



Department of
Primary Industries and
Regional Development

Research Library

Fisheries management papers

Fisheries Research

6-2005

Proposed implementation of sea lion exclusion devices in the western rock lobster fishery. Public consultation.

Department of Fisheries.

Follow this and additional works at: https://researchlibrary.agric.wa.gov.au/fr_fmp



Part of the Aquaculture and Fisheries Commons, Business Administration, Management, and Operations Commons, and the Marine Biology Commons

Recommended Citation

Department of Fisheries.. (2005), *Proposed implementation of sea lion exclusion devices in the western rock lobster fishery. Public consultation..* Department of Fisheries Western Australia, Perth. Report No. 197.

This report is brought to you for free and open access by the Fisheries Research at Research Library. It has been accepted for inclusion in Fisheries management papers by an authorized administrator of Research Library. For more information, please contact jennifer.heathcote@agric.wa.gov.au, sandra.papenfus@agric.wa.gov.au, paul.orange@dpird.wa.gov.au.

Dear licence holder/stakeholder

**WEST COAST ROCK LOBSTER LICENCE HOLDERS AND STAKEHOLDERS
CONSIDERATION AND COMMENT SOUGHT ON THE PROPOSED
IMPLEMENTATION OF THE MANDATORY USE OF SEA LION EXCLUSION
DEVICES IN SPECIFIED AREAS OF THE WESTERN ROCK LOBSTER FISHERY
FOR BOTH COMMERCIAL AND RECREATIONAL FISHERS**

As a requirement of the West Coast Rock Lobster Fishery ecological risk assessment process and Department of Environment and Heritage and the Marine Stewardship Council certification/accreditation, it was necessary to investigate and implement the best possible mitigation measure that would eliminate the bycatch of Australian sea lion pups from rock lobster pots while minimising the impact on commercial fishing operations.

The enclosed document '*Proposed Implementation of Sea Lion Exclusion Devices in the Western Rock Lobster Fishery – public consultation document May 2005*', provides you, the stakeholder, with detailed information regarding the incidental mortality of Australian sea lion pups in rock lobster pots and the possible mitigation measures to be implemented to eliminate this occurrence.

All stakeholders are encouraged to consider the above information and provide comment on the proposed recommendation regarding the mandatory use of SLEDs in the WCRLF in the specific areas proposed. The content of all stakeholder submissions will be carefully considered as part of the consultative process. Stakeholders need to disregard the close of submissions date contained within the consultation document. Rather, comments on the proposal should be addressed as follows, and should be received no later than close of business **Friday 8 July 2005**;

Mr Peter Trott
Commercial Fisheries Management Officer (Rock Lobster)
Department of Fisheries
3rd Floor, The Atrium
168 St George's Terrace
PERTH WA 6000

If you have any further enquires related to the proposal, or the consultative process, please do not hesitate to contact Mr Peter Trott, Commercial Fisheries Management Officer – Rock Lobster, on (08) 9482 7262.

I look forward to your participation in this important process for the rock lobster fishery.

Yours Sincerely

Rhys Brown
MANAGER – ROCK LOBSTER

7 June 2005

PROPOSED IMPLEMENTATION OF SEA LION EXCLUSION DEVICES IN THE WESTERN ROCK LOBSTER FISHERY

Public Consultation Document

FISHERIES MANAGEMENT PAPER No. 197

Published by
Department of Fisheries
168 St. Georges Terrace
Perth WA 6000

June 2005

ISSN 0819-4327



Department of
Fisheries

CONTENTS

| | |
|--|----------|
| EXECUTIVE SUMMARY | 3 |
| INTRODUCTION | 4 |
| ISSUES..... | 5 |
| CURRENT STATUS | 5 |
| PROPOSED AREA..... | 6 |
| ROCK LOBSTER INDUSTRY ADVISORY COMMITTEE RECOMMENDATION | 6 |
| PROCESS – HOW TO HAVE YOUR SAY..... | 7 |
| REFERENCES | 7 |

EXECUTIVE SUMMARY

This document '*Proposed Implementation of Sea Lion Exclusion Devices in the Western Rock Lobster Fishery – public consultation document May 2005*', provides you, the stakeholder, with detailed information regarding the incidental mortality of Australian sea lion pups in rock lobster pots and the possible mitigation measures to be implemented to eliminate this occurrence.

The Rock Lobster Industry Advisory Committee (RLIAC), at its 26 April 2005 meeting, endorsed the use of sea lion exclusion device's (SLEDs) in the West Coast Rock Lobster Fishery (WCRLF). RLIAC proposes to recommend to the Minister for Fisheries the mandatory use of SLEDs (two designs recommended by the Sea Lion Scientific Reference Group) by all rock lobster fishers (commercial and recreational) operating within the defined area, for the duration of all rock lobster seasons, commencing on 15 November 2005.

All stakeholders are encouraged to consider the above information and provide comment on the proposed recommendation regarding the mandatory use of SLEDs in the WCRLF in specific proposed areas. Comments on the proposal should be addressed as follows, and should be received no later than close of business **Friday 8 July 2005**;

Mr Peter Trott
Commercial Fisheries Management Officer (Rock Lobster)
Department of Fisheries
3rd Floor, The Atrium
168 St George's Terrace
PERTH WA 6000

The content of all stakeholder submissions will be carefully considered as part of the consultative process. All submissions received during the public consultation period will be used to develop a report for the consideration of the Minister for Fisheries.

It is important to note that a recommendation on this matter, will be provided to the Minister for Fisheries shortly after the end of the 2004/05 rock lobster fishing season.

INTRODUCTION

A thorough ecological risk assessment (ERA) was undertaken for the western rock lobster fishery in 2000, as part of the Commonwealth Government's ecologically sustainable development (ESD) requirements to gain export approval for western rock lobster and Marine Stewardship Council's certification for the fishery as the world's first well-managed and sustainable fishery.

The ERA identified there was a risk to the Australian sea lion population due to the incidental mortality of Australian sea lion pups in rock lobster pots. It is acknowledged that the level of recorded bycatch of the Australian sea lion is low in the WCRLF, however, the population of sea lions on the west coast is small and even low levels of incidental mortality are considered a threat to the population's survival. The Commonwealth Government has recently added the Australian sea lion to the threatened species list as defined under the *Environmental Protection and Biodiversity, Conservation Act 1999* (EPBC Act 1999). DEH is looking to the WCRLF as a leader in management of protected species interactions, particularly with respect to Australian sea lions.

A Scientific Reference Group (SRG) was established to provide the knowledge and research required to address the issue of incidental sea lion mortality. Key findings from this group suggested that the low level of reported interactions was of significant concern to the small population of this species along the western coast of Western Australia.

It was therefore necessary to investigate and implement the best possible mitigation measure that would eliminate the bycatch of Australian sea lion pups from rock lobster pots while minimising the impact on commercial fishing operations.

Over the last two years there have been ongoing trials of sea lion exclusion devices (SLEDs) as part of the investigation of the interaction between the WCRLF and Australia sea lions. Many SLED designs have been developed and trialed and as with most new technology there have been mixed results in eliminating bycatch of the Australian sea lion and their impact on commercial catches.

After consultation with commercial operators in other rock lobster fisheries in Australia, an initial SLED design consisting of a steel bar placed through the neck of the pot was trialed. The results were not encouraging as a drop in catch rate of nearly 18% was recorded. The next design to be trialed was the "t-bar", consisting of a female threaded fitting welded to the bottom of the pot and a screw in metal "t-bar". This trial was run in the "reds" season. While the catch rate was still less in the modified pots, the difference was reduced to approximately 6% for fishing effort in waters less than 20m depth. A number of fishermen reported catching as many or more lobsters in the modified pots.

After some discussion on the design elements and concern over occupational safety, a new SLED design comprising a threaded cup-head bolt was chosen after extensive video trials around North Fisherman Island.

ISSUES

Young sea lions between 6-24 months are particularly vulnerable to capture in pots and all captures have occurred in relatively shallow waters (<20 meters) at distances up to 25 kilometres from the breeding colonies. There has been no reported captures at the Houtman Abrolhos Islands, a very small breeding colony approximately 40 nautical miles off the coast from Geraldton, or around the haulout areas near Perth.

It was decided that all Australian sea lion mortalities associated with the WCRLF should be eliminated by modifying pots to prevent their entry. The vulnerable age range of sea lions coupled with their non-annual breeding season means that the pot modifications would have to be used for the entire fishing season. Further background reading can be found in the Sea Lion SRG Report document (Campbell 2005a) and the assessment of historical abundance of sea lions in Western Australia (Campbell 2005b).

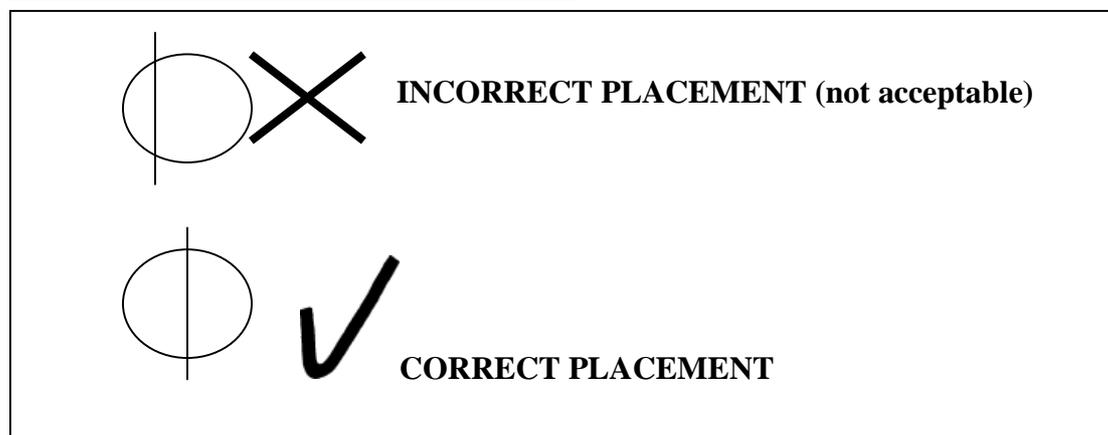
Extensive video trials have been conducted to determine the efficacy of a number of SLEDs. Trials of these devices during commercial fishing operations were also conducted to establish their impact on the catch rate of lobsters.

CURRENT STATUS

The trials showed that the initial SLED resulted in an overall drop in catch but subsequent SLED designs had little effect on the catch rates of legal size lobster. Through the video and commercial trialling process, two designs for SLEDs have been finalised and recommended for use in the industry. These two designs consist of SLED 1-straight bar horizontal (Figure 2) and SLED 2-straight upright (Figures 3a-b).

The first device consists of a metal bar (minimum diameter 6mm) placed through the diameter of the neck of the pot. The device can be placed through at any height within the neck and does not need to be horizontal to the pot top, but must pass through at the diameter of the neck. Figure 1 illustrates the placement of the SLED within the neck of the pot.

Figure 1: Placement of SLED in pot neck



This applies to all pots such as redneck, fingerneck or stickpots. It is noted that this device recorded an overall 18% drop in catch rate of rock lobsters in the commercial trials though some fishers did not record a reduction in catch using this device. The second device consists of a single straight upright, a minimum of 10mm diameter, attached to the bottom of the pot, which finishes at the base of the neck structure.

Trials were conducted using a SLED made from a galvanised cup-head bolts, which were screwed into a nut fixed to the bottom of the pot. The SLED must be positioned centrally within the neck space and extend to the bottom of the neck at least when viewed horizontally (Figure 4). The SLED may extend further into the neck if desired, the minimum height requirement of this SLED in relation to the base of the neck. must reach within 20mm of the base of the neck for all pot types.

The straight upright SLED must have a blunt end protruding into the neck, no sharpened points will be allowed. This applies to all pot types. SLEDs may be fixed to the pot in whatever manner is suitable as long as the SLED satisfies the above dimensions.

PROPOSED AREA

The proposed area for the mandatory use of the SLEDs is shown in Figure 5. This area encompasses all known captures of sea lions and represents the area where sea lions are vulnerable to capture as determined by the best available scientific knowledge. It includes the waters less than 20m within approximately 25 kilometres of the three breeding colonies on the west coast. The northern boundary is just to the north of Freshwater Bay and the southern boundary of the zone is just to the south of Wedge Island. Use of approved SLEDs would be required for the entire fishing season when fishing inside the defined area. This will apply to both commercial and recreational pots set in this area. It is proposed that the mandatory use of SLEDs will be required for the 2005/06 season starting 15th November 2005. As previously stated, there is scope to add SLED designs to the approved list after the commencement of this date, however potential designs will need to be tested in terms of their efficacy in keeping sea lions out of pots and approved by the Executive Director of Department of Fisheries.

ROCK LOBSTER INDUSTRY ADVISORY COMMITTEE RECOMMENDATION

The Rock Lobster Industry Advisory Committee (RLIAC), at its 26 April 2005 meeting, endorsed the use of SLEDs in the WCRLF. RLIAC proposes to recommend to the Minister for Fisheries the mandatory use of the two SLED designs (Figures 2, 3a and 3b) by all rock lobster fishers (commercial and recreational) operating within the defined area shown in Figure 5, for the duration of all rock lobster seasons, commencing on 15 November 2005.

RLIAC have also proposed that other SLED designs may be added to the approved list for future use by fishers after testing and approved by the Executive Director of Fisheries.

PROCESS – HOW TO HAVE YOUR SAY

It is important to note that this matter will be provided to the Minister for Fisheries before the end of the 2004/05 rock lobster fishing season.

The content of all stakeholder submissions will be carefully considered as part of the consultative process in determining the best outcome of the proposed implementation of the mandatory use of SLEDs in the WCRLF. All submissions received during the public consultation period will be used to develop a report for the consideration of the Minister for Fisheries.

All stakeholders are encouraged to consider the above information and provide comment on the proposed recommendation regarding the mandatory use of SLEDs in the WCRLF in specific proposed areas. Comments on the proposal should be addressed as follows, and should be received no later than close of business **Friday 24 June 2005**;

Mr Peter Trott
Commercial Fisheries Management Officer (Rock Lobster)
Department of Fisheries
3rd Floor, The Atrium
168 St George's Terrace
PERTH WA 6000

REFERENCES¹

Campbell R. (2005) Report to the Sea Lion Scientific Reference Group. DoFWA, Marine Research Laboratories, March 2005.

Campbell R. (2005) Historical distribution and abundance of the Australian sea lion (*Neophoca cinerea*) on the west coast of Western Australia. Fisheries Research Report, Dept. of Fisheries, Western Australia, 41pp.

¹ Reference documents are available from the Department of Fisheries Head Office, Perth, or via the Department's website at www.fish.gov.au



Figure 2: SLED 1 consisting of a steel bar (6mm diameter) placed through the neck of the pot and secured around the post with shock cord and clip.

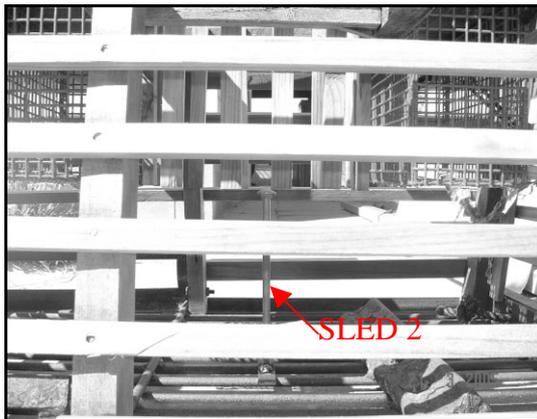


Figure 3a: SLED 2 consisting of a straight upright (cup-head bolt) which attaches to a threaded fitting welded to the bottom of the pot. The minimum height of the device must reach to within 20mm of the bottom of the neck.

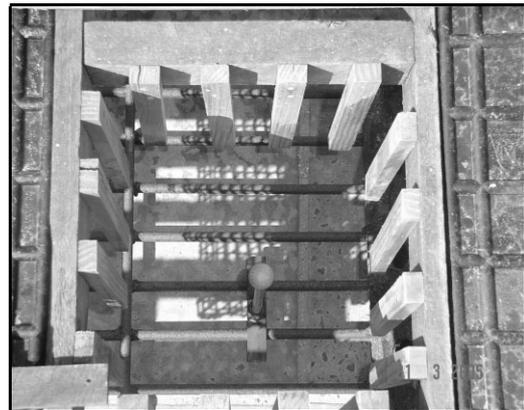


Figure 3b: View of the SLED 2 from above.

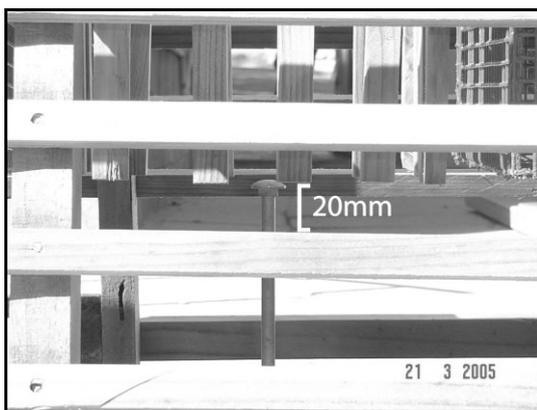


Figure 4: Minimum height requirement of SLED in relation to the base of the neck. Device must reach within 20mm of the base of the neck for all pot types. Pot type shown here is a batten fingerneck

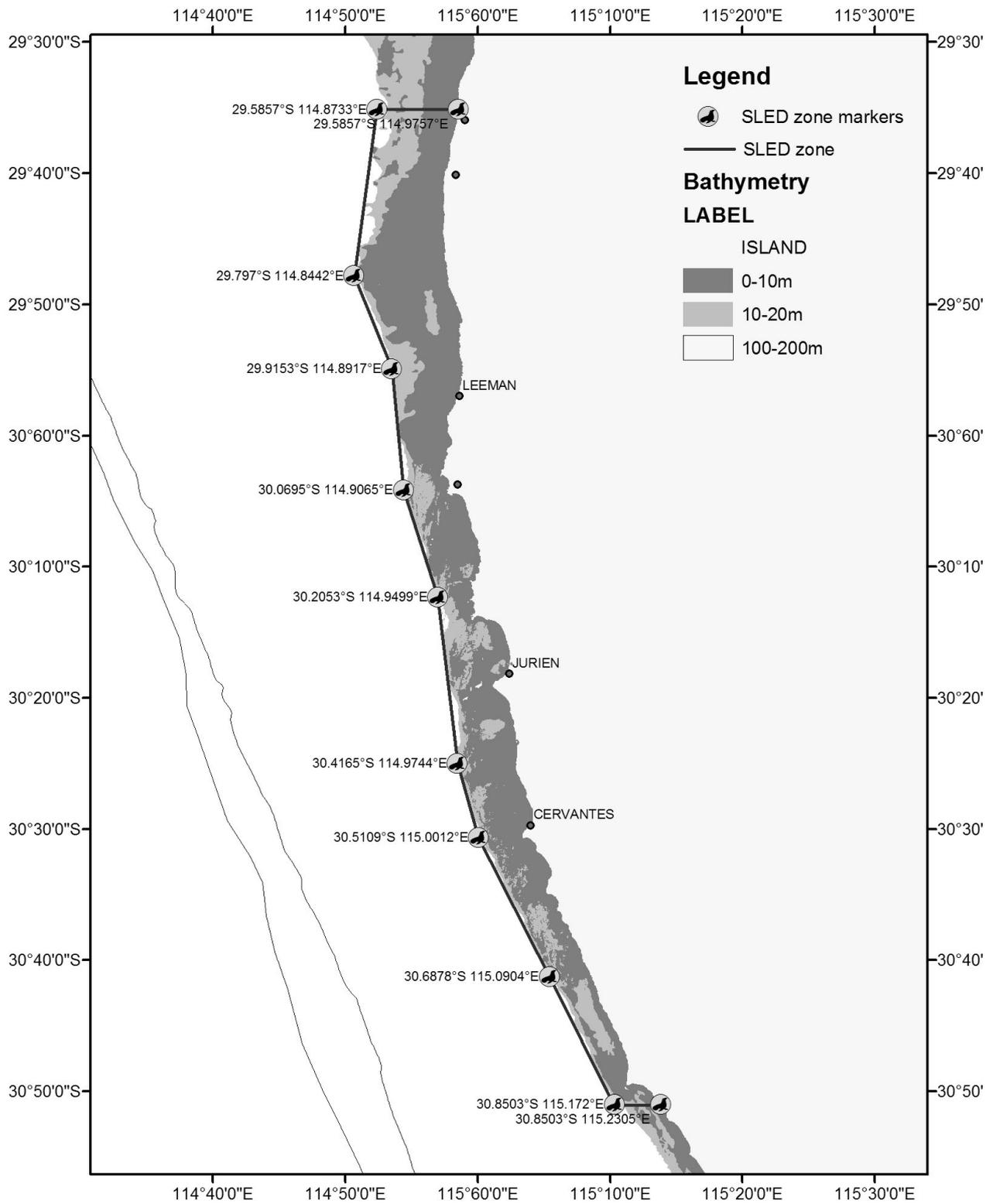


Figure 5: Proposed zone for mandatory use of SLEDs, including waypoints, along the central west coast.