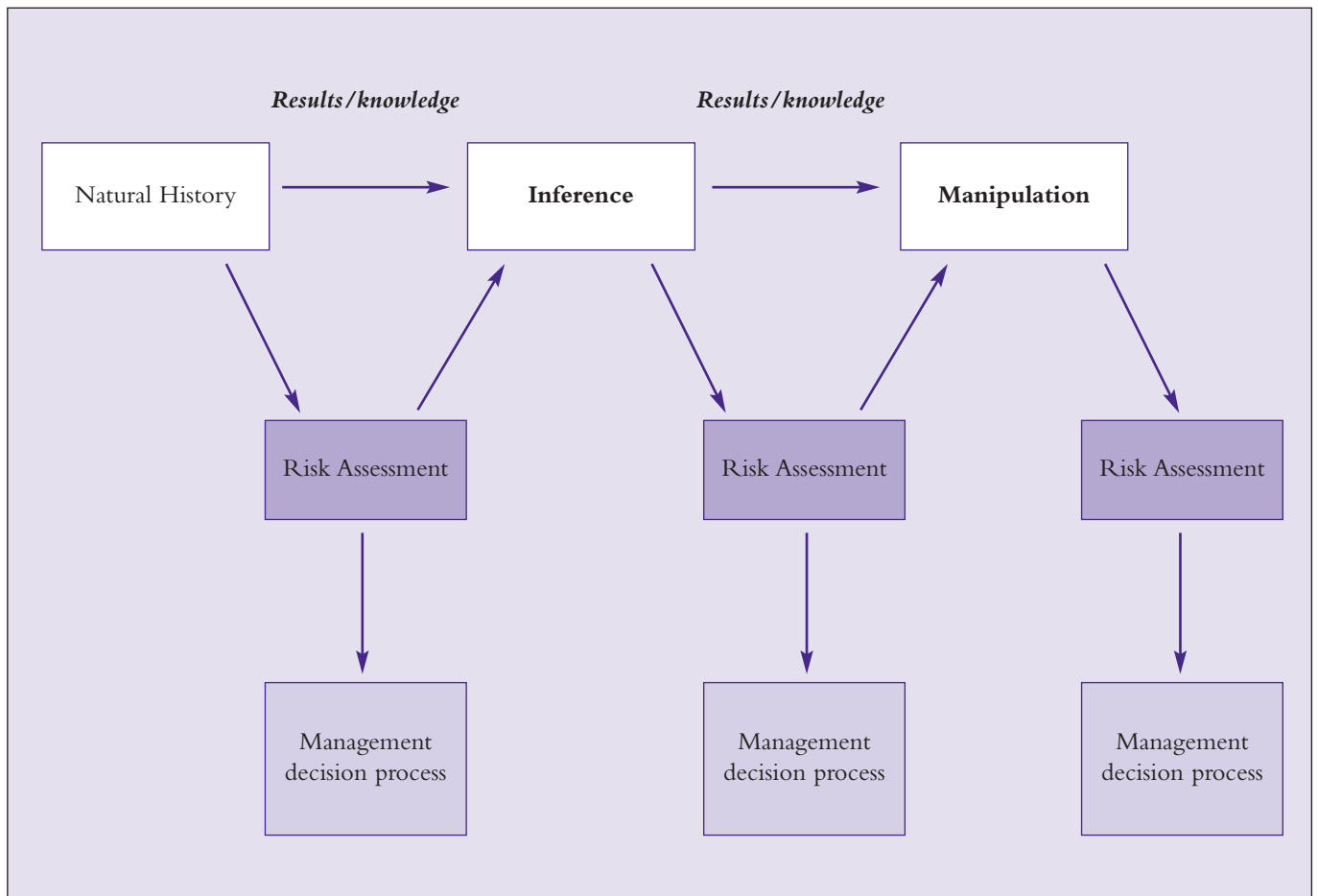


Figure 1: Strategic Research Framework for assessing the effect of commercial western rock lobster fishing on the ecosystem.

Resolution 6

The SRG recommends that the development of detailed projects for these four areas of study occur in liaison with the SRG.

Resolution 7

The SRG recommends that as results from the studies of basic ecology become available that they be used in further risk assessment and decision-making processes as provided for by the strategic framework.

Resolution 8

The SRG recommends that as results from the studies of basic ecology become available that they be used in the inference phase of the strategic framework to develop statistical, conceptual and ultimately mathematical ecological models that can be used in further assessment of risk and the decision making process.

Resolution 9

The SRG recommends that the increased understanding of natural history and the development of ecological modelling capacity should be used to assist in the design of manipulative study options such as fished versus unfished and linear correlative approaches to determine what the effect of fishing on the ecosystem is.

The Western Rock Lobster Fishery/Sea Lion Interaction Scientific Reference Group

Composition	
Ron Edwards	Independent Chair (RLIAC Chairman)
Tim Bray	Executive Officer (RLIAC Executive Officer)
Nick Gales	Australian Antarctic Division
Peter Mawson	Department of Conservation and Land Management
Richard Campbell	University of Western Australia
Jim Penn	Department of Fisheries Research Division

Summary of Recommendations from the Sea Lion SRG

Resolution 1

The SRG summarised the status of Australian sea lions off the west coast as representing isolated and small populations with low genetic variability that is segmented with little or no scope for migration from other populations. The SRG assessed that the impacts of what appear to be low levels of mortality from the fishery can in fact be critical for west coast sea lion

populations. The SRG also concluded that given the generalist feeding behaviour of the sea lion, that there was a very low probability of any effect of lobster removal on the sea lion population.

Resolution 2

The SRG do not believe there is sufficient, or appropriate, data available to conduct a modelling exercise designed to better understand the dynamics of Australian sea lion populations off the west coast, and the impact of fisheries on them. Furthermore, based on the SRG's understanding of sea lion behaviour, in particular their susceptibility to disturbance, the SRG recommends against collecting data that could potentially be used to model sea lion populations and the effect of fishing induced mortality because there is an unacceptably high risk of increasing pup mortality, or reducing sea lion production.

Resolution 3

The SRG advises that a trial of rock lobster pot sea lion exclusion devices, developed with the assistance of gear technologists from, but not limited to, existing designs, be undertaken as a matter of priority to determine the most effective means of eliminating sea lion mortality in rock lobster pots.

Resolution 4

Assuming the Sea Lion Exclusion Devices (SED) trial demonstrates that sea lions can be excluded from rock lobster

pots the SRG recommends that it become compulsory from the commencement of the 2004/05 season to have a SED fitted to every rock lobster pot when fishing in waters from Lancelin to Dongara to a depth of 60m and for all waters of Zone A.

Resolution 5

Given that it is not feasible to have sufficient independent observer data to reliably estimate the level of interaction, the Department of Fisheries should continue with education process designed to improve industry's reporting of whether or not they have interacted with sea lions (and other specially protected species).

Resolution 6

The SRG recommends that the Environmental Management Strategy be revised to include a management trigger requiring a review of SED management rules should there be a sea lion mortality when the use of SEDs becomes mandatory.

Current Status

Having submitted a revised EMS that addresses the certifiers written concerns on time both the Department and WAFIC are awaiting the certifiers formal assessment of the document. A process of clarification with the Certifier is to occur shortly so that should remove any misconceptions and allow for final assessment.



Our Fishery Our Future



Department of
Fisheries



Fish for the future

For further information, contact:

Tim Bray, RLIAC Executive Officer, c/o Department of Fisheries,
3rd Floor, The Atrium, 168 St Georges Terrace, Perth WA 6000
Phone: (08) 9426 7319 Fax: (08) 9321 8917 Mobile: 0418 950 191
E-mail: tbray@fish.wa.gov.au