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Proceedings of the American Lobster Transferable Trap Workshop

October 2002

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Atlantic States Marine Fisheries Commission

Convened by:
Atlantic States Marine Fisheries Commission
August 26, 2002
Washington, DC

Preface

This document was prepared in cooperation with the Atlantic States Marine Fisheries Commission's American Lobster Management Board, Technical Committee, Plan Development Team, Stock Assessment Subcommittee and the Advisory Panel.

A report of the Atlantic States Marine Fisheries Commission pursuant to U.S. Department of Commerce, National Oceanic and Atmospheric Administration Award No. NA17FG2205.

Acknowledgments

This report is the result of a Workshop on transferable trap programs for American lobster which was held on August 26, 2002, in Washington, DC. The workshop was convened and organized by a Workshop Steering Committee composed of: David Spencer (Advisory Panel, Chair), George Doll (New York Commercial Lobsterman, Advisory Panel Member), John Sorlien (Rhode Island Commercial Lobsterman, Advisory Panel Member), Todd Jesse (Massachusetts Commercial Lobsterman, Advisory Panel Member), Ernie Beckwith (Connecticut Department of Environmental Protection), Mark Gibson (Rhode Island Department of Environmental Management), and Heather Stirratt (Atlantic States Marine Fisheries Commission).

Special thanks are extended to the session moderators, speakers, and participants whose commitment of valuable time and effort helped make the workshop a success. In particular, the Steering Committee would like to acknowledge Amy Schick (PEW Oceans Commission), Jim Wilson (University of Maine), John Hunt (Florida Fish & Wildlife Conservation Commission), Mike Howard (Atlantic States Marine Fisheries Commission Law Enforcement), and John Sorlien (Rhode Island Commercial Lobsterman) for presenting individual/organizational perspectives on the utilization of transferable trap programs for managing American lobster. In addition, the Steering Committee would like to thank Commission staff Megan Gamble for acting as raporteur and Heather Stirratt for coordinating and facilitating the workshop.

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Overview

The purpose of the transferable trap workshop was to present a wide range of opinions regarding the utility of transferable trap programs in crustacean management so as to educate and inform decision makers and industry members of the benefits and/or disadvantages of employing this options in the management of American lobster.

This report summarizes the discussions that occurred during the workshop and seeks to document the presentations offered by selected speakers regarding transferable trap programs.

The Application of Transferable Trap Programs in the ASMFC American Lobster Fishery Management Plan

Focus Paper for Participants in the ASMFC Lobster Transferability Workshop

Prepared by: Heather Stirratt

Transferability Workshop Subcommittee Members
David Spencer
George Doll
John Sorlien
Todd Jesse
Ernie Beckwith
Mark Gibson

August 7, 2002

Introduction

In recent months the ASMFC has received two proposals from Lobster Conservation Management Teams containing elements of transferable trap programs for adoption by plan addenda and subsequent implementation by adjacent states. These proposals have stimulated many questions about the legality, enforceability, and administrative nature of transferable trap programs when used as a lobster fishery management tool.

The ASMFC has decided to sponsor a Transferability Workshop during August 2002 in order to address these questions and educate workshop participants on the subject of transferable trap programs. This paper is intended to serve as a focus for the workshop discussions and, as such, it provides background information as well as outlines issues for further thought and consideration.

What Do We Mean When We Are Discussing Trap Transferability In Lobster Management?

A transferable trap program[1] involves fishing an allocated number of lobster traps (either via a flat trap cap or historical participation in the fishery), whereby the privilege to fish traps may be sold and/or transferred amongst fishers. The transfer of trap fishing privileges depends upon an individual's desire to participate in the fishery and is generally facilitated through the buying and selling of tangible trap transfer documents (e.g., certificates, licenses) in order to build up or down one's fishing business.

What Is The Purpose Of A Transferable Trap Program?

Transferable trap programs are intended to reduce effort (i.e., time and fishing power) in the fishery while promoting conservation of the stock. The primary purpose of a transferable trap program is to control fishing effort in commercial lobster fisheries and to improve the overall economic efficiency[2] of the lobster industry. Transferable trap programs can be designed to reduce both latent and active effort in the fishery.

In order for a transferable trap program to be successful in enhancing economic efficiency it must be carefully planned as a component of an effort control program (e.g., limited entry, trap limits, etc.). Effort control programs are intended to regulate fishing mortality rates, thereby, conserving lobster stocks over time.

[1] A transferable trap program differs from a transferable quota in that there is no cap/limit on catch.
[2] Economic efficiency refers to the point at which the added cost of producing a unit of fish (or lobster in this case) is equal to what buyers pay. Economic efficiency refers to a condition of minimal waste in the fishery and economy, when the difference between fishing costs and fishing revenue for the fishery as a whole is greatest, not when catch and/or revenue is maximized.

What Is The Relationship Between Transferability, Allocation, And Property Rights?

Allocation

Amendment 3 to the Interstate Fishery Management Plan for American Lobster and subsequent plan addenda have established a trap tag program which outlines trap allocations to fishery participants in seven lobster conservation management areas (i.e., Areas 1, 2, 3, 4, 5, 6, and Outer Cape Cod) ranging from Maine to North Carolina. Trap allocations differ throughout these seven management areas (i.e., Areas 1, 2, and the Outer Cape Cod are based upon a 800-flat trap cap and Areas 3, 4, 5, and 6 are based upon historical participation of each individual in the fishery). As such, transferable trap programs and associated transfer allocations, if employed, are anticipated to vary between management areas and possibly fishery participants (e.g., based on fisher's share of total landings in the area of concern, previous numbers of traps fished).

Transfers

Transferable trap programs will allow commercial fishers to buy, sell, or trade all or a portion or their privilege to fish lobster traps. This allowance will result in a market for trap fishing privileges and transfer between fishery participants. Market prices for transfer of fishing rights will depend upon many factors including but not limited to 1) the total number of traps allowed to be fished under a transferable program, 2) trends in fishery participation (i.e., if the trend is for increasing numbers of people to retire from the fishery then prices will fall versus a trend where escalating numbers of people are entering the fishery or expanding businesses then prices will increase), and 3) the health of the resource.

Fishing Rights

The mechanism chosen to authorize transferability (e.g., certificates) should be considered a privilege to fish at individually determined levels, thus supporting optimum yield[3] of the fishery.

Are There Current Examples Of Transferable Trap Programs?

U.S. Transfer Programs

There are currently a number of transferable trap programs[4] in the United States. For the purposes of this paper, we will focus on case studies specific to crustaceans.

CASE STUDY 1: SPINY LOBSTER (Crawfish) AND SLIPPER LOBSTER REGULATIONS, FLORIDA[5]

Florida adopted a transferable trap certificate plan for spiny lobster in 1992. Initial allocations were based on an individual's recorded landings. The individual's annual catch was divided by the statewide average catch per unit of effort to determine the number of traps to be allocated to each individual. An excerpt of the regulations pertaining to spiny lobster follow.

Ownership of spiny lobster traps used by any commercial harvester may be transferred to other persons, so long as the following conditions are met:

a) The person acquiring ownership shall notify the Division of Law Enforcement within five days of acquiring ownership as to the number of traps purchased, the vendor, and the license or trap number currently displayed on the traps, and shall request issuance of a crawfish license or trap number if the person does not possess same;
b) Buoys shall be renumbered and recolored at the first pulling of traps;

[3] Optimum yield refers to the harvest level for a species that achieves the greatest overall benefits, including economic, social, and biological considerations.

[4] There are examples of ASMFC member states (e.g., Connecticut) which currently administer transferable lobster license programs, which are similar to transferable trap programs outlined herein as case studies.

[5] See Florida's Marine Fisheries Regulations Chapter 68B-24 for Spiny Lobster (Crawfish) and Slipper Lobster.

c) The new license or trap number shall be permanently attached to the traps prior to them being set at the beginning of the next open season;
d) The new owner shall retain a valid bill of sale.

Passive Reductions - Upon the sale or transfer of certificates outside the immediate family of the certificate holder, the number of certificates received by the purchaser shall be reduced by 25 percent. Additionally, certificates forfeited due to conviction for theft from a spiny lobster trap or reverting to the Commission for nonpayment of certificate fees shall be included as trap certificates passively reduced in a license year.

Active Reductions – If the total passive reduction in lobster trap certificates in any license year does not total 4 percent of the certificates available during that season, an additional reduction in the number of available certificates shall be made at the end of the season in the appropriate percentage to achieve the 4 percent target reduction for that year.

The intent of the above regulations is clearly outlined in the 2000 Florida Statutes (Title XXVIII Chapter 370.142) which states:

(1) INTENT. Due to rapid growth, the spiny lobster fishery is experiencing increased congestion and conflict on the water, excessive mortality of undersized lobsters, a declining yield per trap, and public concern over petroleum and debris pollution from existing traps. In an effort to solve these and related problems, the Legislature intends to develop pursuant to the provisions of this section a spiny lobster trap certificate program, the principal goal of which is to stabilize the fishery by reducing the total number of traps, which should increase the yield per trap and therefore maintain or increase overall catch levels. The Legislature seeks to preserve as much flexibility in the program as possible for the fishery's various constituents and ensure that any reduction in total trap numbers will be proportioned equally on a percentage basis among all users of traps in the fishery.

CASE STUDY 2: STONE CRABS, FLORIDA[6]

Florida recently adopted a transferable trap certificate plan for stone crab. Initial allocations are based upon (whichever is less) the number of traps listed on the saltwater products license or the pounds of claws landed divided by 2, as reported through the trip ticket program during any one of the applicable fishing seasons (i.e., 1995/1996 or 1997/1998). The purpose and intent of the transferable trap program is stated in the regulations as follows.

(1) PURPOSE AND INTENT. Rapid growth of Florida's stone crab trap industry has led to an excessive number of traps in the water, declining yields per trap, and an increase in conflicts between stone crabbers and shrimp trawlers. The expanding number of traps, buoys and ropes impede navigation and damage hard bottom and sea grass beds. In an effort to solve these problems, the Fish and Wildlife Conservation Commission is establishing a trap limitation program for the stone crab fishery in which the principal goal is to stabilize the fishery while generating an optimum sustainable yield utilizing the fewest number of traps.

International Transfer Programs

There are currently a number of transferable trap programs employed internationally. For the purposes of this paper, we will focus on case studies specific to crustaceans.

CASE STUDY 1: ROCK LOBSTER, NORTHERN ZONE OF SOUTH AUSTRALIA[7]

[6] See Florida's Marine Fisheries Regulations Chapter 68B-13 for Stone Crabs. See Also the 2000 Florida Statutes Title XXVIII Chapter 370.13.

The Northern Zone Rock Lobster Fishery Management Committee and the Minister for Primary Industries and Resources in South Australia implemented a five-year management plan for rock lobster in 1997. The regulations pertaining to the rock lobster fishery can be referenced in the Scheme of Management (Rock Lobster Fisheries) Regulations 1991. Specifically, the management plan calls for the following:

- limited entry,
- a legal minimum size of 102 millimeters (both sexes),
- a closed season from June 1 to October 31 annually,
- boat specific time closures,
- escape gaps and mesh requirements,
- a maximum pot limit (60 pots per license),
- a maximum pot weight (40 kilograms),
- no double pulling of pots within 24 hours,
- a prohibition on the taking of berried females, and
- restrictions of boat size and engine capacity.

Licenses to fish for rock lobster are transferable upon approval by the Director of Fisheries. Rock lobster pot entitlements are fixed as a condition of an individual license and no license can have a pot entitlement of more than 60 traps or less than 25 traps. Transfers of pot entitlements must not result in any license exceeding this limit. Licenses that fall below the minimum entitlement as the result of a transfer must be surrendered. To ensure compliance, the regulations require that violations of pot entitlement regulations result in pot entitlement reduction penalties. Pot entitlements can be increased or decreased as necessary by regulation for the proper management of the fishery.

What Are The Issues For Further Thought And Questions For Consideration During The Transferability Workshop?

Conservation

THEME: For the purposes of this paper, conservation refers to the restoring, rebuilding, and maintaining of lobster fishery resources, in order to assure the availability of lobster fishery resources on a long-term basis. There is debate as to whether transferable trap programs contribute to the conservation of lobster fishery resources, as defined above.

IN FAVOR: Transferable trap programs are tools for conservation of lobster fisheries resources. Conservation results from reduced fishing mortality, which can be achieved through effective effort control. Care must taken to scale back traps to a threshold (assuming we know the number of traps fished and can estimate the number of lobsters caught), whereby fishers cannot make up for the effort reductions through adjustments in fishing strategy or skill.

OPPOSED: Whereas traps are only one of many components of lobster fishing effort, transferable trap programs by themselves are not tools for conservation of lobster fisheries resources. Conservation results are difficult to achieve without a tool to limit catch. Even though trap numbers may be reduced along with effort, that does not necessarily equate to a reduction in fishing mortality. This is especially true when one considers fishers ability to modify fishing strategy (i.e., enhancing gear catchability, saturating an area with traps, hauling on a shorter set) or increase skill in order to harvest more lobster. Without a quota or truly effective controls of fishing effort, transferable trap programs serve as an allocation tool rather than a conservation tool.

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[7] See South Australia Scheme of Management (Rock Lobster Fisheries) Regulations 1991. See also South Australian Fisheries Management Series Paper No. 28 entitled "Management Plan for the South Australian Northern Zone Rock Lobster Fishery" (December 1997).

Administration

THEME: For the purposes of this paper, administration refers to the efforts involved in implementing and enforcing a transferable trap program. There is debate as to whether transferable trap programs can be easily enforced and implemented with minimal administrative burden.

IN FAVOR: Transferable trap programs can be easily enforced and applied with minimal administrative burden. Requiring that traps be permanently marked to account for transfer allocations prior to the beginning of the next open season/fishing year can enhance enforcement. Administrative burden can be minimized by requiring that the marine fishery agency with jurisdiction over the resource in question establishes a period of time in which transfers can occur, is notified of the transfer, and that that information is updated, stored, and reported to enforcement officers at the conclusion of the transfer period.

OPPOSED: Transferable trap programs cannot be easily enforced or applied with minimal administrative burden. In order to enforce a transferable trap program, officers must be able to readily link an individual fisher to an authorized number of traps. While the trap tag program was implemented to create this link, it only works if enforcement agencies have the resources (i.e., monetary and personnel) to actively enforce trap tag requirements. Administrative tools must be developed and available to enforcement agents in the field to adequately enforce trap programs allowing transferability. To date this does not exist in all states. In order to reduce the administrative burden associated with implementation of transferable trap programs, a process must be designed to outline when transfers would be allowed, how new tag allocations would be distributed and/or collected with each transfer, and how informational changes would be collected, updated, stored and reported.

Capitalization and Concentration

THEME: For the purposes of this paper, overcapitalization occurs when the total fishing effort in a fishery increases to the point where an additional unit of fishing effort that costs one dollar produces less than an additional dollar of landings revenue. There is debate as to whether transferable trap programs can eliminate overcapitalization in the lobster fishery, while simultaneously avoiding monopolies on allocated fishing privileges.

IN FAVOR: Transferable trap programs can eliminate overcapitalization in the lobster fishery, while simultaneously avoiding monopolies on the allocated fishing privileges. When combined with an effort control program, transferable trap programs can effectively eliminate overcapitalization by removing latent effort and, thereby, reducing the potential for effort expansion. In order to avoid monopolies, transferable programs should employ minimum and/or maximum allocation/authorization provisions.

OPPOSED: Transferable trap programs cannot eliminate overcapitalization in the lobster fishery, while simultaneously avoiding monopolies on the allocated fishing privileges. A transferable trap program employed singularly (i.e., no combination of other management tools to control effort) cannot eliminate overcapitalization because fishing skill will continue to increase as new technologies (e.g., gear specifications) are discovered. This evolution of fishing skill will eventually result in increased fishing effort and, subsequently, overcapitalization in the fishery over time, even if a minimum and/or maximum allocation/authorization provision is included in the design of a transferable trap program.

Equity

THEME: For the purposes of this paper, equity refers to freedom from bias or favoritism when allocating fishing privileges amongst fishery participants. There is debate as to whether transferable trap programs will provide fair and equitable fishing rights to all interested

participants. The degree to which a transferable trap program will provide fair and equitable fishing rights will depend upon the access program (e.g., open, controlled, limited) employed in the area of question.

Workshop Questions:

1. Why is the ASMFC considering transferable trap programs for lobster management? What fishery management problem(s), specific to American lobster, exist(s) (e.g., overcapitalization, lack of effort control, overfishing) that could be addressed through employment of a transferable trap program?
2. Is there anything (i.e., positive or negative attributes/outcomes) to learn from the case studies?
3. Keeping the previous answers in mind, what design elements, at a minimum, should be included in a transferable trap program?
4. How do these design elements apply/mesh with the current ASMFC lobster management regime? Answers should be mindful of existing state and federal statutory limitations, political boundaries (i.e., state, federal, lobster conservation management areas), ASMFC requirements for trap tag program, trap limits, etc.
   - ✓ Are there laws, statutes, or regulations (state or federal) that would limit consideration/implementation of transferable trap programs, hence the legality question? Are states legally allowed to charge money for allocating fishing rights (answers may differ for each state)? If equity amongst users calls into question the legality of this tool, would not a lottery, public auction, or some other system be more equitable? What other challenges (e.g., political opposition, philosophical opposition) are anticipated when considering transferable trap programs?
   - ✓ Are there area/state specific design elements that should be incorporated into a transferable trap program design, hence the political boundary question? If so, what are they (give answers by area/state)? If not, would it be possible to apply a coastwide transferable trap program?
   - ✓ Can transferable trap programs be merged with the existing trap tag program employed by all coastal states/federal government? If not, why?
   - ✓ Can transferable trap programs be employed along side of existing trap limits and remain effective at addressing the problems outlined earlier? If not, why?
5. What role, if any, should the ASMFC play in developing transferable trap programs either on an area-by-area basis or coastwide?
   - ✓ Do we need another workshop to further explore the topic of transferable trap programs (i.e., workshop to delve into the details of area/region specific or coastwide programs)? If so, participants should clearly define the goals and objectives of this workshop. If not, participants should clearly define why they do not want to explore this topic further.

The questions below will require a further workshop to delve into the specifics of a transferable trap program applied either on a regional or coastwide scale.

- ✓ What would be the eligibility requirements for someone to obtain the fishing rights (transfer) of another licensee/permitee (e.g., active fishing requirements, boat ownership)? What mechanism will be employed to allow for new entrants into the fishery (e.g., exit/entry ratios), without increasing effort?
- ✓ Will there be any restrictions on the number of certificates/traps one could possess through this transfer program? Will corporations be allowed to possess certificates/traps through this transfer program? If so, how many?
- ✓ Should individuals be able to buy and "bank" trap certificates?
- ✓ Should non-profit corporations be allowed to buy, hold, sell, and lease trap certificates so as to act as a trap certificate "bank." Is it possible to provide a source of trap certificates for new entrants or to remove allocations for conservation purposes?
- ✓ Will there be a time limit on how long a person must hold or fish tags before they can be sold or resold?

- ✓ How will the trap transfer system be designed to avoid disruption of fishing business (e.g., within the lobster fishery or diversifying into other fisheries)? What system design will recognize and mitigate the impacts to both full and part-time fishers?
- ✓ Will there be a need for geographical sales limitations? Would a seller be able to sell his tags to purchasers from different areas/states?
- ✓ How will historical participation be determined? What is the role of historical participation after the initial allocation (i.e., if person buys or sells is the history based upon the new or old permit)? Does this question imply that there may be some further allocation in the future that will rely on historical participation subsequent to the historical participation that is used to make the initial allocation?
- ✓ Would transferability become a compliance requirement? If so, what specific performance criteria would be used to monitor compliance?

Group Discussions

Discussion Questions/*Participant Responses*

1. **What fishery management problem(s), specific to American lobster, exist(s) (e.g., overcapitalization, lack of effort control, overfishing) that could be addressed through employment of a transferable trap program?**
   - *Latent Effort*
   - *Overfishing*
   - *Long time before goals are attained*
   - *Trap reduction has additional benefits beyond reducing fishing mortality*
   - *Mismatch b/n what can be fished vs what a fisherman would like to fish*
   - *Overcapitalization*
   - *Lack of effort controls*
   - *Increasing difficulty with entering the fishery*
   - *Lack of equitability*
   - *Spatial concentrations of fishers & traps*

2. **Why is the ASMFC considering transferable trap programs for lobster management?**
   - *A management alternative that addresses all of the objectives in Amendment 3*

3. **Is there anything (i.e., positive or negative attributes/outcomes) to learn from the case studies?**

   Negative(s)
   - *Difficult to reduce the number of traps*
   - *Concerns about incentives for fishermen to want to reduce traps*
   - *Concerns about length of time associated with reducing F (FL case study)*
   - *Need a good administrative program in place at the beginning of process*
   - *Need to have a goal (allocation goal, reduction goal)*
   - *Concern about turning latent fishers into active fishers and its effect on the resource*
   - *Concern about efficiencies and how they relate to the effect on coastal communities*
   - *Need to have a cap on the number of traps fished*
   - *Concern about regulatory authorities changes regulations over time*
   - *Building trust among fishermen and between fishermen, managers and scientists through communication (FL case study)*
   - *Need to decided whether or not leasing is allowed and how will it effect the program*
   - *Identify types of allocation programs & what do we want to maintain (Impact of the length of privilege to the cost of the privilege)*
   - *Long term benefits as opposed to short term concerns*

- *make sure there is some stability*
- *Need to maintain diversity in the fishery (different sized boats and participants/companies)*
- *Relationship between reduction in traps and reduction in F is unknown*

Positive(s)

- *Transferability makes Conservation by pot reduction acceptable to the industry*
- *Transferability allows for flexibility in that fishermen can decided what is the best thing to do for their own business (number of traps fished)*
- *Increases the efficiency of each business*
- *Increases conservation by getting rid of the number of traps sitting the water (ghost gear)*
- *Serves multiple purposes (endanger species interactions)*
- *Concerns can be addressed through careful program design*
- *Creates a disincentive to cheat because a fisherman can go beyond a flat trap cap (if program set up this way)*

4. Keeping the previous answers in mind, what design elements, at a minimum, should be included in a transferable trap program?

- *Maximum individual allocation should be based on the economic efficiency of the business*
- *Transfer should only take place with the vessel upgrade requirements in order to maintain the character of the fleet*
- *Transfer should only take place within a given zone or area*
- *Reductions should occur across the board proportionally*
- *Reductions should be permanent*
- *Transfers should only take place at certain time of the year and only once*
- *No leasing (owner operated)*
- *Sufficient stability to allow long term business planning*
- *Buyback of latent licenses or license holders that haven't maintained a certain level of participation in the fishery*
- *No gain from the surcharge of the transfer*
- *Percentage of ownership provision*
- *Number of traps allowed to fish v. number of traps allowed to transfer*
- *Define a saturation point*
- *Conservation tax on the transfer (on traps)*
- *No transfer of latent tags*
- *Define eligibility and consider provisions to assist interested parties into entering the fishery (apprenticeship program)*
- *Establish a total allowable trap level*
- *Articulate goals (amount of reduction over set number of years)*
- *Relationship of transferable trap program with market*

5. How do these design elements apply/mesh with the current ASMFC lobster management regime? Answers should be mindful of existing state and federal statutory limitations, political boundaries (i.e., state, federal, lobster conservation management areas), ASMFC requirements for trap tag program, trap limits, etc.

- *Suggestion for answering question 4: Take previous list and compare to objectives of Amendment*
- *Runs counter to vessel trap limits*
- *Establish a maximum trap allocation*
- *Complexity of LCMTs and federal transferability remains unresolved, requires coordination with interest groups and federal government.*
- *Question of how to implement a transferable trap program for individuals who are duel permitted in multiple areas*
- *Single program applied to all areas*

- **Administrative cost to the agencies**
- *Reevaluation on current limited entry programs at the state and federal level*
- *Assess property right question and determine each state's statutory authority in implementing transferable trap programs*
- *Concern about whether or not transferable trap program is a compliance issue*

6. What role, if any, should the ASMFC play in developing transferable trap programs either on an area-by-area basis or coastwide?

- *LCMTs should develop transferable trap program proposals*
- *ASMFC should investigate the answers/questions/concerns that were raised relative to implementation of transferable trap programs at the state and federal levels*
- *Cooperative approach to developing and implementing transferable trap programs*
- *Concerned about multiple plans due to administration of programs*
- *Representation from each LCMT on a super LCMT*
- **Do not make compliance issue**
- *No one size fits all for LCMTs*
- *ASMFC should develop guidelines for addressing biology and economic based proposals*
- *Adequacy of data available*
- *Require additional monitoring of program to review it*

Appendix 1: Workshop Agenda

ASMFC Lobster Transferability Workshop
Monday, August 26, 2002
9:00 a.m. – 1:00 p.m.

AGENDA

9:00 a.m. – 9:15 a.m.	**Introduction** Welcome *Heather Stirratt*
9:15 a.m. – 11:15 a.m.	**Presentations (15 minutes each; 5 minutes Q/A)** ▪ Transferability as a Fishery Management Tool: Possibilities and Limitations- *Amy Schick* ▪ Experiences with Market-based Transfers in Fisheries Management- *John Sutinen* ▪ Transferable Trap Programs in the Context of Area Management – *Jim Wilson* ▪ Spiny Lobster Fishery Management in Florida - *John Hunt* ▪ Enforcement of Transferable Trap Programs – *Mike Howard* ▪ Preserving the Southern New England Lobster Fishery through Fair and Effective Management- *Jon Sorlien*
11:15 a.m. – 11:20 a.m.	**Break**
11:20 a.m. – 12:50p.m.	**Facilitated Discussion** All Participants
12:50 p.m. – 1:00 p.m.	**Wrap-up** Summarize Discussions/Recommendations *Heather Stirratt*

Workshop will be facilitated by Heather Stirratt, ASMFC ISFMP Staff

Attendees: Members of the Lobster Management Board
Members of the Lobster Advisory Panel
Lobster Interested Parties/General Public

Recommended reading: Focus Paper Entitled "The Application of Transferable Trap Programs in the ASMFC American Lobster Fishery Management Plan"

Additional reading: Florida's Marine Fisheries Regulations Chapter 68B-24 for Spiny Lobster (Crawfish) and Slipper Lobster
Florida's Marine Fisheries Regulations Chapter 68B-13 for Stone Crabs
2000 Florida Statutes Title XXVIII Chapter 370.13
2000 Florida Statutes Title XXVIII Chapter 370.142

Please bring: Questions, Comments, and Supplies as appropriate

Appendix 2: List of Workshop Participants

Participants	*Company/Organization*	*City, State*
Paul Diodati	MA DMF	Boston, MA
Vito Calomo	MA	Gloucester, MA
Tom Fote	NJ	Toms River, NJ
Christina Hamm	Clark University	Worcester, MA
Joe Fessenden	ME DMR	Hallowell, ME
Tom Meyer	NMFS	Silver Spring, MD
Gil Pope	RI	Wakefield, RI
Anne Lange	NMFS	Silver Spring, MD
George Gunther	CT	Stratford, CT
Pat Augustine	NY	Coram, NY
Lance Stewart	CT	Avery Point, CT
Bill Adler	MA	Marshfield, MA
Janice Plante	Commercial Fisheries News	--
David Etnier	ME	Maine
Dennis Abbott	NH	New Market, NH
Chris Schoppineyer	NOAA/NMFS	New Castle, NH
Sherman Baynard	Coastal Conservation Association	Centreville, MD
Byron Young	NY DEC	East Sautuket, NY
Roy Crabtree	FL Fish & Wildlife Commission	Tallahassee, FL
Richard Allen	R. B. Allen Association	Wakefield, RI
Carl Wilson	ME DMR	Boothbay Harbor, ME
Pat White	ME	York, ME
Pat Stante	Commercial Lobsterman	Annapolis, MD
Harold Mears	NMFS	Gloucester, MA
Bonnie Spinazzola	Atlantic Offshore Lobstermen's Assoc.	Candia, NH
David Spencer	Commercial Lobsterman	Jamestown, RI
Bob Baines	Commercial Lobsterman	So. Thomaston, ME
Lawrence Fernandes	Commercial Lobsterman	Stratford, CT
Lynn Waller Fegley	MD DNR	Annapolis, MD
Ed Bogaert	Commercial Lobsterman	Mountain Lakes, NJ
Paul Perra	NMFS	Gloucester, MA
John Depersensorre	NJ	Margate, NJ
James Fox	Commercial Lobsterman	Smithtown, NY
George Doll	Commercial Lobsterman	Northport, NY
John German	Commercial Lobsterman	Brookhaven, NY
John P. Davi Jr.	Commercial Lobsterman	Port Jefferson, NY
Eric Schwaab	MD DNR	Annapolis, MD
Dan McKiernan	MA DMF	Boston, MA
Bob Glenn	MA DMF	Pocasset, MA
Eric Smith	CT DEP	Old Lyme, CT
Mark Gibson	RI DEM	Jamestown, RI
David Borden	RI DEM	Providence, RI
Arthur Sawyer Jr.	Commercial Lobsterman	Gloucester, MA

Participants	*Company/Organization*	*City, State*
Todd Jesse	Commercial Lobsterman	Plymouth, MA
John Sorlien	Commercial Lobsterman	Wakefield, RI
Gordon Colvin	NY DEC	East Setauket, NY
Amy Schick	PEW Oceans Commission	Arlington, VA
John Hunt	FL Fish & Wildlife Commission	Florida
Jim Wilson	University of Maine	Maine
Mike Howard	ASMFC	Washington, DC
Tina Berger		
Megan Gamble		
Heather Stirratt		

Appendix 3: Literature Review

SOUTH AUSTRALIAN
FISHERIES MANAGEMENT SERIES

PAPER NO. 28

MANAGEMENT PLAN FOR THE SOUTH AUSTRALIAN NORTHERN ZONE ROCK LOBSTER FISHERY

William Zacharin (Editor)

Prepared by the
Northern zone Rock Lobster Fishery Management Committee
in association with
Primary Industries and Resources SA
South Australian Northern zone Rock Lobster Fishermen's Association

December 1997

Foreword

Management of Marine Resources in South Australia

Marine resources in South Australia are common property resources. The role of the Government, as custodian of the marine resources on behalf of the general community, is to ensure that marine resources are used in an ecologically sustainable manner and as efficiently as possible, while yielding a reasonable return to the community. This ensures that the benefits of the use of marine resources are maximised within the community.

Experience world-wide has shown that where there is unrestricted use of marine resources, there is little incentive for individuals harvesting the resource to conserve fish stocks and competition amongst users often leads to resource depletion. Left unmanaged, the increase in fishing effort that results from competition is reflected in lower individual catches in the recreational fishing sector, and over-capitalisation and reduced financial returns in the commercial fishing industry. Loss of these resources to the community can result in significant regional economic problems in some States.

In carrying out their management of the resource, Governments have the responsibility of ensuring that the basis for the sharing of the resource among all users is clearly understood and accepted as equitable, and that the allocation of fisheries resources and their level of utilisation are consistent with the needs of present and future generations.

To provide for better decision making by Government in managing the marine resources, specific fishery management committees have been established to advise the Minister for Primary Industries, Natural Resources and Regional Development. These management committees are comprised of Government managers, research scientists, commercial and recreational fishers and fish processors, and are chaired by independent chairpersons. Appointment of members and the terms of reference of the management committees are provided for under the *Fisheries (Management Committees) Regulations 1995*.

Where scientific data or evidence on some biological parameter for a fishery is lacking and management decisions must be made in an environment of uncertainty, the Government and management committee will take a precautionary approach to the management of these resources.

Hon Rob Kerin
MINISTER FOR PRIMARY INDUSTRIES,
NATURAL RESOURCES AND REGIONAL DEVELOPMENT

/ / 1997

A LETTER FROM THE CHAIRMAN

The northern zone rock lobster fishery is a major generator of export revenue, with an estimated beach value of around $26 million per annum. It also contributes to the State's economy with over 200 jobs generated throughout regional South Australia.

Careful planning and management by Government, in partnership with industry, has seen the many problems of unrestricted fishing overcome. Harvesting levels in the northern zone rock lobster fishery have been limited since 1966 and the catch has stabilised at around 900 tonnes per season (November to May).

The Northern Zone Rock Lobster Fishery Management Committee provides advice to the Minister for Primary Industries, Natural Resources and Regional Development on management of the fishery. The management committee is comprised of commercial and recreational fishers, a government resource manager and research scientists. In carrying out our management responsibilities, the management committee must ensure that the basis for sharing the resource among all users is clearly understood and accepted as equitable between the stakeholders. The allocation of this resource and the level of utilisation also needs to be consistent with the needs of present and future generations.

Scientific assessment of the northern zone rock lobster fishery shows that the resource is being harvested at a sustainable level. To ensure total fishing effort remains within current levels, a unique time closure system was introduced into the fishery in 1995. This flexible management approach could not have succeeded without the full support of the commercial licence holders and committee members. I am confident that the northern zone rock lobster fishery will continue to prosper and make a significant contribution to the regional economy of South Australia.

I take this opportunity to thank the industry members of the management committee, Graham Walden, Guy Manthorpe, Daryl Spencer, Alby Whittle and Bob Rigoni for their excellent work on the committee; and Roger Edwards (Executive Officer, SANZRLFA) and the past Chairman, Stephen Duncan (to 1 October 1997) in the preparation of this management plan.

Diane Myers
CHAIRMAN
NORTHERN ZONE ROCK LOBSTER
FISHERY MANAGEMENT COMMITTEE

Contents

1 Scope of the management plan

Sustainable management of marine resources is the responsibility of Primary Industries and Resources South Australia (PIRSA) under the *Fisheries Act 1982*. The principal objectives of the Act (Section 20) are:

(a) ensuring, through proper conservation, preservation and fisheries management measures, that the living resources of the waters to which this Act applies are not endangered or overexploited; and

(b) achieving the optimum utilisation and equitable distribution of those resources.

This management plan provides a statement of the policy, objectives and strategies to be employed for the sustainable management of the northern zone rock lobster fishery in State waters. Fishing for all species of rock lobster in the Genus *Jasus* is controlled under this management plan.

Regulations pertaining to the management of the rock lobster fishery in South Australia are located in the *Scheme of Management (Rock Lobster Fisheries) Regulations 1991*.

This management plan shall operate for a **five** year period from 1 November 1997 subject to annual review and amendments as considered necessary by the Northern Zone Rock Lobster Fishery Management Committee and the Minister for Primary Industries, Natural Resources and Regional Development.

2 Description of the fishery

2.1 Definition of the Fishery

The area of the northern zone rock lobster fishery extends from the Murray Mouth, north and west to the Western Australian border and is defined as being those coastal waters:

> *"westerly of a line commencing at the point where the meridian of longitude 139°E intersects the shore of South Australia, then due south to position latitude 36°20.0S and longitude 139°E, then due west to position latitude 36°20.0S and longitude 138°40.0E, then due south to position latitude 36°40.0S and longitude 138°40.0E, then due west to position latitude 36°40.0S and longitude 138°20.0E, then due south to position latitude 37°S and longitude 138°20.0E, then due west to position latitude 37°S and longitude 138°E, then continuing due south along the meridian of longitude 138°E."* (figure 1)

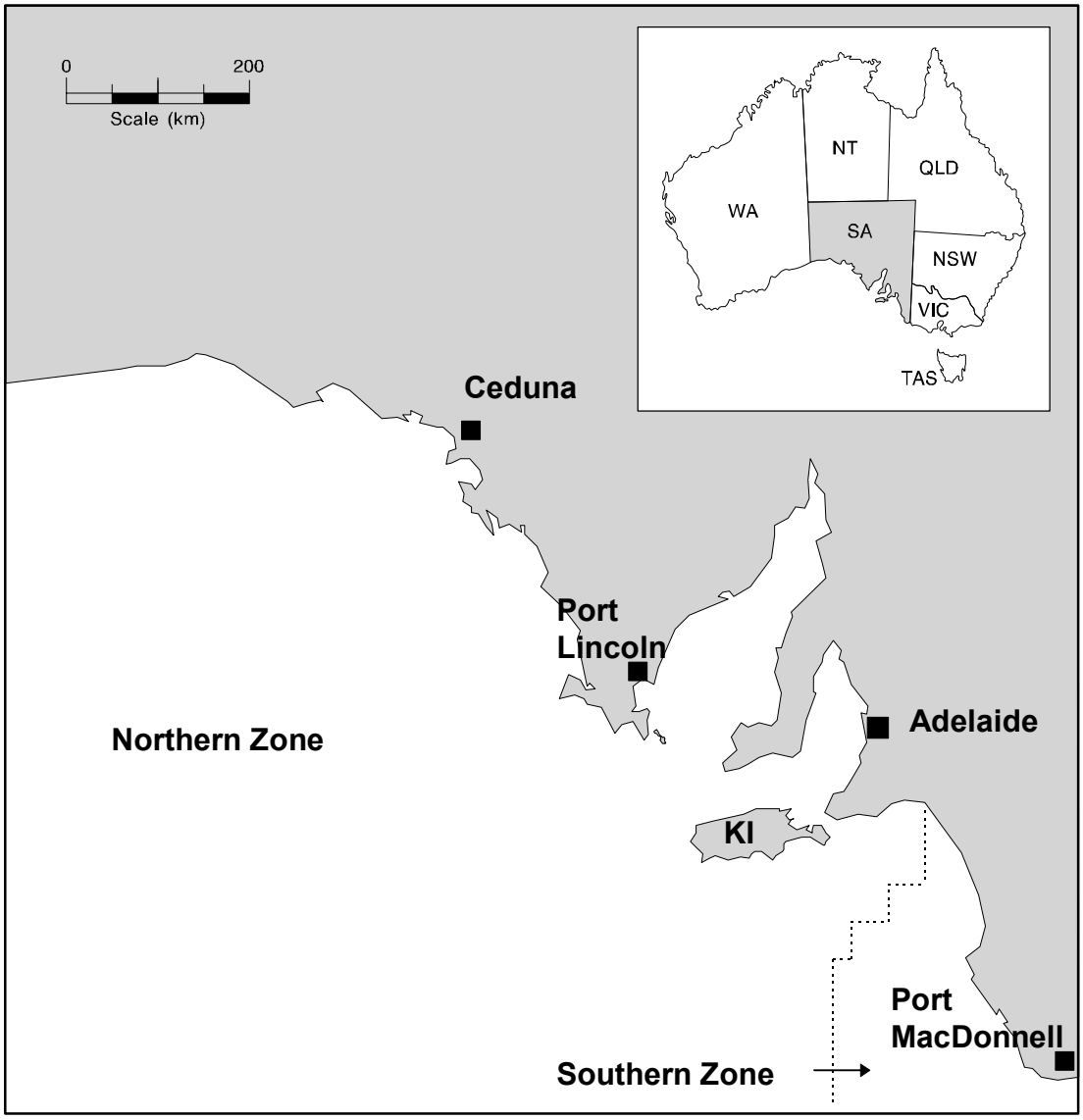

Figure 1: The Northern and Southern Zones of the South Australian rock lobster fisheries.[Refer to Appendix I for statistical fishing areas]

A number of marine protected areas have been established within the waters of the fishery, consequently not all waters in figure 1 are available to fishing.

The fishery involves the taking of rock lobster, *Jasus edwardsii*, within these waters as prescribed under the *Fisheries Act 1982* and regulations. Licensed rock lobster fishers also have access to a variety of other species within the region including salmon (*Arripis truttaceus*), mulloway (*Argyrosomous hololepidotus*), octopus (*Octopus* spp) and snapper (*Pagrus auratus*). Some fishers have unrestricted access to king (giant) crabs (*Pseudocarcinus gigas*), while other fishers are subject to a five crab bycatch per trip limit.

There are 74 licence holders in the fishery which operates between 1 November and 31 May. The fleet operates from a number of ports in South Australia between Victor Harbour and the far west coast. Vessels fish for between one and ten days per trip, with vessels on the west coast fishing further from port and therefore having longer trips.

Pots of wire mesh on steel frames or 50 x 75 mm weldmesh with moulded plastic necks, are used in the fishery. The dimensions of pots and the requirement for enabling escape of undersize rock lobster are specified in the *Scheme of Management (Rock Lobster Fisheries) Regulations 1991*. Pots are usually set overnight and hauled at first light. Hydraulic or mechanical pot haulers are used.

Vessels are restricted to 18 meters in length and a total engine capacity of 1,200 BHP. There has been a recent shift away from traditional displacement vessels to planing hulls enabling fishing over greater distances during a day. Recent technology changes have also resulted in an increasing level of capital investment by fishers and increased profit expectations.

2.2 Biological characteristics

Southern rock lobsters are distributed from Eden in New South Wales to southern Tasmania in the south and Dongara, Western Australia to the west. Rock lobster mate primarily between April and July, with females carrying eggs for four to six months. Rock lobster larvae moult through several stages before settling on a substrate as puerulus[8]. The period between egg fertilisation and settlement may last up to two years and the planktonic larvae are widely dispersed.

Growth rates are highly variable across the fishery. Highest growth rates for rock lobster in South Australia occur around the southern end of Yorke Peninsula (Areas 33 and 40), while the lowest growth rates occur near the mouth of the Murray River (Area 46)(refer Appendix I). Size at maturity for female rock lobster varies substantially among the fishing areas, ranging from 89 millimetres carapace length in Area 56 to 112 millimetres in Area 40 (Prescott *et al* 1997). Rock lobsters can live for at least 20 years and may grow to 230 millimetres carapace length and reach weights in excess of seven kilograms.

Major predators of rock lobster in South Australian waters include *Octopus* species, seals and groper.

2.3 History of fishery management

Fishing for rock lobster in South Australia began in the early 1900s. In August 1967, following 12 months of investigation by a Government Select Committee into the fishing industry in South Australia, the following findings were made:

- that a pot and boat limit be imposed for each of three zones in the rock lobster fishery, and
- that no new boats be allowed to operate in the south-eastern zone without the approval of the Minister (Anon. 1967).

[8] Puerulus are transparent larvae which resemble the lobster adult form prior to coloration and hardening of the carapace in the juvenile stage.

The northern zone rock lobster fishery has progressively reduced the potential fishing effort since 1968 with adjustments to the numbers of pots and the length of the season (days). A diagram describing the management changes in the fishery since 1966 is shown in figure 2.

Currently, the northern zone rock lobster fishery is managed by input or effort controls which restrict the number of pots used by each licence holder and the number of days fished each season. This strategy is preferred instead of an output controlled fishery for a number of reasons. These include:

- the fishery operates in an environment of high recruitment variability, and consequently there is greater annual variation in stock abundance;
- the ability of scientific research to accurately predict future recruitment strengths and subsequent stock biomass in the northern zone for setting a total allowable catch is limited;
- the potential for quota evasion would be of greater compliance risk in the northern zone due to the expansive unpopulated coastline and the number of suitable landing points;
- compliance costs are relatively low using input controls; and
- demonstrated commitment by licence holders to the time management system where the number of days fished is restricted using a flexible closure strategy selected by the licensee.

Fishing effort controls will remain effective for controlling total catch provided appropriate management measures are taken to offset any increase in the fishing power of the fleet.

Current management arrangements include:

- limited entry;
- a legal minimum size of 102 millimetres (for both males and females);
- a closed season from 1 June to 31 October each year;
- a number of boat specific time closures during the season (at present representing between 19 to 24 days);
- requirements for escape gaps, or a minimum mesh diameter on pots of 50 millimetres or rectangular mesh not less than 50 x 75 millimetres;
- a maximum of 60 pots per licence;
- a maximum pot weight of 40 kilograms;
- no double pulling of pots within 24 hours;
- a prohibition on the taking of berried females; and
- restrictions on boat size (18 metres) and engine capacity (1,200 BHP).

2.4 Trends in the commercial catch

Effort increased substantially between 1985/86 and 1991/92 due to a combination of factors including the increased use of colour sounders, global positioning systems and improved boats. During the latter part of this period the catch rate also increased substantially (figure 3). The higher catch rates are also due to a number of factors including expanding fishing grounds and greater fishing power.

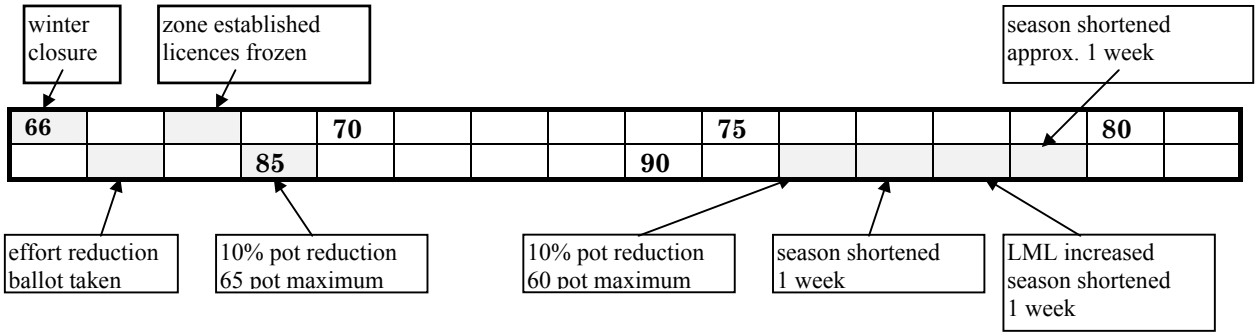

Figure 2. Timeline describing management changes in the Northern zone rock lobster fishery from 1966 to 1997.

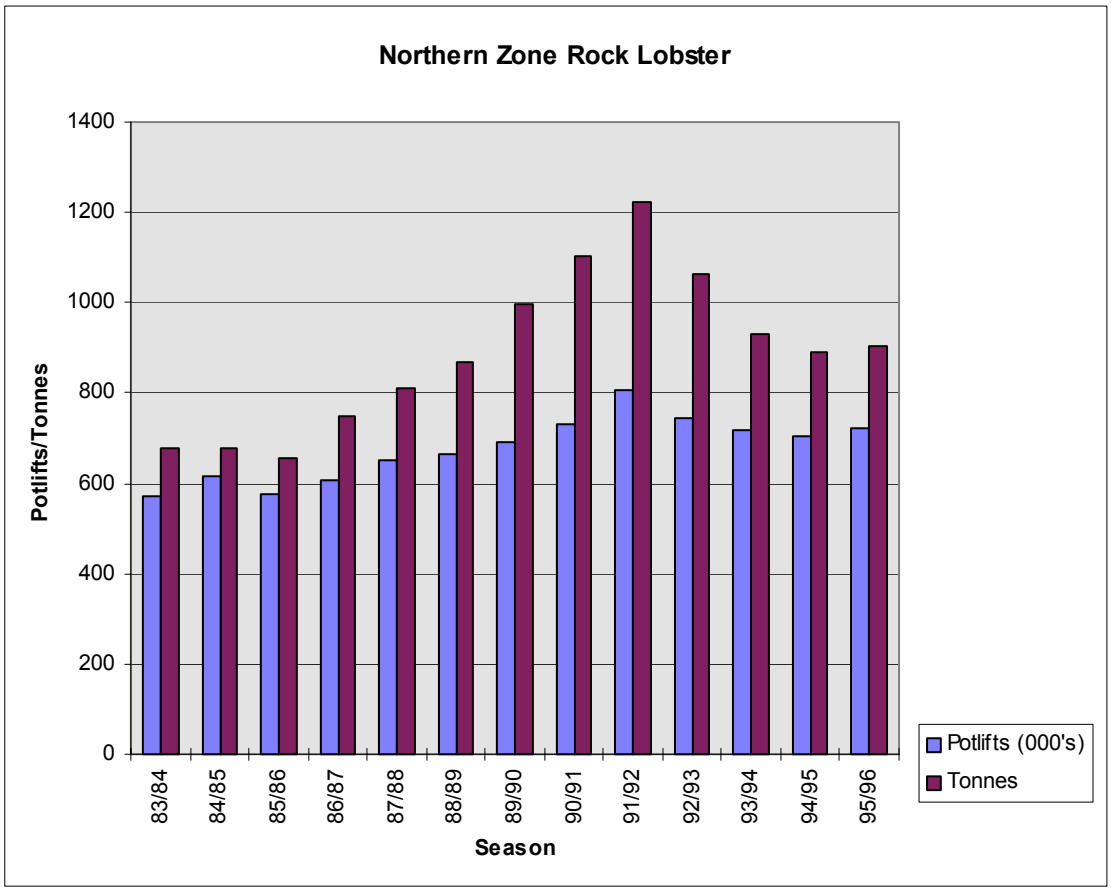

Figure 3. Catch and effort in the Northern zone rock lobster fishery from the 1967/68 season to 1995/96 (Anon. 1995, Prescott *et al* 1997).

Following the peak catches in 1991/92, the rock lobster industry recognised the need to constrain fishing effort. A review was undertaken which canvassed a number of management options. The resultant strategy was the use of time closures during the season. Each fisher is provided with approximately ten time closure option during the season for which he must nominate one option. Each option represent between 19 and 24 days during the season when no pots can be used by that licence holder.

The fishery is operating with very little latent effort following the implementation of effort reduction arrangements in terms of total days fished. The convergence of the potential and actual numbers of potlifts is shown in figure 4.

Recruitment to the fishery was better than average in 1988 and 1989. There are two sources of data that assist in determining recruitment to the fishery. Firstly, fishers reported comparatively high catches of undersize lobsters in their pots in the late 1980s. Secondly, at about the same time, the average weight of lobsters in the Northern zone was decreasing which would be expected if there was a large recruitment event in progress.

2.5 Research and stock assessment

Research needs and priorities for management of the fishery are determined by the Rock Lobster Research Sub-Committee, a joint sub-committee made up of representatives from both the northern and southern zone management committees. A five year strategic research plan has been developed by the management committees and is attached as Appendix II. Currently, the South Australian Research and Development Institute (SARDI) conducts the majority of research and monitoring programs for the rock lobster fisheries.

South Australia has established excellent long term monitoring programs collecting commercial data, pot-catch data, length frequency data, larval settlement indices and temperature records. Catch and effort data are available from 1950, however the quality of these data improved after limited entry was introduced in 1968. Comprehensive stock assessment reports has been recently prepared for the South Australian rock lobster fisheries (Prescott *et al* 1997 and McGarvey *et al* 1997). These reports indicate that there is greater variability in recruitment in the northern zone fishery and that the average size of lobster is larger than the southern zone.

A review of research requirements in the fishery was commissioned by the rock lobster industry in 1995 and was completed in February 1996. The report set out research directions for the industry for the next three years (Breen 1996). Research programs focus on catch monitoring, collection of data for yield per recruit, egg per recruit analysis and production, and modelling information.

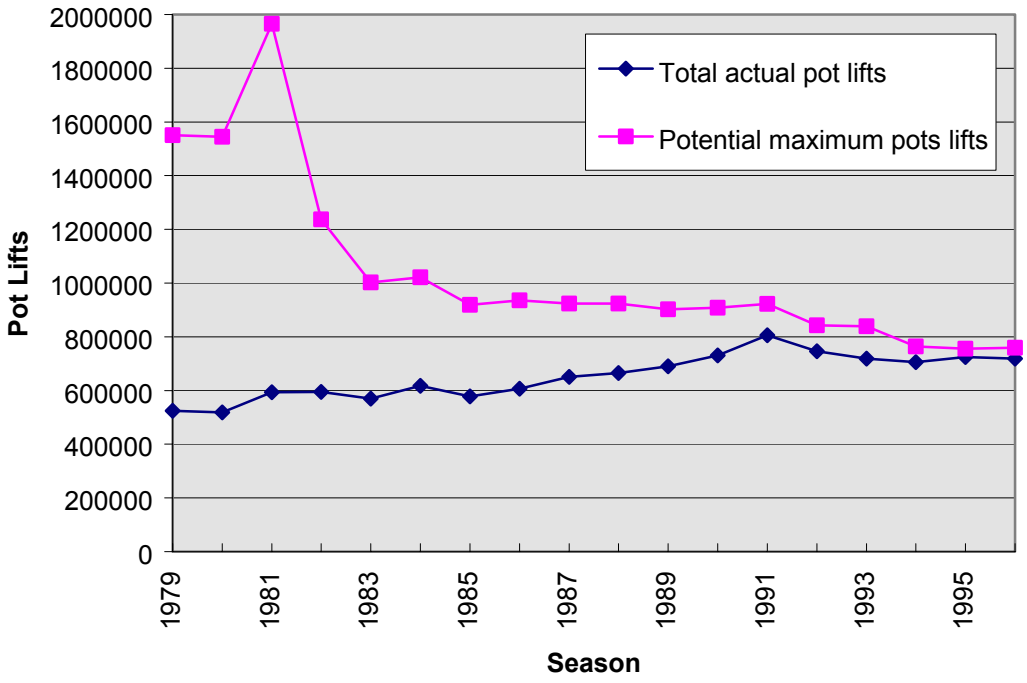

Figure 4. Potential and actual potlifts in the Northern zone rock lobster fishery between 1979/80 and 1996/97 seasons.

2.6 The recreational catch

Recreational fishers also participate in the fishery, though they account for only a small percentage of the total catch. They have access to the fishery by diving, drop netting and a limited number have access to the use of pots. The use of pots requires registration and the number of registered recreational pots was increased to a maximum of 12,000 in September 1997

. The management of the recreational lobster fishery is currently under review in South Australia.

Rock lobsters taken by recreational divers and drop net fishers have not been estimated to-date. Data collection from these groups is made more difficult as there are no recorded contact numbers for these fishers.

The recreational lobster catch was estimated to be approximately 53 tonnes and 62 tonnes live weight during the 1990/91 and 1991/92 seasons respectively. The 17.6 percent increase in catch between the two seasons mirrors the increase in catch in the commercial fishery which was 18.5 percent over this period. This estimated recreational pot catch was approximately two percent of the total pot fishery in the State (Tyrer 1994). Even if this level of the recreational catch taken by pots was underestimated by 50 percent the catch taken would still be less than five percent of the total recreational and commercial pot catch (Appendix III).

While the overall catch by recreational fishers is small, intensive inshore fishing by recreational pots and divers can deplete rock lobster resources in localised areas. There are some areas where recreational fishing effort may exceed the commercial effort (eg areas of the lower Yorke Peninsula).

2.7 Illegal catch

No estimates for the illegal catch are available (Prescott *et al* 1997).

2.8 Processing sector and markets

There are a number of processors trading in rock lobster in the northern zone. Processors are based in the major fishing ports and the majority of these facilities have live holding capability. This reflects the market demand for live product, principally to Asian markets. There are only minor sales of frozen rock lobster tails to the United States of America. This latter product was the main market for the industry until the late 1980s when market focus shifted into Asia which offered higher prices and lower consignment costs. The globalisation of the rock lobster market over the past ten years has resulted in greater price certainty and reduced fluctuations in the market.

Western Australia is the largest supplier of rock lobster in Australia and a major competitor. Increased production in Western Australia may significantly affect domestic market prices.

2.9 Industry development

A number of industry development opportunities are currently being investigated by the rock lobster industry. Holding of rock lobster in sea cages both during and after the fishing season is undertaken on a small scale. These operations aim to take advantage of periods of higher prices with some potential for increasing the size of lobsters by holding them over a moult cycle. Some interest has also been expressed for the aquaculture of rock lobster. Similar developments are occurring in Tasmania, Western Australia and New Zealand. These developments have the potential to directly impact on management of the fishery in the future.

3 Compliance and enforcement

The annual compliance budget for the northern zone of the rock lobster fishery is about $270,000 and accounts for costs incurred for a monitoring program focused on policing minimum size regulations, random checks on pot numbers and specifications, flexible time closures and illegal activities.

To monitor compliance with pot restrictions and to deter fishers double pulling pots within a 24 hour period, part of the compliance budget funds the operation of a fisheries patrol. There are no major compliance problems in this fishery that have been identified by the management committee or Primary Industries and Resources. The status of illegal activities by recreational fishers and unlicensed operators is not known.

An outline of compliance activities in the northern zone rock lobster fishery is described in Appendix IV.

4 Fishery management objectives and strategies

The priority for management of the northern zone rock lobster fishery is to ensure that annual harvest levels are biologically sustainable so that future generations may benefit from exploitation of the resource. Commensurate with this priority are a number of more specific biological, economic, environmental, and social objectives that have been developed by the Northern Zone Rock Lobster Fishery Management Committee to complement the broad directives of Section 20 of the *Fisheries Act 1982*.

Objective	Strategy
4.1 Biological	
1. To maintain rock lobster populations at sustainable levels across the fishery.	Adopt a 'precautionary approach'[9] in the management of the rock lobster resource. Restrict the number of licences in the fishery to a maximum of 75. Control fishing effort by manipulating days fished.
2. To harvest rock lobster at a size likely to provide for adequate levels of recruitment	Set legal minimum size limits which assist in protecting a proportion of the adult spawning stock.
4.2 Economic	
1. To maintain the northern zone rock lobster fishery at a level which provides for fair and reasonable economic benefits to licence holders and the community through employment and export revenue.	Set licence fees at a level sufficient to recover all attributed management, research and compliance costs.
2. To recover an economic return from licence holders sufficient to cover attributed costs of management, research and compliance for the fishery.	Support cost effective compliance strategies to protect the resource from illegal harvesting. Develop harvest strategies which minimise costs.
3. To provide for economic efficiency and flexibility in management arrangements by developing harvesting strategies that minimise costs.	Develop flexible management arrangements.
4. Optimise the yield from the fishery.	Set minimum size limits. Assess economic benefits of alternative management strategies.
4.3 Environmental	
1. To minimise environmental impacts of rock lobster fishing and promote conservation measures in habitats worthy of higher conservation status.	Promote environmentally sensitive fishing practices in the industry. Identify areas of conservation significance to the northern zone rock lobster fishery that may be worthy of conservation.
2. To minimise potential conflict with other users of the marine resources.	Be proactive in dealing with conservation issues that may impact on the fishery. Take an ecosystem approach in considering management arrangements for the fishery.

[9] the management committee shall be more cautious when information is uncertain, unreliable or inadequate. The absence of adequate scientific information shall not be used as a reason for postponing or failing to take conservation and management measures.

4.4 Social	
1. To maintain and provide for reasonable levels of access to the rock lobster resource for recreational fishers.	Monitor and regulate participation and catch by the recreational sector in the fishery.
2. To ensure a high level of awareness of occupational health, safety and welfare issues for skippers and crew.	Promote occupational health and safety issues within the industry.
3. To inform and educate the community about the management of the rock lobster resource in the Northern zone.	Develop educational and awareness packages for distribution to the wider community.
4. To maintain the current nature of the rock lobster fishery and provide for regional employment in the fishery.	Consider regional employment in the development of management arrangements for the fishery.

5 Reference points and performance indicators

Reference points are agreed quantitative measures used to assess performance of the fishery based on clearly defined management objectives.

Reference points begin as conceptual criteria which capture in broad terms the management objectives for the fishery. To implement fishery management it must be possible to convert the conceptual reference point into a technical reference point, which can be calculated or quantified on the basis of biological or economic characteristics of the fishery (Caddy and Mahon 1995).

5.1 Biological reference points

Considering the stated biological objectives for the fishery, the following reference points may be used to assess the stock status of the northern zone rock lobster fishery:

- exploitation rate - indicates the level of available lobsters taken by the fishery.
- catch rates - directly relative to current stock abundance.
- egg production - reflects reproductive capacity of the fishery.
- abundance of pre-recruits - provides a forecasting tool on future stock abundance.
- mean size of rock lobster - indicates changes in stock structure.

Historical data available from commercial catch returns, catch sampling programs and a stock assessment model for the fishery are shown in table 1. The data reference points in table 1 will be reviewed at the end of each season as part of the annual stock assessment report for the fishery.

Table 1: Historical data available for use in assessing appropriate biological reference points for the northern zone rock lobster fishery.

CATCH (tonnes)	**1,064**	**929**	**891**	**903**	**902**
REFERENCE POINT	**1992/93**	**1993/94**	**1994/95**	**1995/96**	**1996/97**
Exploitation rate (%) *	**0.304**	**0.270**	**0.262**	**0.262**	**0.271**
Egg production (billions) #	**643**	**620**	**625**	**625**	**625**
Pre-recruit abundance ^	**0.206**	**0.180**	**0.245**	**0.245**	**0.302**
Catch rates (kg/pot lift)	**1.43**	**1.29**	**1.26**	**1.25**	**1.25**
Mean size + (kg)	**1.07**	**1.12**	**1.10**	**1.13**	**1.06**

* The exploitation rate is the fraction of the population harvested annually, determined from the dynamic qR method employing annual catches by weight and number.
# Total egg production (including only legal sized females) has been derived from the qR stock assessment model (McGarvey *et al* 1997).
^ The pre-recruit index is undersize catch per unit of effort (CPUE) reported in commercial catch data summed over the months of November to March (inclusive).
+ mean size of rock lobster landed across the fishery.

Management action on reaching a reference point outside the historical range for the fishery

When one or more of the reference points described above are reached or exceeded, the management committee will undertake the following actions:

1. notify the Minister for Primary Industries, Natural Resources and Regional Development and participants in the fishery as appropriate,

2. undertake an examination of the causes and implications of 'triggering' a reference point,

3. consult with the northern zone rock lobster industry and PIRSA on the need for alternative management strategies or actions, which may include:

- changes to the fishing season,
- changes to the minimum size limit, or
- changes to the current pot restrictions; and

4. provide a report to the Minister and industry, within three months of the initial notification, on the outcomes of a review of the effect of triggering a performance indicator.

Marine park effects on management of the fishery

The establishment of the Great Australian Bight Marine Park in State waters and the intent to extend the park into Commonwealth waters has resulted in the loss of fishing grounds to the rock lobster fishery.

The management committee may support future declarations of marine reserves if it can be demonstrated that the reserves are essential for the proper conservation of the marine resource and after full consultation has occurred with the committee and the wider fishing industry.

Declaration of any marine park which has an impact on the sustainable operation of the fishery must be accompanied by adequate funding to provide for continued sustainability of that fishery.

5.2 Economic performance indicators

Considering the stated economic objectives for the fishery, the following performance indicators are used to assess the economic status of the northern zone rock lobster fishery:

- Gross Value of Product (GVP)
- cost of management programs compared with GVP
- Return on Investment (ROI)
- determination of any major operating cost increases (eg possible future loss of fuel rebate)

5.3 Management committee performance indicators

The primary responsibility for ecologically sustainable development of the northern zone rock lobster resource rests with the Minister for Primary Industries, Natural Resources and Regional Development. However, to assess the effectiveness and efficiency of the Northern Zone Rock Lobster Fishery Management Committee in managing the resource, and to provide for transparency in the management process and improve accountability, performance indicators are required.

The primary performance indicator used to assess the effectiveness and efficiency of the management committee is the acceptance of advice from the committee by the Minister for Primary Industries, Natural Resources and Regional Development, and the quality of the information which the committee supplies to the Minister. Further information on the strategic direction of the management committee and key performance measures can be found in the Northern Zone Rock Lobster Fishery Management Committee Strategic and Business Plan.

5.4 Compliance performance indicators

Compliance costs for the northern zone rock lobster fishery are a significant part of the overall management costs for the fishery. The effectiveness and efficiency of compliance protocols and programs needs to be assessed annually to ensure effectiveness in service delivery and that costs are minimised where possible without raising the level of compliance risk.

The following performance indicators are used to assess the effectiveness and efficiency of the compliance and audit operations for the northern zone rock lobster fishery:

- reduction in illegal activity determined by number of reports for offences,
- cost effective compliance programs,
- the number of offences detected against the number of checks performed, and
- greater support from stakeholders for Fishwatch.

Biological reference points and performance indicators will be reviewed on an annual basis. Changes may occur to biological reference points as more scientific information on the stock status of the northern zone rock lobster fishery is provided from the strategic research program. Other performance indicators may also change to ensure the management of the fishery is subject to a continuous improvement program.

6 Review of the management plan

The Northern Zone Rock Lobster Fishery Management Committee is required under the *Fisheries (Management Committee) Regulations 1995* to provide the Minister for Primary Industries, Natural Resources and Regional Development on or before the 30 November each year a report on the operations of the management committee during the preceding financial year. This report will include a report on any target or limit reference points which were reached during the reporting period and any actions that resulted. The performance of the management committee and fishery operations will also be rated against the stated objectives.

This management plan is a dynamic document which reflects current understanding of the northern zone rock lobster fishery and as such may change over time. No radical departure from the stated management arrangements, biological reference points or performance indicators will occur unless the management committee is otherwise directed by the Minister for Primary Industries, Natural Resources and Regional Development during the life of this plan.

Six months before the end of the five year period (1 May 2002) this management plan will undergo a major review.

7 References

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Appendix I

FISHERY LOGBOOK STATISTICAL AREAS

Appendix II

FIVE YEAR STRATEGIC RESEARCH PLAN FOR THE SOUTH AUSTRALIAN NORTHERN ZONE ROCK LOBSTER FISHERY

Principles

- linked to explicit quantifiable management objectives
- provide defensible values of the performance indicators to evaluate stock status
- annual stock assessment reports in uniform format
- cost-effective delivery of information

Guidelines

The development of a five year strategic plan for South Australian rock lobster reflects a need of the industry and managers for reliable, cost-effective, performance indicators of the status of the rock lobster resource. These performance indicators are quantitative indices which can be updated annually and can be used to reliably assess the effectiveness of current management of rock lobster stocks in South Australia.

The plan also takes into account the conduct and transfer of information of a major biological study of rock lobsters done between 1993 and 1996. This study produced a valuable information resource and an operational dynamic model of the South Australian rock lobster fishery. The research plan addresses the transition from a study of the fisheries biology of lobsters to an annual assessment of the two stocks (southern and northern zones). The latter assessment is noted to be the core research necessary above all to ensure that management decisions are based on defensible, robust, information. Such core research has been identified as part of an independent review of research needs for the South Australian rock lobster fishery (Breen 1996). The review identified priorities for research and resources necessary to deliver prioritised research programs.

Further to the core research programs, funded through licence-fee contributions, are discrete research projects which, although not directly related to stock assessment, have demonstrable value in providing additional information to the rock lobster industry. In the plan, such projects are promoted through the fisheries management committee for external funding (eg FRDC). Relevant research projects already considered include:

- condition indices and methods for non-destructive determination of growth;
- identification of methods to reduce incidental predation of rock lobsters in pots; and
- ecological effects of rock lobster fishing.

Assessing stocks of rock lobster: core research programs 1997–2002

1. Performance indicators

The research has been designed to deliver the following performance indicators annually:

- catch rate
- exploitation rate
- total egg production
- abundance of pre-recruits

- mean size of rock lobster

These performance indicators are described below:

catch rates

Catch rates are used as indicators of the relative biomass of lobsters. Catch rate data will be derived from compulsory catch log data and from independent catch sampling aboard commercial vessels.

exploitation rate

This is the proportion of the stock removed by fishing. This indicator will be derived from several methods the main ones being: consideration of catches (weights and numbers of lobsters), analysis of length frequency methods. As the exploitation rate is a derived index it is estimated with error. Uncertainty in the estimate will be explicitly stated.

total egg production

An estimate of the total number of eggs produced as a function of lobsters remaining in each stock after fishing. The estimate will be derived from the catch-sampling program and application of biological parameters available from the completed population dynamics study.

abundance of pre-recruits

An index of potential recruitment to the fishery. Expressed in two ways:

- the relative abundance of pueruli on collectors at selected sites in the southern and northern zones
- the abundance of under-size lobsters retained in pots (from the catch-sampling program).

mean size

The size (weight) of rock lobster landed across the fishery by statistical area.

2. Sources of data

The following will be used as inputs to the derivation of performance indicators:

- catch and effort data (from monthly returns);
- seasonal information on abundance and size composition by sex of lobsters sampled aboard commercial vessels in selected areas and depth zones (pot sampling);
- estimates of growth, movement, size at maturity, and length/weight relationship by statistical fishing area derived from the population dynamics study; and
- seasonal information on abundance of pueruli settling on collectors placed at coastal sites in the southern and northern zones.

Other projects

Other projects of potential benefit to the South Australia are summarised below:

Rock lobster condition
A project to assess sources of variation in growth and condition of lobsters. Important outcomes include:

- reliable prediction of rock lobster condition and market potential
- non-destructive method for the estimation of growth rate of lobsters

start: 1996 **finish:** 1998 **funding**: FRDC

Reducing incidental predation on rock lobsters
A project to examine potential mechanisms for reducing the incidental predation of rock lobsters in pots. Important predators include octopus, leather jackets, and seals.

start: 1998 **finish:** 2000 **funding:** industry funds

South Australian Rock Lobster – five year research plan

Research activity	**1997/98**	**1998/99**	**1999/20**	**2000/01**	**2001/02**
complete publication of the population dynamics study	#				
design catch sampling program	#				
update rock lobster model	#				
commercial catch sampling					
produce stock assessment report for southern zone	by May 31	by May 31	by May 31	by May 31	by May 31
produce stock assessment report for Northern zone	by June 30	by June 30	by June 30	by June 30	by June 30
summarise catch and effort information	May and November	May and November	May and November	May and November	May and November
rock lobster condition/growth *		#			
incidental predation *				#	
# = final report; * = externally funded					

Appendix III

Recreational Catch of Rock Lobster in South Australia

Table 1. The estimated recreational catch (kilograms) of lobsters taken by pots in South Australia per month for 1990/91 and 1991/92 (Tyrer 1994). The area codes are FLE Fleurieu Peninsula, KIS Kangaroo Island South, LEP Lower Eyre Peninsula, LSE Lower South East, USE Upper South East, WEC West Coast and YOP Yorke Peninsula.

1990-1991 SEASON

AREA	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	AREA
FLE		870	2621	3138	1565	739	86	33	9052
KIS		485	1512	1883	442	370	25	18	4735
LEP		19	174	128	18	7	4	0	350
LSE	664	1273	1943	5492	3133	1510	916	0	14931
USE	270	289	1326	3369	1678	812	397	0	8141
WEC		788	1739	1489	637	257	288	13	5211
YOP		883	1940	4965	2072	329	196	80	10465
MONTH TOTAL	934	4607	11255	20464	9545	4024	1912	144	**52885**

1991-1992 SEASON

AREA	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	AREA
FLE		1007	1879	2690	1361	596	139	6	7678
KIS		280	1235	1365	282	160	114	0	3436
LEP		98	193	356	177	126	69	18	1037
LSE	870	1713	4952	7482	5053	2853	1461	0	24384
USE	382	574	2040	3443	2363	961	1068	0	10831
WEC		754	1536	1727	884	461	177	39	5578
YOP		868	2054	3837	1658	581	238	39	9275
MONTH TOTAL	1252	5294	13889	20900	11778	5738	3266	102	**62219**

Appendix IV

COMPLIANCE PROTOCOLS

PROTOCOL	STRATEGY	PERFORMANCE INDICATOR
Reduction in illegal activity	1. Promote "1800" for reporting suspected illegal activity to encourage greater participation in resource protection by stakeholders. 2. Investigate reports of illegal activity received from "1800" and other sources.	1. Increased number of reports received by "1800" regarding suspected illegal activity in the fishery. 2. Completed investigation of reports and outcomes. 3. Review of sources of reports to indicate stakeholder interest.
Compliance of rock lobster pots with legislation (marking, escape gaps, construction etc)	Random inspection of rock lobster pots used in zone.	Numbers of rock lobster pots checked during pot counts, random checks in port and during patrols at sea.
Compliance with licence conditions regarding pot limitations.	Random checks of vessels engaged in rock lobster fishing.	At sea inspection of fishing operations including counts of rock lobster pots in use.
Compliance with minimum size restrictions for rock lobster taken.	Random inspection of catches at point of landing and processing facilities.	Numbers of catches inspected and recording of any undersize rock lobsters detected.
Compliance with legislation preventing the taking of berried female rock lobsters.	Random inspection of catches landed and rock lobsters on board vessels during period of high incidence of rock lobsters carrying spawn.	Numbers of catches inspected and illegal rock lobsters detected.
Compliance with boat specific closures during the season.	Establish reporting protocol for vessels and random inspections at nominated port upon arrival and departure.	1. All vessels complying with reporting protocol. 2. Numbers of vessels inspected at nominated port.
Compliance with licence conditions applying to nominated masters.	Random checks of licences on board vessels during rock lobster fishing activities.	Numbers of licences checked and breaches detected.
Compliance with legislation by recreational participants in fishery.	Random checks of non commercial activity including catches and equipment within the fishery.	Numbers of non commercial participants catches and equipment inspected.
Review compliance operations during the season to determine effectiveness.	Monitor compliance operational procedures monthly.	Review inspections and investigations completed and establish priorities for programmed operations.

Appendix V

MEMBERSHIP OF THE MANAGEMENT COMMITTEE

Independent chairperson

4 members representing each of the major ports (Port Lincoln (2), Kangaroo Island, Yorke Peninsula)

1 general member

fishery manager (PIRSA) (non voting)

research scientist (currently SARDI) (non voting)

South Australian Fishing Industry Council representative (non voting)

South Australian Recreational Fishing Advisory Committee representative (non voting)

SOUTH AUSTRALIAN FISHERIES MANAGEMENT SERIES

Paper No.	Title	Issue Date
1	A draft management plan for the blue crab fishery in South Australia	August 1994
2	A discussion paper on the management options for the South Australian recreational rock lobster fishery	September 1994
3	South Australian Shellfish Quality Assurance Program Report no. 1	November 1994
4	A review of net fishing in South Australia	November 1994
5	A review of the management arrangements for the Southern Zone Rock Lobster fishery	September 1995
6	Options for the management of the White Shark in South Australia	May 1995
7	Cost recovery in South Australia's commercial fisheries	October 1995
8	The role of management committees, peak industry bodies and government in fisheries management decision making	October 1995
9	A review of the management and prioritisation of fisheries research	November 1995
10	A management proposal for the Northern Zone Rock Lobster Fishery's 1995/96 season and an assessment of the effort reduction package implemented during the 1994/95 season	October 1995
11	Management plan for the South Australian abalone fishery	February 1996
12	Assessment, management and research support for the Gulf St Vincent prawn fishery	November 1995
13	A management plan for the experimental Pilchard Fishery	November 1995
14	South Australian Shellfish Quality Assurance Program Report No .2	November 1995
15	A draft plan for the management of the specimen shell fishery in South Australia	March 1996
16	A discussion paper on issues relating to the development of rock lobster aquaculture and rock lobster holding systems at sea in South Australia A draft plan for structural adjustment in the South Australian River Fishery	March 1996
17	Economic analysis of management options for the Gulf St Vincent Prawn Fishery	April 1996
18	The roles and structure of fisheries management committees and the responsibilities of chairpersons and members	April 1996
19	Review of research and management of the Spencer Gulf prawn fishery South Australian Shellfish Quality Assurance program Report No. 3	October 1996
20	The cost recovery process for 1996/97 A discussion paper on the management and development of recreational	October 1996
21	fishing in South Australia	November 1996
22	Development of at-sea rock lobster holding systems in South Australia	November 1996
23	South Australian recreational fishing survey 1997 Fishcare South Australia - fish for the future	May 1997
24	Management plan for the South Australian abalone fishery	May 1997
25	Management plan for the South Australian northern zone rock lobster fishery	May 1997
26		June 1997
27		September 1997
28		December 1997

South Australia

SCHEME OF MANAGEMENT (ROCK LOBSTER FISHERIES) REGULATIONS 1991

REGULATIONS UNDER THE FISHERIES ACT 1982

Scheme of Management (Rock Lobster Fisheries) Regulations 1991

being

No. 107 of 1991: *Gaz*. 27 June 1991, p. 2143[1]

as varied by

No. 112 of 1992: *Gaz*. 25 June 1992, p. 1942[2]
No. 128 of 1993: *Gaz*. 24 June 1993, p. 2077[3]
No. 94 of 1994: *Gaz*. 23 June 1994, p. 1806[4]
No. 154 of 1994: *Gaz*. 1 September 1994, p. 686[5]
No. 166 of 1994: *Gaz*. 29 September 1994, p. 883[6]
No. 175 of 1994: *Gaz*. 20 October 1994, p. 1248[7]
No. 143 of 1995: *Gaz*. 29 June 1995, p. 3151[8]
No. 156 of 1996: *Gaz*. 20 June 1996, p. 3013[9]
No. 162 of 1996: *Gaz*. 27 June 1996, p. 3164[10]
No. 223 of 1996: *Gaz*. 26 September 1996, p. 1245[11]
No. 127 of 1997: *Gaz*. 13 May 1997, p. 1955[12]
No. 136 of 1998: *Gaz*. 11 June 1998, p. 2547[13]
No. 159 of 1998: *Gaz*. 30 July 1998, p. 297[14]
No. 139 of 1999: *Gaz*. 1 July 1999, p. 47[15]
No. 139 of 2000: *Gaz*. 22 June 2000, p. 3365[16]
No. 139 of 2001: *Gaz*. 28 June 2001, p. 2443[17]
No. 252 of 2001: *Gaz*. 6 December 2001, p. 5297[18]
No. 259 of 2001: *Gaz*. 13 December 2001, p. 5412[19]

[1] Came into operation 27 June 1991: reg. 2.
[2] Came into operation 25 June 1992: reg. 2.
[3] Came into operation 24 June 1993: reg. 2.
[4] Came into operation 23 June 1994: reg. 2.
[5] Came into operation 1 September 1994: reg. 2.
[6] Came into operation 1 October 1994: reg. 2.
[7] Came into operation 20 October 1994: reg. 2.
[8] Came into operation 29 June 1995: reg. 2.
[9] Came into operation 20 June 1996: reg. 2.
[10] Came into operation 27 June 1996: reg. 2.
[11] Came into operation 26 September 1996: reg. 2.
[12] Came into operation 13 May 1997: reg. 2.
[13] Came into operation 11 June 1998: reg. 2.
[14] Came into operation 1 September 1998: reg. 2.
[15] Came into operation 1 July 1999: reg. 2.
[16] Came into operation 22 June 2000: reg. 2.
[17] Came into operation 28 June 2001: reg. 2.
[18] Came into operation 31 December 2001: reg. 2.
[19] **Came into operation 15 January 2002: reg. 2.**

NOTE:

- *Asterisks indicate repeal or deletion of text.*
- *Entries appearing in bold type indicate the amendments incorporated since the last consolidation.*
- *For the legislative history of the regulations see Appendix 1.*

SUMMARY OF PROVISIONS

Citation

1. These regulations may be cited as the *Scheme of Management (Rock Lobster Fisheries) Regulations 1991*.

Commencement

2. These regulations will come into operation on 27 June 1991.

Revocation

3. The following regulations are revoked:

(a) the *Scheme of Management (Northern Zone Rock Lobster Fishery) Regulations 1984* (see *Gazette* 14 June 1984 p. 1625), as varied;

and

(b) the *Scheme of Management (Southern Zone Rock Lobster Fishery) Regulations 1984* (see *Gazette* 14 June 1984 p. 1636), as varied.

Interpretation

4. (1) In these regulations, unless the contrary intention appears—

"**the Act**" means the *Fisheries Act 1982*:

"**coastal waters**" means the waters of the ocean and all bays, gulfs, straits, passages, inlets and estuaries of the State that are subject to the tidal influence of the sea, but does not include the waters of the Coorong between the barrages and the Murray Mouth:

"**closed season**", in relation to a rock lobster fishery, means a period, as specified in the *Fisheries (General) Regulations 2000* during which the taking of rock lobster in the Zone for that fishery is unlawful by virtue of section 41 of the Act and those regulations:

"**director**", in relation to a body corporate, has the meaning assigned to that term by section 60 of the *Corporations Law*:

"**licence period**" means the period of 12 months commencing on 1 July in any year;

"**Northern Zone**" means the coastal waters westerly of a line commencing at the point where the meridian of longitude 139°E intersects the shore of South Australia, then due south to position latitude 36°20.0′S and longitude 139°E, then due west to position latitude 36°20.0′S and longitude 138°40.0′E, then due south to position latitude 36°40.0′S and longitude 138°40.0′E, then due west to position latitude 36°40.0′S and longitude 138°20.0′E, then due south to position latitude 37°S and longitude 138°20.0′E, then due west to position latitude 37°S and longitude 138°E, then continuing due south along the meridian of longitude 138°E:

"**prescribed Victorian licence**" means a Victorian licence that is held by the holder of a licence in respect of the Southern Zone Rock Lobster Fishery as a result of a transfer made before 28 June 1990:

"**the revoked regulations**" means the regulations revoked by regulation 3:

"**rock lobster**" means southern rock lobster (*Jasus edwardsii*):

"**rock lobster fishery**" means—

(a) the Northern Zone Rock Lobster Fishery;

or

(b) the Southern Zone Rock Lobster Fishery,

constituted by these regulations:

"**rock lobster pot**" means a fish trap designed and constructed for the purpose of taking rock lobster:

"**rock lobster pot entitlement**" means the maximum number of rock lobster pots that the holder of a licence in respect of a rock lobstery fishery may lawfully use at any one time for the purpose of taking rock lobster pursuant to the licence:

"**SARDI**" means the South Australian Research and Development Institute:

"**Southern Zone**" means the coastal waters easterly of a line commencing at the point where the meridian of longitude 139°E intersects the shore of South Australia, then due south to position latitude 36°20.0′S and longitude 139°E, then due west to position latitude 36°20.0′S and longitude 138°40.0′E, then due south to position latitude 36°40.0′S and longitude 138°40.0′E, then due west to position latitude 36°40.0′S and longitude 138°20.0′E, then due south to position latitude 37°S and longitude 138°20.0′E, then due west to position latitude 37°S and longitude 138°E, then continuing due south along the meridian of longitude 138°E:

"**Victorian licence**" means a licence, permit, authority or other entitlement that authorizes the holder to take fish for sale from waters of the State of Victoria that are adjacent to or adjoin the Southern Zone.

(2) For the purposes of these regulations, a person is an associate of another if—

(a) they are partners;

(b) they are parties to a contract, arrangement or understanding, the purpose or effect of which is that one will act at the direction of, or in accordance with the wishes or instructions of, another when, for the purpose of trade or business, he or she engages or refrains from engaging in a fishing activity of a class that constitutes a fishery;

(c) one is a body corporate and the other is a director or secretary of, or the holder of a share in, that body corporate;

(d) they are bodies corporate that are related to each other for the purpose of the *Corporations Law*;

(e) they are both trustees or beneficiaries of the same trust, or one is a trustee and the other is a beneficiary of the same trust;

or

(f) a chain of relationships can be traced between them under one or more of the above paragraphs.

(3) For the purposes of these regulations—

(a) "share", in relation to a body corporate, has the meaning assigned to that term by section 9 of the *Corporations Law*;

(b) a person is the holder of a share in a body corporate if—

(i) he or she is beneficially entitled to that share;

or

(ii) he or she has a relevant interest in that share;

and

(c) a person has a relevant interest in a share in a body corporate if the person has a relevant interest in a share for the purposes of the *Corporations Law*.

(4) In these regulations, a reference to the taking of fish includes a reference to an act preparatory to, or involved in the taking of the fish.

Note: For definition of divisional penalties (and divisional expiation fees) see Appendix 2.

Constitution of fisheries

5. (1) The following fisheries are constituted:

(a) the Northern Zone Rock Lobster Fishery;

and

(b) the Southern Zone Rock Lobster Fishery.

(2) The Northern Zone Rock Lobster Fishery consists of—

(aa) the taking of rock lobster in the waters of the Northern Zone; and

(a) the taking of fish specified in schedule 1 in the waters of the Northern Zone; and

(b) the taking of razor fish (*Pinna bicolor*) in the waters of the Northern Zone for the purpose of bait.

(3) The Southern Zone Rock Lobster Fishery consists of—

(aa) the taking of rock lobster in the waters of the Southern Zone; and

(a) the taking of fish specified in schedule 1 in the waters of the Southern Zone; and

(b) the taking of razor fish (*Pinna bicolor*) in the waters of the Southern Zone for the purpose of bait.

No further licences are to be granted

6. (1) The licences in respect of the Northern Zone Rock Lobster Fishery in force under the revoked regulations immediately before the commencement of these regulations continue in force as licences in respect of the Northern Zone Rock Lobster Fishery subject to the provisions of the Act and these regulations, and no other licence may be granted in respect of the fishery.

(2) The licences in respect of the Southern Zone Rock Lobster Fishery in force under the revoked regulations immediately before the commencement of these regulations continue in force as licences in respect of the Southern Zone Rock Lobster Fishery subject to the provisions of the Act and these regulations, and no other licence may be granted in respect of the fishery.

Expiry of licences

7. A licence in respect of a rock lobster fishery expires on 30 June following the date of its last renewal.

Renewal of licences

8. (1) A licence in respect of a rock lobster fishery may be renewed by the Director on application made before the expiry of the licence or before the end of the licence period following the expiry of the licence.

(2) An application to renew a licence in respect of a rock lobster fishery must—

(a) be made by the holder of the licence or, if the licence has expired, by the person who last held the licence;

and

(b) be made in writing in a form approved by the Director and signed by the applicant.

(3) Where an application to renew a licence is made before the expiry of the licence, the renewal of the licence takes effect from the expiry of the licence.

(4) Where an application to renew a licence is made after the expiry of the licence, the renewal of the licence takes effect from the date on which the application is granted.

(4a) The Director must not renew a licence in respect of the Southern Zone Rock Lobster Fishery unless a rock lobster pot entitlement of not less than 40 is endorsed on the licence.

(5) The Director may not renew a licence unless the applicant has paid—

(a) —

(i) the renewal fee specified in Schedule 2 less $90; or

(ii) the first instalment of the renewal fee specified in Schedule 2, in accordance with subregulation (6); and

(b) the amount of any previous renewal fee remaining payable in respect of the licence, together with any additional amount payable for late payment of an instalment of such renewal fee.

(6) Where an application to renew a licence is made before or within three months after the expiry of the licence, the renewal fee may be paid by four instalments of 25 per cent payable on or before the date of renewal of the licence and 1 October, 1 January and 1 April following the date of renewal.

(7) If an instalment of a renewal fee is not paid in full within 21 days after the due date for payment, an additional amount equal to 10 per cent of the amount of the instalment is payable.

(8) Where—

(a) an instalment of a renewal fee for a licence is not paid in full on or before the due date;

or

(b) an additional amount is required to be paid for late payment of an instalment of a renewal fee,

the amount unpaid may be recovered from the holder of the licence or the person who last held the licence as a debt due to the Crown.

Refund on surrender of licence

8A. Where a licence in respect of a rock lobster fishery is surrendered, the Director must, on application by the former licensee, refund an amount that bears to the renewal fee last paid in respect of the licence the same proportion as the number of complete months from the date of surrender to the day on which the following licence period commences bears to the number of months in the licence period during which the licence was surrendered.

Transfer of licence

9. (1) A licence in respect of a rock lobster fishery may be transferred with the consent of the Director.

* * * * * * * * * *

(3) An application for consent to the transfer of a licence must be a joint application made by the holder of the licence and the transferee.

(4) The application—

(a) must be made in writing in a form approved by the Director;

(b) must contain the information specified in schedule 3;

(c) must contain a nomination by the holder of the licence of the person to whom the licence is to be transferred;

and

(d) must be verified by the applicants by statutory declaration.

(5) The application must be lodged with the Director together with—

(a) the licence to be transferred;

(b) a form of return as required by these regulations completed by the holder of the licence up to the date of application;

* * * * * * * * * *

and

(d) the application fee specified in schedule 2.

(6) Before consenting to the transfer of a licence, the Director must be satisfied as to the following matters:

(a) that the licence to be transferred has not been suspended;

(b) that no proceedings alleging an offence under the Act are pending or likely to be commenced in the State against the holder of the licence;

(c) that the transfer is to one person only;

(d) that the transferee is a natural person who—

(i) is at least 15 years of age;

and

(ii) has not, within the period of three years preceding the date of the application, been convicted in the State or elsewhere in Australia of an offence involving a breach of any legislation relating to fishing;

(e) that no proceedings alleging an offence involving a breach of any legislation relating to fishing are pending or likely to be commenced in the State or elsewhere in Australia against the transferee;

(f) that the transferee does not already hold a licence in respect of a rock lobster fishery or any other fishery;

(g) that the transferee is not an associate of a person who holds such a licence;

and

(h) if any boat registered by endorsement of the licence is the subject of, is registered by endorsement of, or is otherwise referred to in, a licence, permit, authority or other entitlement to take fish granted under the Commonwealth Act or the laws of another State or Territory (other than a prescribed Victorian licence)—

(i) that the entitlement is either to be transferred together with the fishery licence to the transferee or to be surrendered on or before the transfer of the fishery licence;

or

(ii) that—

(A) the transfer of the fishery licence separately from the entitlement is not likely to result in fishing activities that endanger or overexploit fishery resources;

and

(B) the person or body that granted the entitlement concurs with the separate transfer of the licence.

Registration of boats

10. (1) An application to register a boat to be used in a rock lobster fishery must be made in writing in a form approved by the Director and be accompanied by the applicant's licence in respect of the fishery.

(2) Before granting registration of the boat the Director must be satisfied—

(a) that the applicant is the holder of a licence in respect of the fishery;

and

(b) that—

(i) where the applicant holds a licence in respect of the Northern Zone Rock Lobster Fishery—no more than one other boat is registered by endorsement of the applicant's licence in respect of the fishery;

or

(ii) where the applicant holds a licence in respect of the Southern Zone Rock Lobster Fishery—

(A) the boat in respect of which the application is made is not already registered by endorsement of any licence in respect of a rock lobster fishery;

and

(B) no other boat is registered by endorsement of the applicant's licence in respect of the Southern Zone Rock Lobster Fishery.

Use of second registered boat in Northern Zone

11. (1) Where two boats are registered by endorsement of a licence in respect of the Northern Zone Rock Lobster Fishery, the holder of the licence must not use both boats, or cause, suffer or permit both boats to be used, at the same time for taking fish pursuant to the licence unless the use made of one of the boats is limited to the setting and retrieval of bait nets and mesh nets.

Penalty: Division 6 fine.

(2) Any second registered boat that is being used for the setting and retrieval of nets as referred to in subregulation (1) need not be in the charge of a registered master.

Registration as master

12. An application to be registered as the master of a boat must be made in writing in a form approved by the Director and be accompanied by the applicant's licence in respect of the fishery.

Revocation of registration

13. (1) The Director may, on application by the holder of a licence in respect of a rock lobster fishery, revoke a registration effected by endorsement of the licence.

(2) An application for revocation of a registration must be made in writing in a form approved by the Director and be accompanied by the licence on which the registration is endorsed.

Rock lobster pot entitlement

14. (1) The Director may impose or vary conditions on licences in respect of a rock lobster fishery fixing rock lobster pot entitlements as follows:

(a) a rock lobster pot entitlement may be fixed by condition of a licence but must—

(i) in the case of a licence in respect of the Northern Zone Rock Lobster Fishery—be not more than 60 and not less than 25;

(ii) in the case of a licence in respect of the Southern Zone Rock Lobster Fishery—be not more than 100 and not less than 40;

(b) the rock lobster pot entitlement fixed by any such condition of a licence must be the number endorsed on the licence as the rock lobster pot entitlement under the revoked regulations immediately before the commencement of these regulations subject to any subsequent variation made in accordance with this regulation;

(c) the rock lobster pot entitlements fixed by licence conditions as referred to in this regulation may be increased or decreased on the same proportionate basis for all licences (provided that where in relation to any licence the result of such proportionate variation would be a fractional entitlement, that fractional entitlement is increased to the next highest whole number) if the Director is satisfied that it is appropriate to do so for the proper management of a rock lobster fishery;

(d) subject to paragraph *(e)*, the rock lobster pot entitlements fixed by the conditions of any two licences in respect of the same fishery may, on application made by the holders of those licences in a manner and form approved by the Director and payment of the fee specified in Schedule 2, be varied so as to increase the entitlement under one of the licences and decrease the entitlement under the other by a corresponding number;

(e) a variation must not be made as referred to in paragraph *(d)*—

(i) if it would result in the entitlement under one of the licences exceeding the upper limit referred to in paragraph *(a)*;

or

(ii) subject to paragraph *(h)*, if it would result in the entitlement under one of the licences falling below the lower limit referred to in paragraph *(a)* except where—

(A) the licence is surrendered to the Director;

and

(B) if any boat registered by endorsement on that licence is the subject of, is registered by endorsement on, or is otherwise referred to in, a licence, permit, authority or other entitlement to take fish granted under the Commonwealth Act or the laws of another State or Territory (other than a prescribed Victorian licence)—that other licence, permit, authority or entitlement is also surrendered;

(f) notwithstanding any other provisions of this regulation, where the rock lobster pot entitlement under a licence in respect of the Southern Zone Rock Lobster Fishery was, immediately before the commencement of these regulations, less than 40, the entitlement under that licence may, until the licence is transferred, continue to be fixed at a number less than 40;

(g) notwithstanding any other provisions of this regulation, a variation may be made in accordance with paragraph *(c)* in respect of the Northern Zone Rock Lobster Fishery despite the fact that it would result in the rock lobster pot entitlement under a licence falling below 25, and, in that event, the entitlement under that licence may, until the licence is transferred, continue to be fixed at a number less than 25 but may not be decreased subsequently except to a number not less than 25;

(h) notwithstanding any other provision of this regulation, a variation may be made in accordance with paragraph *(d)* in respect of the Southern Zone Rock Lobster Fishery despite the fact that it would result in the rock lobster pot entitlement under a licence falling below 40, and in that event, the entitlement under that licence may, until the expiry of the licence, continue to be fixed at a number less than 40.

(2) The Director may impose conditions on licences in respect of a rock lobster fishery limiting the number of rock lobster pots that may be carried on boats and otherwise regulating the carrying of rock lobster pots on boats used for fishing activities pursuant to the licences.

(3) Where a court convicts the holder of a licence in respect of a rock lobster fishery of an offence of contravening a condition of the licence fixing a rock lobster pot entitlement, the court must make an order requiring the Director to vary the conditions of the licence so as to reduce the rock lobster pot entitlement under the licence by one rock lobster pot for each rock lobster pot used in excess of the entitlement.

Individual catch quota system—Southern Zone

14A. (1) In this regulation—

"**the fishery**" means the Southern Zone Rock Lobster Fishery;

"**rock lobster quota**", in relation to a licence in respect of the fishery, means the maximum number of kilograms of rock lobster that may be lawfully taken by the holder of the licence during a licence period, being the product of—

(a) the unit entitlement of that licence;

and

(b) the unit value for the fishery and that licence year,

subject to any variation of the rock lobster quota of the licence applying during that licence period;

"**unit entitlement**" means the number of rock lobster units for the time being allocated to a licence;

"**unit value**" means the number of kilograms of rock lobster determined by the Director to be the value of a rock lobster unit for the fishery and a licence period.

(2) The Director may impose or vary conditions on licences in respect of the fishery fixing rock lobster quotas as follows:

(a) all licences in respect of the fishery must be allocated numbers of rock lobster units to be determined by the Director having regard to—

(i) the respective rock lobster pot entitlements under the licences;

and

(ii) the respective quantities of rock lobster taken pursuant to the licences during a specified period (as recorded on returns lodged under regulation 15 or the corresponding regulation previously in force);

(b) the numbers of rock lobster units allocated to the licences may be varied by the Director for succeeding licence periods up until (and including) the licence period expiring in 1998 so as progressively to bring the number of rock lobster units allocated to each licence into relationship only with the rock lobster pot entitlement under the licence;

(c) the Director must, on the commencement of each licence period, determine the number of kilograms of rock lobster that is to be the value of a rock lobster unit for the fishery and the licence period;

(d) the conditions of any two licences in respect of the fishery may, on application made to the Director by the holders of those licences in a manner and form approved by the Director, be varied so as to increase the unit entitlement of one of the licences and decrease the unit entitlement of the other licence by a corresponding number of units;

(e) the Director may, if the total rock lobster catch taken pursuant to a licence during a licence period exceeded the rock lobster quota of the licence for that licence period, vary the conditions of the licence so as to decrease the quota—

(i) where the catch exceeded the quota by not more than 20 kilograms of rock lobster—by one kilogram for each kilogram in excess of the quota;

or

(ii) where the catch exceeded the quota by more than 20 kilograms but not more than 50 kilograms of rock lobster—by two kilograms for each kilogram in excess of the quota;

(f) any variation of—

(i) a unit entitlement made pursuant to paragraph *(d)*;

or

(ii) a rock lobster quota made pursuant to paragraph *(e)*,

must be expressed to apply only for the licence period during which the variation is made;

(g) unit entitlements and rock lobster quotas must not be varied except as provided by this regulation.

(3) Where—

(a) a court convicts the holder of a licence in respect of the fishery of an offence of contravening a condition of the licence imposing a rock lobster quota on the licence;

and

(b) the conduct constituting the offence involved the taking of more than 50 kilograms of rock lobster in excess of the quota,

the court must make an order requiring the Director to vary the conditions of the licence so as to reduce the rock lobster quota of the licence for three licence periods following the conviction by one kilogram for each kilogram in excess of the quota for the licence period during which the offence was committed.

Individual giant crab catch quota system

14B. (1) In this regulation—

"**giant crab**" means giant crab (*Pseudocarcinus gigas*);

"**giant crab quota**"—

(a) in relation to a licence in respect of a rock lobster fishery—means the maximum number of kilograms of giant crab that may be lawfully taken by the holder of the licence during a licence period, being the product of—

(i) the unit entitlement of that licence; and

(ii) the unit value for the fishery and that licence period,

subject to any variation of the giant crab quota of the licence applying during that licence period;

(b) in relation to a licence in respect of the Miscellaneous Fishery—has the same meaning as in regulation 11 of the *Scheme of Management (Miscellaneous Fishery) Regulations 2000*;

"**Miscellaneous Fishery**" means the fishery of that name constituted by the *Scheme of Management (Miscellaneous Fishery) Regulations 2000*;

"**unit entitlement**"—

(a) in relation to a licence in respect of a rock lobster fishery—means the number of giant crab units for the time being allocated to the licence;

(b) in relation to a licence in respect of the Miscellaneous Fishery—has the same meaning as in regulation 11 of the *Scheme of Management (Miscellaneous Fishery) Regulations 2000*;

"**unit value**" means the number of kilograms of giant crab determined by the Director to be the value of a giant crab unit for a rock lobster fishery and a licence period.

(2) For the purposes of the formula set out in subregulation (3)*(a)*, the following fishing periods are prescribed:

(a) in relation to the Northern Zone Rock Lobster Fishery—

(i) the period commencing on 1 January 1997 and ending on 31 May 1997; and

(ii) the period commencing on 1 November 1997 and ending on 31 May 1998; and

(iii) the period commencing on 1 November 1998 and ending on 31 May 1999; and

(iv) the period commencing on 1 November 1999 and ending on 31 May 2000;

(b) in relation to the Southern Zone Rock Lobster Fishery—

(i) the period commencing on 1 January 1997 and ending on 30 April 1997; and

(ii) the period commencing on 1 October 1997 and ending on 30 April 1998; and

(iii) the period commencing on 1 October 1998 and ending on 30 April 1999; and

(iv) the period commencing on 1 October 1999 and ending on 30 April 2000.

(3) The Director may impose or vary conditions on licences in respect of a rock lobster fishery imposing or varying giant crab quotas (and may vary conditions on licences in respect of the Miscellaneous Fishery varying giant crab quotas) as follows:

(a) on the commencement of this regulation a licence referred to in Schedule 4 may be allocated a number of giant crab units determined in accordance with the following formula:

$$A = \frac{B \times 350}{C} 1$$

where—

A is the number of giant crab units to be allocated to the licence (rounded up to two decimal points)

B is the aggregate number of kilograms of giant crab taken pursuant to the licence during prescribed fishing periods (as recorded on completed returns lodged under regulation 15 before 31 May 2001)

C is the aggregate number of kilograms of giant crab taken pursuant to licences in respect of the fishery specified in Schedule 4 during prescribed fishing periods (as recorded on completed returns lodged under regulation 15 before 31 May 2001);

(b) if the aggregate number of giant crab units allocated to licences in respect of a rock lobster fishery under paragraph *(a)* is less than 350, an additional number of units equal to the difference between the aggregate number allocated under that paragraph and 350 may be allocated to those licences, and in that case the conditions of each licence must be varied so as to increase the unit entitlement of the licence by a number of units that bears to the aggregate number of units to be allocated under this paragraph the same proportion as the number of units allocated to that licence under paragraph *(a)* bears to the aggregate number of units allocated to licences in respect of the fishery under that paragraph;

(c) during the licence period ending on 30 June 2002, the conditions of each licence in respect of a rock lobster fishery endorsed with a condition fixing a giant crab quota on the licence must be varied so as to reduce the quota of the licence for that licence period by one kilogram for each kilogram of giant crab taken pursuant to the licence during the period commencing on 1 July 2001 and ending on 14 January 2002 (as recorded on completed returns lodged under regulation 15);

(d) the Director must, on the commencement of this regulation, determine the number of kilograms of giant crab that is to be the value of a giant crab unit for a rock lobster fishery and the licence period ending on 30 June 2002;

(e) the Director must, on the commencement of each licence period, determine the number of kilograms of giant crab that is to be the value of a giant crab unit for a rock lobster fishery and the licence period;

(f) on application made to the Director by the holders of any two licences in respect of the same rock lobster fishery endorsed with conditions fixing giant crab quotas on the licences, the conditions of the licences may be varied so as to increase the unit entitlement of one of the licences and decrease the unit entitlement of the other licence by a corresponding number of units;

(g) on application made to the Director by the holder of a licence in respect of the Northern Zone Rock Lobster Fishery endorsed with a condition fixing a giant crab quota on the licence (the "**first licence**") and the holder of a licence in respect of the Miscellaneous Fishery endorsed with a condition fixing a giant crab quota on the licence in relation to the Northern Zone (the "**second licence**")—

(i) the conditions of the first licence may be varied so as to decrease the unit entitlement of that licence and the conditions of the second licence may be varied so as to increase the unit entitlement of that licence in respect of the Northern Zone by a corresponding number of units; or

(ii) the conditions of the first licence may be varied so as to increase the unit entitlement of that licence and the conditions of the second licence may be varied so as to decrease the unit

entitlement of that licence in respect of the Northern Zone by a corresponding number of units;

(h) on application made to the Director by the holder of a licence in respect of the Southern Zone Rock Lobster Fishery endorsed with a condition fixing a giant crab quota on the licence (the "**first licence**") and the holder of a licence in respect of the Miscellaneous Fishery endorsed with a condition fixing a giant crab quota on the licence in relation to the Southern Zone (the "**second licence**")—

(i) the conditions of the first licence may be varied so as to decrease the unit entitlement of that licence and the conditions of the second licence may be varied so as to increase the unit entitlement of that licence in respect of the Southern Zone by a corresponding number of units; or

(ii) the conditions of the first licence may be varied so as to increase the unit entitlement of that licence and the conditions of the second licence may be varied so as to decrease the unit entitlement of that licence in respect of the Southern Zone by a corresponding number of units;

(i) the Director may, if the total giant crab catch taken pursuant to a licence in respect of a rock lobster fishery during a licence period exceeded the giant crab quota of the licence for that licence period, vary the conditions of the licence so as to decrease the quota—

(i) if the catch exceeded the quota by not more than 20 kilograms of giant crab—by one kilogram for each kilogram in excess of the quota; or

(ii) if the catch exceeded the quota by more than 20 kilograms but not more than 50 kilograms—by two kilograms for each kilogram in excess of the quota;

(j) any variation of a giant crab quota made under paragraph *(i)* must be expressed to apply only for the licence period during which the variation is made;

(k) unit entitlements and giant crab quotas must not be varied except as provided by this regulation or the *Scheme of Management (Miscellaneous Fishery) Regulations 2000*.

(4) If—

(a) a court convicts the holder of a licence in respect of a rock lobster fishery of an offence of contravening a condition of the licence imposing a giant crab quota on the licence; and

(b) the conduct constituting the offence involved the taking of more than 50 kilograms of giant crab in excess of the quota,

the court must make an order requiring the Director to vary the conditions of the licence so as to reduce the giant crab quota of the licence for three licence periods following the conviction by one kilogram for each kilogram in excess of the quota for the licence period during which the offence was committed.

(5) An application under subregulation (3)*(f)*, *(g)* or *(h)* must be made in a manner and form approved by the Director.

(6) A variation of a unit entitlement under subregulation (3)*(f)*, *(g)* or *(h)* cannot take effect before 1 July 2002.

Furnishing of returns

15. (1) The holder of a licence in respect of a rock lobster fishery must—

(a) fill out a return, in a form determined by the Minister, in respect of each calendar month during the currency of the licence;

(b) include in the return such information as the Chief Executive Officer of SARDI, with the approval of the Minister, requires;

and

(c) date and sign the return and certify that the information contained in the return is complete and accurate, and post or deliver the return to the office of the Chief Executive Officer of SARDI within 15 days of the end of the month to which it relates.

Penalty: Division 6 fine.

(2) Where the holder of a licence in respect of a rock lobster fishery takes no fish pursuant to the licence during a particular calendar month, he or she is required by subregulation (1) to furnish a return in respect of that period indicating that no fish were taken.

(3) Where a rock lobster fishery has been closed for a whole calendar month, the holder of a licence need not furnish a return for that month in respect of rock lobster.

Copies of returns must be made

16. The holder of a licence in respect of a rock lobster fishery must—

(a) make a copy of each return that he or she fills out pursuant to these regulations before the return is sent to the Chief Executive Officer of SARDI;

and

(b) retain the copy for the period of one year from the last day of the month to which the return relates.

Penalty: Division 6 fine.

Victorian licences

17. A person who is the holder of a licence in respect of the Southern Zone Rock Lobster Fishery must—

(a) where he or she becomes the holder of a Victorian licence, give written notice within 14 days informing the Director of that fact;

or

(b) where he or she ceases to hold a Victorian licence, give written notice within 14 days informing the Director of that fact.

Penalty: Division 6 fine.

Sale of rock lobster during closed season

18. (1) A holder of a licence in respect of a rock lobster fishery must not sell live rock lobster during a closed season for that fishery.

Penalty: Division 6 fine.

(2) It is a defence to a charge of an offence against subregulation (1) if it is proved that the defendant did not take the rock lobster to which the charge relates in the zone for the rock lobster fishery in respect of which he or she holds a licence.

SCHEDULE 1

Fish prescribed for rock lobster fisheries

The following fish are specified for the rock lobster fisheries:

Scalefish

- Anchovy (*Engraulis australis*)
- Barracouta (*Thyrsites atun*)
- Bluethroated wrasse (*Notolabrus tetricus*)
- Bream (*Acanthopagrus butcheri*)
- Cod (marine species) (Family Moridae)
- Dory (Family Zeidae)
- Flathead (Family Platycephalidae)
- Flounder (Family Pleuronectidae)
  (Family Bothidae)
- Garfish (*Hyporhamphus melanochir*)
- Horse mackerel (*Trachurus declivis*)
- Leather jacket (Family Aluteridae)
- Ling (*Genypterus blacodes*)
- Mackerel (*Scomber australasicus*)
- Morwong (Family Cheilodactylidae)
- Mullet (Family Mugilidae)
- Mulloway (*Argyrosomus hololepidotus*)
- Nannygai, Red snapper, Swallowtail (Family Berycidae)
- Pilchard (*Sardinops neopilchardus*)
- Red mullet (*Upeneichthys porosus*)
- Salmon (*Arripis truttaceus*)
- Snapper (*Chrysophrys auratus*)
- Snook (*Sphyraena novaehollandiae*)
- Sole (*Aserragodes haackeanus*)
- Sweep (*Scorpis aequipinnis*)
- Tommy ruff (*Arripis georgianus*)
- Trevalla (*Hyperoglyphe antarctica*)
- Trevally (*Usacaranx georgianus*)
- Whiting (Family Sillaginidae)

Crustaceans

- Crab, giant (*Pseudocarcinus gigas*)
- Crab, velvet (*Nectocarcinus tuberculosus*)

Molluscs

- Cockle (Suborder Teledonta)
- Cuttlefish (*Sepia* spp.)
- Mussels (*Mytilus* spp.)
- Octopus (*Octopus* spp.)
- Oyster (Family Ostridae)
- Scallop (Family Pectinidae)
- Squid, calamary (*Sepioteuthis australis*)
  arrow (*Nototodarus gouldi*)

Annelids

- Beachworm, Bloodworm, Tubeworm (Class Polychaeta)

Shark

- All species other than white pointer shark (*Carcharodon carcharias)*, Skate, Rays (Class Elasmobranchii)

SCHEDULE 2
Fees

1. The following fees are payable under the Act and these regulations:

			$
(a)	on application for the renewal of a licence in respect of the Northern Zone Rock Lobster Fishery—		
	(i)	in the case of a licence that will, on its renewal, be subject to a condition limiting the holder of the licence to the taking of rock lobster, octopus and giant crab	4 894.00
	(ii)	in the case of a licence that will, on its renewal, be subject to a condition limiting the holder of the licence to the taking of—	
		(A) rock lobster, octopus and giant crab; and	
		(B) fish of a species (other than octopus or giant crab) prescribed by Schedule 1 for the purpose of bait only	5 359.50
	(iii)	in any other case	6 230.00
		An additional fee of an amount obtained by multiplying $88 by the number equal to the rock lobster pot entitlement fixed by condition of a licence under regulation 14 is payable.	
(ab)	on application for the renewal of a licence in respect of the Southern Zone Rock Lobster Fishery—		
	(i)	in the case of a licence that will, on its renewal, be subject to a condition limiting the holder of the licence to the taking of rock lobster, octopus and giant crab	5 924.00
	(ii)	in the case of a licence that will, on its renewal, be subject to a condition limiting the holder of the licence to the taking of—	
		(A) rock lobster, octopus and giant crab; and	
		(B) fish of a species (other than octopus or giant crab) prescribed by Schedule 1 for the purpose of bait only	6 389.50
	(iii)	in any other case	7 260.00
		An additional fee of an amount obtained by multiplying $96 by the number equal to the rock lobster pot entitlement fixed by condition of a licence under regulation 14 is payable.	
(b)	on application for transfer of a licence in respect of either rock lobster fishery		300

(c) on application under reg. 14(1)*(d)* by the holder of a licence in respect of a rock lobster fishery to vary a condition of the licence so as to decrease the rock lobster pot entitlement under the licence and increase the rock lobster pot entitlement under one or more other licences in respect of that fishery—$100 plus a fee of an amount obtained by multiplying $20 by the number of licences the rock lobster pot entitlement of which is to be increased.

(d) on application under regulation 14B by the holder of a licence in respect of a rock lobster fishery to vary the conditions of the licence so as to decrease the unit entitlement of the licence in respect of giant crab and increase the unit entitlement of one or more licences in respect of that fishery or the Miscellaneous Fishery—$100 plus a fee of an amount obtained by multiplying $20 by the number of licences the unit entitlements of which are to be increased.

SCHEDULE 3

Information required in application for consent to licence transfer

The following information is to be contained in an application for consent to transfer a licence:

1. Full name of the holder of the licence.

2. The licence number.

3. Full name, date of birth, address (residential and postal) and telephone number of the transferee.

4. The price to be paid for the transfer of—

(a) the licence;

and

(b) any boat, equipment, registration or any other matter or thing being transferred as part of the transaction.

5. Details of any boat to be used by the transferee to take fish including—

(a) its length (where surveyed—surveyed length);

(b) the number of its current survey certificate;

(c) the year of its construction;

(d) the material of which its hull is made;

(e) its main colour;

(f) its name;

(g) its registration number.

6. Details of the number of persons who are to assist the transferee to take fish from the boat or otherwise.

7. Details of the person who is to be the registered master of the boat.

8. Details of any device to be used to take fish.

9. Statements by the transferee as to whether or not the transferee—

(a) holds a licence in respect of any fishery;

(b) is the associate of a person who holds a licence in respect of any fishery;

(c) is a party to a contract, arrangement or understanding, the purpose or effect of which is that he or she will act at the direction of, or in accordance with, the wishes or instructions of another in relation to the transferee's activities pursuant to the licence;

(d) has, during the three years immediately preceding the date of the application, been convicted by a court of a State or Territory of the Commonwealth of an offence involving a breach of legislation relating to fishing;

and

(e) has, at the date of the application, any proceedings alleging an offence involving a breach of any legislation relating to fishing pending or likely to be commenced in the State or elsewhere in Australia against him or her.

10. Details in respect of any of the statements made by the transferee in respect of the matters referred to in clause 9.

SCHEDULE 4

Licences to which giant crab units may be allocated

Northern Zone Rock Lobster Fishery licence number		
N009		
N014		
N039		
N040		
N056		
N097		
Southern Zone Rock Lobster Fishery licence number		
S036	S115	S165
S049	S117	S167
S052	S119	S175
S053	S122	S176
S074	S127	S189
S077	S134	S193
S078	S152	S217
S097	S164	S241

APPENDIX 1

LEGISLATIVE HISTORY

Transitional Provisions

(*Transitional provision from Regulation No. 112 of 1992, reg. 10*)

10. (1) A licence renewal fee prescribed by schedule 2 of the principal regulations as varied by these regulations applies in relation to a licence year commencing after the commencement of these regulations.

(2) Notwithstanding regulation 8, a licence renewal fee prescribed by schedule 2 of the principal regulations as in force immediately before the commencement of these regulations continues to apply in relation to a licence year that commenced before the commencement of these regulations.

(3) An additional fee of one-twelfth of the licence renewal fee prescribed by schedule 2 of the principal regulations as in force immediately before the commencement of these regulations is payable on 1 September 1992 by each holder of a licence in respect of a rock lobster fishery in force on that date.

(4) Where a fee payable under subregulation (3) is not paid by the due date, the fee may be recovered from the holder of the licence or the person who last held the licence as a debt due to the Crown.

(5) In this regulation—

"**licence year**" means the period from the date of expiry of licences in one year to the date of expiry of licences in the next year.

(*Transitional provision from Regulation No. 128 of 1993, reg. 9*)

9. (1) A licence renewal fee prescribed by schedule 2 of the principal regulations as varied by these regulations applies in relation to a licence year commencing after the commencement of these regulations.

(2) Notwithstanding regulation 8, a licence renewal fee prescribed by schedule 2 of the principal regulations as in force immediately before the commencement of these regulations continues to apply in relation to a licence year that commenced before the commencement of these regulations.

(3) In this regulation—

"**licence year**" means the period of 12 months from 1 November in any year.

(*Transitional provision from Regulation No. 94 of 1994, reg. 4*)

4. (1) A licence renewal fee prescribed by schedule 2 of the principal regulations as varied by these regulations applies in relation to a licence year commencing after the commencement of these regulations.

(2) Notwithstanding regulation 3, a licence renewal fee prescribed by schedule 2 of the principal regulations as in force immediately before the commencement of these regulations continues to apply in relation to a licence year that commenced before the commencement of these regulations.

(3) In this regulation—

"**licence year**" means the period of 12 months from 1 November in any year.

(*Transitional provision from Regulation No. 143 of 1995, reg. 9*)

9. (1) A licence renewal fee prescribed by schedule 2 of the principal regulations as varied by these regulations applies in relation to a licence period commencing after the commencement of these regulations.

(2) Notwithstanding regulation 8, a licence renewal fee prescribed by schedule 2 of the principal regulations as in force immediately before the commencement of these regulations continues to apply in relation to a licence period commencing before the commencement of these regulations.

(3) In this regulation—

"**licence period**" has the same meaning as in the principal regulations as varied by these regulations.

(*Transitional provision from Regulation No. 136 of 1998, reg. 6*)

6. (1) A licence renewal fee prescribed by Schedule 2 of the principal regulations as varied by these regulations applies in relation to a licence year commencing after the commencement of these regulations.

(2) Despite regulation 5, a licence renewal fee prescribed by Schedule 2 of the principal regulations as in force immediately before the commencement of these regulations continues to apply in relation to a licence year that commenced before the commencement of these regulations.

(3) In this regulation—

"**licence period**" has the same meaning as in the principal regulations.

(*Transitional provision from Regulation No. 139 of 1999, reg. 6*)

6. (1) A licence renewal fee prescribed by Schedule 2 of the principal regulations as varied by these regulations applies in relation to a licence period commencing after the commencement of these regulations.

(2) Despite regulation 4, a licence renewal fee prescribed by Schedule 2 of the principal regulations as in force immediately before the commencement of these regulations continues to apply in relation to a licence period that commenced before the commencement of these regulations.

(3) In this regulation—

"**licence period**" has the same meaning as in the principal regulations.

(*Transitional provision from Regulation No. 139 of 2000, reg. 5*)

5. (1) A fee prescribed by Schedule 2 of the principal regulations as varied by these regulations applies in relation to a licence period commencing after the commencement of these regulations.

(2) Despite regulation 4, a fee prescribed by Schedule 2 of the principal regulations as in force immediately before the commencement of these regulations continues to apply in relation to a licence period that commenced before the commencement of these regulations.

(3) In this regulation—

"**licence period**" has the same meaning as in the principal regulations.

(*Transitional provision from Regulation No. 139 of 2001, reg. 6*)

6. (1) A fee prescribed by Schedule 2 of the principal regulations as varied by these regulations applies in relation to a licence period commencing after the commencement of these regulations.

(2) Despite regulation 5, a fee prescribed by Schedule 2 of the principal regulations as in force immediately before the commencement of these regulations continues to apply in relation to a licence period that commenced before the commencement of these regulations.

(3) In this regulation—

"**licence period**" has the same meaning as in the principal regulations.

Legislative History

(***entries in bold type indicate amendments incorporated since the last consolidation***)

Regulation 4(1):	definition of "closed season" varied by 139, 2001, reg. 3 definition of "licence period" substituted by 136, 1998, reg. 3 definition of "renewal fee" revoked by 252, 2001, reg. 3 definition of "rock lobster" varied by 154, 1994, reg. 3 definition of "SARDI" inserted by 128, 1993, reg. 3 definition of "licence period" inserted by 143, 1995, reg. 3
Regulation 5(2):	substituted by 162, 1996, reg. 3; varied by 223, 1996, reg. 3(a)
Regulation 5(3):	substituted by 162, 1996, reg. 3; varied by 223, 1996, reg. 3(b)
Regulation 6(2):	varied by 252, 2001, reg. 4
Regulation 7:	varied by 112, 1992, reg. 3; substituted by 143, 1995, reg. 4; 252, 2001, reg. 5
Regulation 8(1):	varied by 143, 1995, reg. 5(a)
Regulation 8(4a):	inserted by 159, 1998, reg. 3
Regulation 8(5):	varied by 128, 1993, reg. 4; 139, 1999, reg. 3
Regulation 8(6):	substituted by 143, 1995, reg. 5(b); 136, 1998, reg. 4
Regulation 8(7):	substituted by 139, 2001, reg. 4
Regulation 8a:	inserted by 112, 1992, reg. 4; substituted by 128, 1993, reg. 5; 143, 1995, reg. 6
Regulation 9(2):	revoked by 252, 2001, reg. 6
Regulation 9(2a):	inserted by 166, 1994, reg. 3; revoked by 252, 2001, reg. 6
Regulation 9(5)(c):	revoked by 112, 1992, reg. 5
Regulation 10(2):	varied by 159, 1998, reg. 4
Regulation 14(1):	varied by 112, 1992, reg. 6; 166, 1994, reg. 4(a); 159, 1998, reg. 5; 139, 1999, reg. 4
Regulation 14(3):	inserted by 166, 1994, reg. 4(b)
Regulation 14A:	inserted by 166, 1994, reg. 5
Regulation 14A(1):	definition of "rock lobster quota" varied by 143, 1995, reg. 7(a) definition of "licence year" revoked by 143, 1995, reg. 7(b) definition of "unit value" varied by 143, 1995, reg. 7(c)
Regulation 14A(2):	varied by 143, 1995, reg. 7(d)-(h)
Regulation 14A(3):	varied by 143, 1995, reg. 7(i), (j)
Regulation 14B:	inserted by 139, 2000, reg. 3; **substituted by 259, 2001, reg. 3**
Regulation 15(1):	varied by 112, 1992, reg. 7; 128, 1993, reg. 6
Regulation 16:	varied by 128, 1993, reg. 7
Schedule 1:	varied by 154, 1994, reg. 4; 162, 1996, reg. 4
Schedule 2:	substituted by 112, 1992, reg. 8; 128, 1993, reg. 8; 94, 1994, reg. 3; **varied by** 175, 1994, reg. 3; 143, 1995, reg. 8; 156, 1996, reg. 3; 127, 1997, reg. 3; 136, 1998, reg. 5; 139, 1999, reg. 5; 139, 2000, reg. 4; 139, 2001, reg. 5; **259, 2001, reg. 4**
Schedule 4:	revoked by 112, 1992, reg. 9; **inserted by 259, 2001, reg. 5**

APPENDIX 2

DIVISIONAL PENALTIES AND EXPIATION FEES

At the date of publication of this reprint divisional penalties and expiation fees are, as provided by section 28A of the *Acts Interpretation Act 1915*, as follows:

Division	Maximum imprisonment	Maximum fine	Expiation fee
1	15 years	$60 000	—
2	10 years	$40 000	—
3	7 years	$30 000	—
4	4 years	$15 000	—
5	2 years	$8 000	—
6	1 year	$4 000	$300
7	6 months	$2 000	$200
8	3 months	$1 000	$150
9	—	$500	$100
10	—	$200	$75
11	—	$100	$50
12	—	$50	$25

Note: This appendix is provided for convenience of reference only.

SOUTH AUSTRALIAN
FISHERIES MANAGEMENT SERIES

PAPER NO. 29

MANAGEMENT PLAN FOR THE SOUTH AUSTRALIAN SOUTHERN ZONE ROCK LOBSTER FISHERY

William Zacharin (Editor)

prepared by the
Southern Zone Rock Lobster Fishery Management Committee
in association with
Primary Industries and Resources SA

December 1997

Foreword

Management of Marine Resources in South Australia

Marine resources in South Australia are common property resources. The role of the Government, as custodian of the marine resources on behalf of the general community, is to ensure that marine resources are used in an ecologically sustainable manner and as efficiently as possible, while yielding a reasonable return to the community. This ensures that the benefits of the use of marine resources are maximised within the community.

Experience world-wide has shown that where there is unrestricted use of marine resources, there is little incentive for individuals harvesting the resource to conserve fish stocks and competition amongst users often leads to resource depletion. Left unmanaged, the increase in fishing effort that results from competition is reflected in lower individual catches in the recreational fishing sector, and over-capitalisation and reduced financial returns in the commercial fishing industry. Loss of these resources to the community can result in significant regional economic problems in some States.

In carrying out their management of the resource, Governments have the responsibility of ensuring that the basis for the sharing of the resource among all users is clearly understood and accepted as equitable, and that the allocation of fisheries resources and their level of utilisation are consistent with the needs of present and future generations.

To provide for better decision making by Government in managing the marine resources, specific fishery management committees have been established to advise the Minister for Primary Industries, Natural Resources and Regional Development. These management committees are comprised of Government managers, research scientists, commercial and recreational fishers and fish processors, and are chaired by independent chairpersons. Appointment of members and the terms of reference of the management committees are provided for under the *Fisheries (Management Committees) Regulations 1995*.

Where scientific data or evidence on some biological parameter for a fishery is lacking and management decisions must be made in an environment of uncertainty, the Government and management committee will take a precautionary approach to the management of these resources.

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MINISTER FOR PRIMARY INDUSTRIES,
NATURAL RESOURCES AND REGIONAL DEVELOPMENT

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1 Scope of the management plan

Sustainable management of marine resources is the responsibility of the Minister for Primary Industries, Natural Resources and Regional Development under the *Fisheries Act 1982*. The principal objectives of the Act (Section 20) are:

(a) ensuring, through proper conservation, preservation and fisheries management measures, that the living resources of the waters to which this Act applies are not endangered or overexploited; and

(b) achieving the optimum utilisation and equitable distribution of those resources.

This management plan provides a statement of the policy, objectives and strategies to be employed for the sustainable management of the southern zone rock lobster fishery in State waters. Fishing for all species of rock lobster in the Genus *Jasus* is controlled under this management plan.

Regulations pertaining to the management of the southern zone rock lobster fishery in South Australia are located in the *Scheme of Management (Rock Lobster Fisheries) Regulations 1991*.

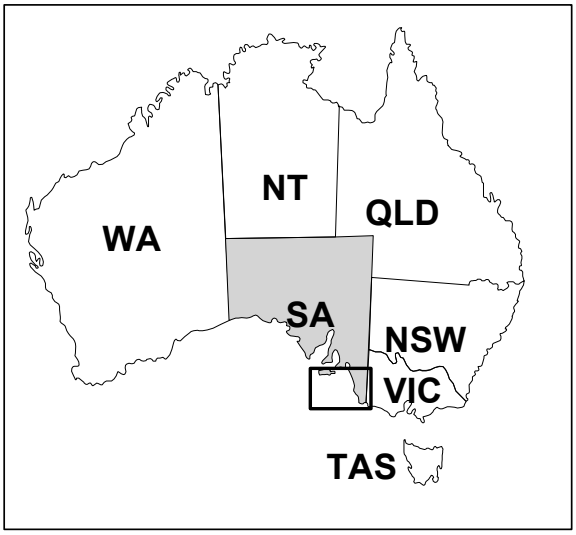
This management plan will operate for a **five** year period from 1 December 1997 subject to annual review and amendments as considered necessary by the Southern Zone Rock Lobster Fishery Management Committee and the Minister for Primary Industries, Natural Resources and Regional Development.

2 Description of the fishery

2.1 Definition of the fishery

The area of the southern zone of the rock lobster fishery extends from the mouth of the Murray River, south and east to the Victorian border (*140°58.0'E*)and is defined as being those coastal waters:

> *"easterly of a line commencing at the point where the meridian of longitude 139°E intersects the shore of South Australia, then due south to position latitude 36°20.0'S and longitude 139°E, then due west to position latitude 36°20.0'S and longitude 138°40.0'E, then due south to position latitude 36°40.0'S and longitude 138°40.0'E, then due west to position latitude 36°40.0'S and longitude 138°20.0'E, then due south to position latitude 37°S and longitude 138°20.0'E, then due west to position latitude 37°S and longitude 138°E, then continuing due south along the meridian of longitude 138°E."*



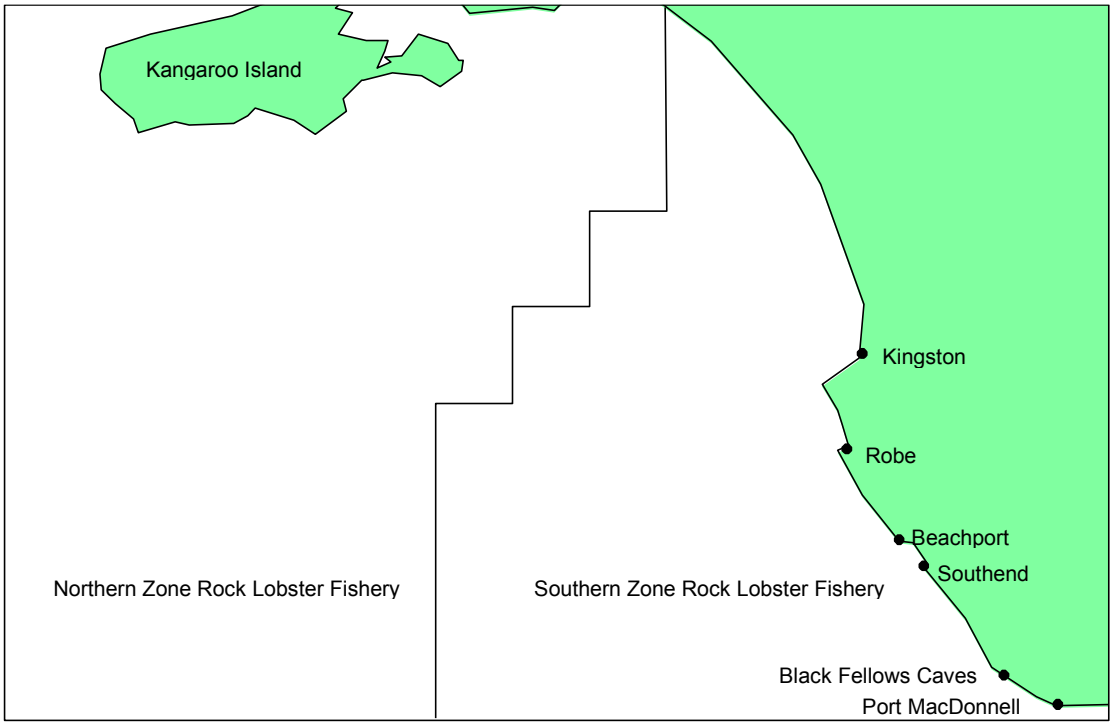


Figure 1: The northern and southern zones of the South Australian rock lobster fisheries.[Refer to Appendix I for statistical fishing areas]

The fishery involves the taking of rock lobster, *Jasus edwardsii*, within these waters as prescribed under the *Fisheries Act 1982* and regulations. Licensed rock lobster fishers also have access to a variety of other species, including salmon (*Arripis truttaceus*), mulloway (*Argyrosomous hololepidotus*), octopus (*Octopus* spp) and snapper (*Pagrus auratus*). Some fishers have unrestricted access to king (giant) crab (*Pseudocarcinus gigas*), while other fishers are subject to a five crab bycatch per trip limit.

The southern zone rock lobster fishery is a limited entry fishery which had 185 licensees during the 1996/97 season. The majority of boats fish from one of the seven principal ports between Port MacDonnell and Kingston. The fishery is primarily a day fishery and vessels return to port at varying times during the day to unload their catch.

In the southern part of the zone, from Port MacDonnell to Beachport, there is a high density of fishable bottom (lobster habitat) from the low water mark to the margin of the continental shelf. The close proximity of the continental shelf in the southern part of the zone, combined with an abundance of lobster habitat, means that it is not necessary for fishers to travel far from their ports to fish. North of Beachport, the reef substrate becomes more scattered and the continental shelf widens.

The fishing fleet is exhibiting greater mobility across the fishing grounds. It is becoming increasingly common for vessels to fish grounds previously only fished by boats of another port. As a result, some fishing grounds are heavily fished with local stock implications.

Beehive pots of wire mesh on steel frames or 50 x 75 millimetres weldmesh with moulded plastic or cane necks, are used in the fishery. The dimensions of pots and the requirement for enabling escape of undersize rock lobster are specified in the *Fisheries (General) Regulations 1984*. Pots are usually set overnight and hauled at first light. Hydraulic or mechanical pot haulers are used.

There has been a recent shift away from traditional vessels to planing hulls enabling fishing over greater areas adjacent to the home ports. Recent technology changes have seen an increase in global positioning systems (GPS), giving greater precision in fishing activities. These changes have resulted in a higher capital investment by fishers.

The levels of bycatch of scalefish is low. Some boats retain incidental catches of the giant crab, others return crabs to the water, and some target the species during the season if they appear to be close to taking their quota. Some boats "dropline" for blue eye trevalla and ling, and “longline” or net for sharks out of season, and some of these activities require a Commonwealth permit. Most boats are slipped or removed on large trailers almost immediately after the season ends, and are not put back in the water until the following spring. This is partially due to the scarcity of safe winter anchorages.

2.2 Biological characteristics

Southern rock lobsters are distributed from Eden in NSW to southern Tasmania in the south and Dongara, Western Australia to the west. Rock lobster mate primarily in April - July with the females carrying eggs for 4 - 6 months. Rock lobster larvae moult through several stages before settling on a substrate as puerulus[10]. The period between egg fertilisation and settlement may last up to two years and the planktonic larvae are widely dispersed.

Growth rates are highly variable across the fishery. Highest growth rates for rock lobster in South Australia occur around the southern end of Yorke Peninsula (areas 33 and 40), while the lowest growth rates occur near the mouth of the Murray River (area 46)(see Appendix I). Size at maturity for female rock lobster varies substantially among the fishing areas, ranging from 89 millimetres carapace length in area 56 to 112 millimetres in area 40 (Prescott *et al* 1997). Rock lobsters can live

[10] Puerulus are transparent larvae which resemble the lobster adult form prior to coloration and hardening of the carapace in the juvenile stage.

for 20 years and may grow to 230 millimetres carapace length reaching weights in excess of seven kilograms.

The major predators of rock lobster in the southern zone are *Octopus* species, leather jackets and the occasional seal.

2.3 History of fishery management

Fishing of rock lobsters in the waters of the southern zone fishery has been carried out since early settlement. It was not until the late 1940s when lobsters were processed for the American market at a facility in Beachport, that the number of boats began to steadily increase. It was this market for rock lobster tails during the 1950s that proved to be the catalyst for the industry to develop. Processing facilities were set up in the southern zone ports and small communities began to flourish.

The fishery was originally managed as an open access fishery with a licence costing two pounds. Operators fished all year and used up to 200 pots per day. The increasing number of boats, from three boats in 1947 to 38 in 1955 in Port MacDonnell, led to a reduction in catches and the average size of rock lobster landed. In 1958, the fishery was closed to the taking of females from 1 June to 31 October and for males from 1 to 31 October.

In August 1967, following 12 months of investigation by a Government Select Committee into the fishing industry in South Australia, the following decisions were implemented:

- that a pot and boat limit be imposed for each of three zones in the rock lobster fishery (this included a region around Victor Harbor in addition to the now northern and southern zones), and

- that no new boats be allowed to operate in the south-eastern zone without the approval of the Minister (Anon. 1967).

In 1968, the fishery management arrangements were changed to provide for a limited entry fishery, with 324 boats. A commercial catch logbook became compulsory in the same year. In 1970, the South East Professional Fishermen's Association (SEPFA) was formed as the peak industry body for the southern zone rock lobster commercial fishers.

In 1975, another full-scale review of the fishery was commissioned following two reviews by the Commonwealth (Anon. 1975, 1976). A major outcome of the review was to recommend the introduction of a buy-back scheme within the fishery to enhance its viability (Copes 1978). In 1980, the fishery was closed during winter following assessments of its potential impacts, with the season starting on 1 October and finishing on 30 April (Lewis & Gleeson 1978, Lewis 1979, Byrne 1979, Goldsworthy 1980, Stimson 1980).

In 1984, the number of pots held by all fishers was reduced by 15% and each licence was limited to a maximum of 80 and a minimum of 40 pots. Analysis of the pot reduction showed that whilst it had a small affect on fishing effort, it failed to induce significant rationalisation within the fishery (Staniford 1987). Remaining fishers responded to the reduced pot numbers by working the smaller number of pots more intensively.

To improve the economic performance of the fishery a buyback scheme was introduced in 1987. The buyback scheme successfully removed 41 licences (boats) and 2,455 pots from the fishery. However, the remaining fishers increased their fishing effort by increasing the number of days spent fishing, and this dissipated any potential benefits for the stock derived from the scheme (Staniford 1993).

The fishery is currently managed by regulations governing inputs to and outputs from the fishery. The season currently runs from 0600 hours on 1 October to 1800 hours on 30 April. There is a minimum size limit of 98.5 millimetres carapace length; a prohibition on the taking of berried lobsters; and several sanctuaries where lobster fishing is prohibited. The dimensions of

the rock lobster pots, including the mesh size and escape gaps, are specified to control the efficiency of the pot and limit retention of undersize lobsters. Fishers may hold between 40 and 100 pots per licence. A maximum of 80 pots may be used to take rock lobster at any one time (if at least 80 pots are held against the licence).

Since 1993/94, the fishery has been controlled by a quota system. The total allowable commercial catch (TACC) was set at 1,718 tonnes and 1,740 tonnes during the 1993/94 and 1994/95 seasons, respectively. The TACC is divided proportionally into individual transferable quotas (ITQs) and allocated according to the number of pots held against the licence. The daily catch of individual boats is monitored by catch and disposal records (CDR), purchase records, and sales and transfer records that provide an audit paper trail from the point of landing to the point of sale by a wholesaler or exporter. The TACC for the 1995/96 and 1996/97 seasons was 1,720 tonnes.

Development and implementation of a quota system

The quota management system was introduced to the fishery with the primary aim being to ensure that catches would not exceed the sustainable harvest level for the fishery. Seven options were presented to industry (Anon 1995) being:

- individual transferable quotas,
- a fishery total allowable catch,
- pot reductions,
- gear restrictions,
- time and area closures,
- buyback schemes, and
- changes to lobster size limits.

From the above options, the Minister for Primary Industries introduced a competitive TACC of 1,650 tonnes in 1992/93. Many fishers were unsure whether quota management was appropriate for the fishery, however, there was little support for other options once a TACC had been set. A pot reduction and buyback scheme had been used previously to control fishing effort.

With a competitive TACC set for the fishery, the most difficult task in implementing a quota management system was to develop a fair and equitable method of allocating the TACC amongst fishers in the southern zone. This was a very controversial and complex issue for both the Government and the fishery management committee to resolve.

Three alternative allocation methods were initially considered based on:

- a fisher's share of the total number of pots in the fishery (standard pot allocation);
- a fisher's share of the total historical catch from the fishery; or
- a combination of the above.

For the first year of quota management, individual quotas were allocated according to a method referred to as the "Adjusted Preferred" or "Presser Model". This method selected each fisher's greatest relative share of either pots or catch history. Determining a fisher's share by the total number of pots in the fishery was straightforward. However, determining a fisher's share of the catch history was more complex.

A number of years had to be chosen in order to determine a fisher's relative share of the catch history for the fishery. In June 1991, the then Director of Fisheries advised SEPFA that if a quota system was to be introduced in the future, and if the allocation involves consideration of historic catches, catch history up to (and including) the 1990/91 season would be used as the basis for allocation. This was to avoid licence holders falsifying catch and effort returns in an attempt to establish an inflated catch history.

The method for determining shares of catch history in the fishery for the purposes of the "Adjusted Preferred" method was to average the catch per pot for the best two years of the 1988/89, 1989/90 and 1990/91 seasons, and then multiply this by the number of pots endorsed on the licence holder's fishing licence at the end of the 1990/91 fishing season.

After adding the highest percentage shares of all fishers (eg shares in either pots or catch history) the total percentage figure was about 110%. To ensure that the TAC was not exceeded, all fishers allocations were reduced by 10%. This meant that all licence holders received an allocation that was about 10% less than their most preferred allocation system, regardless of whether this was catch history or pots.

The Minister responsible for fisheries at the time gave an undertaking that management of the fishery (including the allocation method) would be reviewed at the end of the 1993/94 season. The review was conducted from May 1994 until August 1994, with most effort focusing on a review of the quota allocation method.

An exhaustive process of management committee meetings, port meetings and consultations with individual licence holders resulted in the management committee recommending that the current quota allocation method be adapted so that quota would be allocated on the basis of an equal share of the quota per pot at the end of a three year period - the "APACHE" (Adjusted Preferred Allocation Catch History Equation) Model.

The Minister for Primary Industries instructed the management committee to consider further the impact of this recommendation on licence holders with a history of high catches. The management committee laboured over the issue and while still supporting the "APACHE" model agreed that the system should be implemented over a four year period to allow high catch history licence holders an extra season to adapt to the changes.

Whilst the recommendation to implement the APACHE four year method of quota allocation was supported by the management committee and accepted by the Director of Fisheries and the Minister for Primary Industries, around 25 percent of licence holders did not support the method. This generally equates to the number of licence holders who would benefit under an allocation system based on catch history.

A high catch history licence holder successfully challenged the regulations which implemented the APACHE model in the Supreme Court of South Australia in March 1995 (BR Lawrie v Minister for Primary Industries, J Jefferson and TJ Moran). As a result, the fishery reverted to a competitive quota managed fishery for the remainder of the 1994/95 season. Fishers voted to continue to support the allocation model and continued fishing on this basis. The Minister successfully appealed this decision in the Full Supreme Court of South Australia in July 1995 (Minister for Primary Industries & ORS v Lawrie). All three judges agreed that the appeal should be allowed and the recommendations of the management committee and the "APACHE" model remain in force.

During the four years of the APACHE allocation method, pots transferred were allocated the average weight of the pot quota across the fishery. The 1997/98 season saw the end of the APACHE model with all pots being allocated a standard per pot allocation of the TACC.

2.4 Trends in the commercial catch

Historical catch and value data for the southern zone rock lobster fishery is presented in Table 1. From 1993/94, the fishery has been controlled by a TACC, but due to a number of considerations (eg stock abundance, environment, boat breakdown, bad weather,), the TACC in most years is not taken. For example, the TAC in 1996/97 was 1,720 tonnes but only 1,643 tonnes was landed.

Table 1. Total catch and total value in the southern zone rock lobster fishery from 1977/78 to 1995/96. Data collected prior to 1977/78 were combined for both rock lobster fishing zones (Prescott *et al* 1997).

Season	Total Catch (tonnes)	TACC	Total Value ($ millions)	Potlifts (millions)
77/78	1 249		4.771	1.7788
78/79	1 356		5.763	1.877
79/80	1 389		6.724	1.5239
80/81	2 140		11.644	2.0444
81/82	2 090		12.486	2.1666
82/83	1 877		12.614	2.2023
83/84	1 734		12.177	2.2572
84/85	1 537		16.347	1.9867
85/86	1 547		17.294	2.0217
86/87	1 458		22.067	1.9125
87/88	1 657		25.717	2.1314
88/89	1 407		17.080	1.8876
89/90	1 528		22.505	1.7983
90/91	1 562		26.687	1.9094
91/92	1 940		36.347	2.0511
92/93	1 754		34.832	1.7606
93/94	1 669	1 718	43.164	1.6445
94/95	1 720	1 740	48.574	1.5111
95/96	1 684	1 720	44.569	1.5934
96/97	1 643	1 720	47.647	1.7568
97/98				
98/99				

Note: this table does not include the recreational catch or illegal catch.

2.5 Research and stock assessment

The South Australian Research and Development Institute (SARDI) is the preferred research provider of the Government and this agency conducts the majority of the research and monitoring programs for the rock lobster fishery. Research needs and priorities for management of the fishery are determined by the Rock Lobster Research Sub-Committee, a joint sub-committee made up of representatives from both the northern and southern zone management committees. A five year strategic research plan has been developed by the northern and southern zone rock lobster management committees and is attached as Appendix II.

South Australia has established good monitoring programs collecting commercial data, pot-catch data, length frequency data, larval settlement indices and temperature records. Catch and effort data are available from 1950, however the data quality improved after the introduction of limited entry and fishery logbooks in 1968.

A review of research requirements in the fishery was commissioned by industry in 1995 and completed in February 1996. The report set out research directions for the industry for the subsequent three years (Breen 1996). The research directions focus on monitoring through a catch sampling program, collection of data for yield per recruit, egg per recruit analysis and production, and modelling information.

SARDI currently provides annual stock assessment reports on the southern zone rock lobster fishery to the management committee by 31 May each year (Prescott *et al* 1997).

2.6 The recreational catch

Recreational fishers also participate in the fishery throughout South Australia, though they account for only a small percentage of the total catch. Estimates of the total recreational catch range between 90 and 130 tonnes per year (Anon. 1995, Prescott *et al* 1997). Recreational fishers have access to the fishery by diving, drop netting and a limited number have access to the use of pots. The latter device requires registration and the number of registered recreational fishers has increased with the addition of new pot registrations in September 1997. There are approximately 6,000 registrations comprising some 12,000 pots. The management of the recreational rock lobster fishery is currently under review.

In the south-east of South Australia, rock lobsters are taken by recreational fishers predominantly by pots and drop nets. Diving for lobsters occurs mainly during the summer months.

Lobster pots are used to collect lobsters throughout the season with peak effort during holiday periods (eg Christmas and Easter). Most tourist fishers concentrate within close proximity to the ports of Port MacDonnell, Southend, Beachport and Robe. Most local recreational fishers fish in areas such as Number Two Rocks, Nene Valley, Green Point, Carpenters Rocks, Pelican Point and Cape Douglas.

Drop nets are considered to be the most successful method of catching lobsters quickly along the south-east coast although fishers must be very skilful in using them and good weather is required. Marginal diving conditions occur along the south-east coastline and this is thought to be the reason why it has been observed that most divers do not catch the bag limit of five lobsters.

The recreational pot-caught lobster catch was estimated to be approximately 53 tonnes and 62 tonnes live weight during the 1990/91 and 1991/92 seasons respectively (Prescott *et al* 1997). The 17.6 percent increase in catch between the two seasons mirrors very closely the increase in catch in the commercial fishery which was 18.5 percent during the same period. The estimated recreational pot catch was approximately two percent of the total pot fishery in the State. Even if this level of the recreational catch taken by pots was underestimated by 50%, the catch taken would still be less than five percent of the total recreational and commercial pot catch (Appendix III).

While the overall catch by recreational pot fishers is small, it should be noted that it can be significant in localised areas. There are some areas where recreational fishing effort may exceed the commercial effort. Examples in the south-east are at Nora Creina and waters adjacent to Gleeson's Landing.

Lobsters taken by divers and drop net fishers have not been estimated. Data collection from these groups is made more difficult than it is for the pot fishers by the fact that there is no licence required by these fishers.

2.7 Illegal catch

No estimates are available of the illegal catch (Prescott *et al* 1997).

2.8 Processing and Markets

There are a number of processors trading in rock lobster in the southern zone. Processors are based in the major fishing ports and the majority of these facilities have live holding capabilities. This reflects the market demand for live product, principally for Asian markets. There are only small sales of frozen rock lobster tails to the United States of America. This latter product was the main market for the industry until the late 1980s when market focus shifted into Asia which offered higher prices and lower consignment costs.

The globalisation of the rock lobster market over the past ten years has resulted in greater certainty and reduced fluctuations in market price.

Western Australia is the largest supplier of rock lobster in Australia and a major competitor. Increased production in Western Australia may significantly affect domestic market prices.

3 Fishery management objectives and strategies

The priority for management of the southern zone rock lobster fishery is to ensure that annual harvest levels are biologically sustainable so that future generations may benefit from exploitation of the resource.

Commensurate with this priority are a number of more specific biological, economic, environmental, and social objectives that have been developed by the Southern Zone Rock Lobster Fishery Management Committee to complement the broad directives of section 20 of the *Fisheries Act 1982*.

3.1 Biological objectives

1. **To maintain rock lobster populations at sustainable levels across the fishery.**

2. **To harvest rock lobster at a size likely to provide for adequate levels of recruitment.**

Strategies

- adopt a 'precautionary approach'[11] in the management of the rock lobster resource;
- set a sustainable total allowable commercial catch for the fishery each year;
- restrict the number of licences in the fishery to a maximum of 185;

[11] the management committee shall be more cautious when information is uncertain, unreliable or inadequate. The absence of adequate scientific information shall not be used as a reason for postponing or failing to take conservation and management measures to prevent overfishing.

- control the catch taken by the recreational sector; and
- set legal minimum size limits which protect a proportion of the adult spawning stock.

3.2 Economic objectives

1. **To maintain the economic return from the southern zone rock lobster fishery at a level which provides for fair and reasonable benefits to licence holders.**

2. **Optimise yield from the fishery.**

3. **To recover an economic return from licence holders sufficient to cover attributed costs of management, research and compliance for the fishery.**

4. **To provide for economic efficiency and flexibility in management arrangements by developing harvesting strategies that minimise costs.**

5. **To protect the resource through the provision of adequate compliance resources.**

Strategies

- allocate total allowable commercial catches to licence holders as individual transferable pot quotas;
- set licence fees at a level sufficient to recover all attributed management, research and compliance costs;
- set legal minimum size limits which assist in optimising yield;
- develop harvest strategies which minimise commercial fishing costs;
- develop flexible management arrangements; and
- support cost effective compliance strategies to protect the resource from illegal harvesting

3.3 Environmental objectives

1. **To minimise the environmental impact of rock lobster fishing.**

2. **To minimise potential conflict with other users of marine resources.**

Strategies

- promote environmentally sensitive fishing practices in the industry and promote actions that reduce fishery impacts; and
- identify the potential for conflict with other marine resource users and determine strategies to reduce these conflicts.

3.4 Social objectives

1. **To maintain and provide for reasonable levels of public access to the rock lobster resource.**

2. **To ensure a high level of awareness of occupational health, safety and welfare issues in the fishery.**

3. **To keep the community informed regarding the status of the rock lobster fishery.**

4. **To maintain the regional development nature of the rock lobster fishery.**

Strategies

- monitor participation and catch by the recreational sector in the fishery;
- promote occupational health and safety issues within the industry;
- develop educational and awareness packages for the community about the fishery; and
- develop management arrangements which ensure continued levels of access to the fishery by owner/operators in regional communities.

4 Compliance and enforcement

The annual compliance budget for the southern zone of the rock lobster fishery is approximately $950,000 and accounts for costs incurred for a monitoring program focused on policing minimum size regulations, catch disposal records, port scales, processors, northern zone/southern zone and South Australian/Victorian border issues.

The quota system is managed through a paper audit trail from the time rock lobster are landed to the point of sale. Prior to landing their catch, fishers are required to complete a form giving an accurate number and an estimated weight of lobsters caught and the port at which they intend to land. Landing must occur at one of the ports with certified weigh scales. These are located at Beachport, Robe, Blackfellows Caves, Southend, Cape Jaffa, Carpenters Rocks and Port MacDonnell. A further set of scales has been positioned at Victor Harbor for the 1997/98 season.

On landing, the catch must be weighed at the certified scales and the exact weight entered on the CDR form. The CDR form is then lodged in a locked box at the scales, collected every 24 hours and delivered to the Fisheries Compliance Office at Mt Gambier. CDR information is entered onto a database and individual catches recorded against allocated pot quotas. Further paperwork is completed by processors upon purchase and sale of rock lobster.

An outline of the compliance plan for the fishery is provided in Appendix IV.

5 Reference points and performance indicators

Reference points are agreed quantitative measures used to assess performance of the fishery based on clearly defined management objectives.

Reference points begin as conceptual criteria which capture in broad terms the management objectives for the fishery. To implement fishery management it must be possible to convert the conceptual reference point into a technical reference point, which can be calculated or quantified on the basis of biological or economic characteristics of the fishery (Caddy and Mahon 1995).

Reference points used for rational exploitation of fish resources can be placed in two categories: target reference points and limit reference points. Target reference points are considered as indicators of stock status which are a desirable management target, whilst a limit reference point is an agreed level at which stock stress may occur, and immediate action is required to remedy the situation before long term damage to resource productivity may result.

5.1 Biological reference points

Considering the stated biological objectives for the fishery, the following reference points may be used to assess the stock status of the southern zone rock lobster fishery:

- exploitation rate - indicates the level of available lobsters taken by the fishery.
- catch rate - directly relative to current stock abundance.
- egg production - reflects reproductive capacity of the fishery.

- abundance of pre-recruits - provides a forecasting tool on future stock abundance.
- mean size of rock lobster - indicates changes in stock structure.

Historical data available from commercial catch returns, catch sampling programs and the SARDI stock assessment model for the fishery is shown in table 2.

In determining the annual reference points to measure performance of the fishery, the management committee will be guided by the following principles:

* to maintain and improve the average catch rate above the 1993/94 level.
* to maintain the spawning biomass at a level which sustains the reproductive capacity of the stock.
* a desire by industry to maintain the annual catch around 1,700 tonnes.

Table 2: Historical data available for use in assessing appropriate biological reference points for the southern zone rock lobster fishery.

REFERENCE POINT	1992/93	1993/94	1994/95	1995/96	1996/97
Exploitation rate (%) *	**0.42**	**0.40**	**0.41**	**0.41**	**0.40**
Egg production (billions) #	**1,254 (14%)**	**1,228 (15%)**	**1,243 (14%)**	**1,235 (15%)**	**1,227 (15%)**
Pre-recruit abundance ^	**1.47**	**1.32**	**1.51**	**1.41**	**1.17**
Catch rates (kg/pot lift)	**0.9961**	**1.0146**	**1.1383**	**1.0568**	**0.9351**
Mean size + (kg)	**0.7831**	**0.8156**	**0.8077**	**0.8038**	**0.8049**

* The exploitation rate is the fraction of the population harvested annually, determined from the dynamic qR method employing annual catches by weight and number.
# Total egg production (including only legal sized females) has been derived from the qR stock assessment model. (Percent virgin egg production)
^ The ratio of pre-recruits includes all undersize rock lobster reported in commercial logbooks between November and March (inclusive)/total reported potlifts.
+ mean size of rock lobster landed across the fishery.

Management action on reaching a reference point outside the historical range for the fishery

When one or more of the reference points described by the management committee are reached or exceeded, the management committee will undertake the following actions:

1. notify the Minister for Primary Industries, Natural Resources and Regional Development and participants in the fishery as appropriate,

2. undertake an examination of the causes and implications of 'triggering' a reference point,

3. consult with the southern zone rock lobster industry and Director of Fisheries on the need for alternative management strategies or actions, which may include:

- changes to the TACC in subsequent years;
- changes to the minimum size limit; or
- changes to the fishing season; and

1. provide a report to the Minister and industry, within three months of the initial notification, on the outcomes of a review of the effect of triggering a target reference point.

Marine park effects on management of the fishery

The establishment of the Great Australian Bight Marine Park in State waters and the intent to extend the park into Commonwealth waters has resulted in the loss of fishing grounds to the rock lobster fishery.

The management committee may support future declarations of marine reserves if it can be demonstrated that the reserves are essential for the proper conservation of the marine resource and after full consultation has occurred with the committee and the wider fishing industry.

Declaration of any marine park which has an impact on the sustainable operation of the fishery must be accompanied by adequate funding to provide for continued sustainability of that fishery.

5.2 Economic performance indicators

Considering the stated economic objectives for the fishery, the following performance indicators are used to assess the economic status of the southern zone rock lobster fishery:

- Gross Value of Product (GVP);
- cost of management programs compared with GVP;
- Return on Investment (ROI); and
- determination of any major operating cost increases (eg possible future loss of fuel rebate)

5.3 Management committee performance indicators

The primary responsibility for ecologically sustainable development of the southern zone rock lobster resource rests with the Minister for Primary Industries, Natural Resources and Regional Development. However, to assess the effectiveness and efficiency of the Southern Zone Rock Lobster Fishery Management Committee in managing the resource, and to provide for transparency in the management process and improve accountability, performance indicators are required.

The primary performance indicators used to assess the effectiveness and efficiency of the management committee is the acceptance of advice from the committee by the Minister for Primary Industries, Natural Resources and Regional Development, and the quality of the information which the committee supplies to the Minister. Further information on the strategic direction of the management committee and key performance measures can be found in the Southern Zone Rock Lobster Fishery Management Committee Strategic and Business Plan.

5.4 Compliance performance indicators

Compliance costs for the southern zone rock lobster fishery are a significant part of the overall management costs for the fishery. The effectiveness and efficiency of compliance protocols and programs needs to be assessed annually to ensure effectiveness in service delivery and that costs are minimised where possible without raising the level of compliance risk.

The following performance indicators are used to assess the effectiveness and efficiency of the compliance and audit operations for the southern zone rock lobster fishery:

- reduction in illegal activity determined by number of reports for offences;
- cost effective use of compliance resources;
- every fisher formally checked at the scales at least once per year; and
- greater support from stakeholders for Fishwatch.

Biological reference points and performance indicators will be reviewed on an annual basis. Changes may occur to biological reference points as more scientific information on the stock status of the southern zone rock lobster fishery is provided from the strategic research program. Other performance indicators may also change to ensure the management of the fishery is subject to a continuous improvement program.

6 Review of the management plan

The Southern Zone Rock Lobster Fishery Management Committee is required under the *Fisheries (Management Committee) Regulations 1995* to provide the Minister for Primary Industries, Natural Resources and Regional Development on or before the 30 November each year a report on the operations of the management committee during the preceding financial year. This report will include a report on the reference points which were reached during the reporting period and any actions that resulted. The performance of the management committee and fishery operations will also be rated against the stated objectives.

This management plan is a dynamic document which reflects current understanding of the southern zone rock lobster fishery and as such may change over time. No radical departure from the stated management arrangements, biological reference points or performance indicators will occur unless the management committee is otherwise directed by the Minister for Primary Industries, Natural Resources and Regional Development during the life of this plan.

Six months before the end of the five year period (1 June 2002) this management plan will undergo a major review.

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Appendix I

FISHERY LOGBOOK STATISTICAL AREAS

Appendix II

FIVE YEAR STRATEGIC RESEARCH PLAN FOR THE SOUTH AUSTRALIAN SOUTHERN ZONE ROCK LOBSTER FISHERY

Principles

- linked to explicit quantifiable management objectives
- provide defensible values for the performance indicators to evaluate stock status
- annual stock assessment reports in uniform format
- cost-effective delivery of information

Guidelines

The development of a five-year strategic plan for South Australian rock lobster reflects a need of the industry and of managers for reliable, cost-effective, performance indicators of the status of the rock lobster resource. These performance indicators are quantitative indices which can be updated annually and can be used to reliably assess the effectiveness of current management of rock lobster stocks in South Australia.

The plan also takes into account the conduct and transfer of information of a major biological study of rock lobsters done from 1993–1996. This study produced a valuable information resource and an operational dynamic model of the South Australian rock lobster fishery. The research plan addresses the transition from a study of the fisheries biology of lobsters to an annual assessment of the two stocks (southern and northern zones). The latter assessment is noted to be the core research necessary above all to ensure that management decisions are based on defensible, robust, information. Such core research has been identified as part of an independent review of research needs for the South Australian rock lobster fishery (Breen 1996). The review identified priorities for research and resources necessary to deliver prioritised research programs.

Further to the core research programs, funded through licence-fee contributions, are discrete research projects which, although not directly related to stock assessment, have demonstrable value in providing additional information to the rock lobster industry. In the plan, such projects are promoted through the fisheries management committee for external funding (eg FRDC). Relevant research projects already considered include:

- condition indices and methods for non-destructive determination of growth

- identification of methods to reduce incidental predation of rock lobsters in pots

Assessing stocks of rock lobster: core research programs 1997–2002

1. Performance indicators

The research has been designed to deliver the following performance indicators annually:

- catch rate
- exploitation rate
- total egg production
- abundance of pre-recruits

These performance indicators are described below:

catch rates

Catch rates are used as indicators of the relative biomass of lobsters. Catch rate data will be derived from compulsory catch logbook data and from independent catch sampling aboard commercial vessels.

exploitation rate

This is the proportion of the stock removed by fishing. This indicator will be derived from several methods the main ones being: consideration of catches (weights and numbers of lobsters), analysis of length frequency methods. As the exploitation rate is a derived index it is estimated with error. Uncertainty in the estimate will be explicitly stated.

total egg production

An estimate of the total number of eggs produced as a function of lobsters remaining in each stock after fishing. The estimate will be derived from the catch-sampling program and application of biological parameters available from the completed population dynamics study.

abundance of pre-recruits

An index of potential recruitment to the fishery. Expressed in two ways:

- the relative abundance of pueruli on collectors at selected sites in the southern and northern zones
- the abundance of under-size lobsters retained in pots (from the catch-sampling program).

mean size

The size (weight) of rock lobster landed across the fishery by statistical area.

2. Sources of data

The following will be used as inputs to the derivation of performance indicators:

- catch and effort data (from monthly returns),
- seasonal information on abundance and size composition by sex of lobsters sampled aboard commercial vessels in selected areas and depth zones (pot sampling),
- estimates of growth, movement, size at maturity, and length/weight relationship by MFA derived from the population dynamics study, and
- seasonal information on abundance of pueruli settling on collectors placed at coastal sites in the southern and northern zones.

Other projects/proposals

Other projects of potential benefit to the South Australia are summarised below:

Rock lobster condition
A project to assess sources of variation in growth and condition of lobsters. Important outcomes include:

- reliable prediction of rock lobster condition and market potential
- non-destructive method for the estimation of growth rate of lobsters

start: 1996 **finish:** 1998 **funding**: FRDC

Reducing incidental predation on rock lobsters
A project to examine potential mechanisms for reducing the incidental predation of rock lobsters in pots. Important predators include octopus, leather jackets, and seals.

start: 1998 **finish:** 2000 **funding:** industry

South Australian Rock Lobster – five year research plan

Research activity	**1997/98**	**1998/99**	**1999/20**	**2000/01**	**2001/02**
complete publication of the population dynamics study	#				
design catch sampling program	#				
update rock lobster model	#				
commercial catch sampling					
produce stock assessment report for southern zone	by May 31	by May 31	by May 31	by May 31	by May 31
produce stock assessment report for northern zone	by June 30	by June 30	by June 30	by June 30	by June 30
summarise catch and effort information	May and November	May and November	May and November	May and November	May and November
rock lobster condition/growth *		#			
incidental predation *				#	
# = final report; * = external funding opportunity					

Appendix III

Recreational Catch of Rock Lobster in South Australia

Table 2. The estimated recreational catch (kilograms) of lobsters taken by pots in South Australia per month for 1990/91 and 1991/92 (Tyrer 1994). The area codes are (FLE) Fleurieu Peninsula, (KIS) Kangaroo Island South, (LEP) Lower Eyre Peninsula, (LSE) Lower South East, (USE) Upper South East, (WEC) West Coast and (YOP) Yorke Peninsula.

1990-1991 SEASON

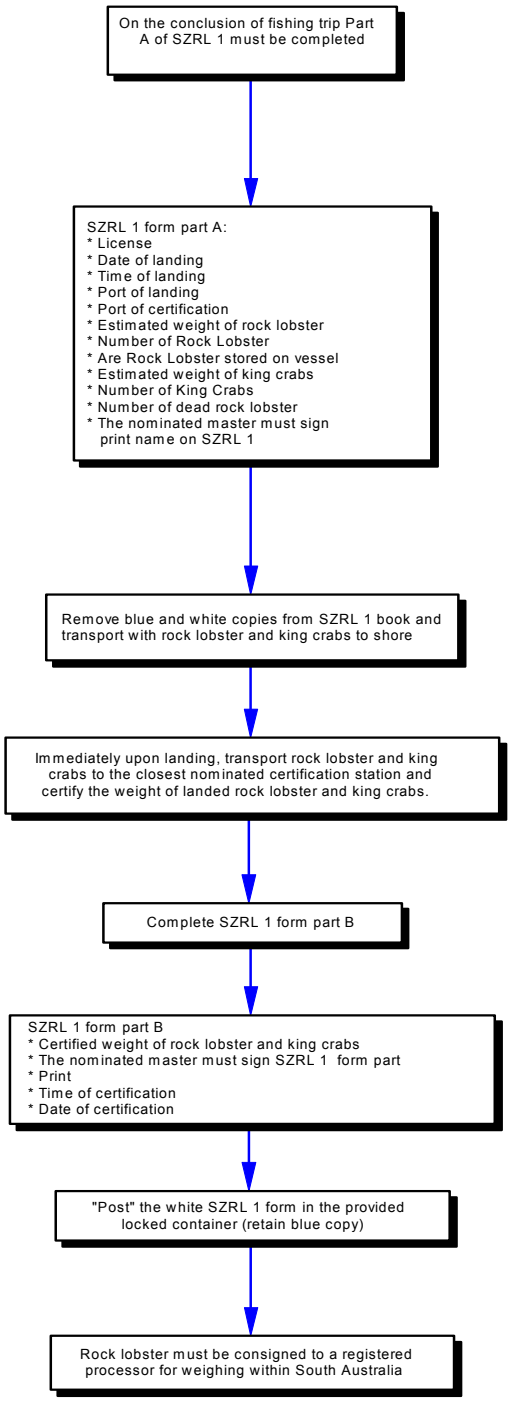
AREA	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	AREA
FLE		870	2621	3138	1565	739	86	33	9052
KIS		485	1512	1883	442	370	25	18	4735
LEP		19	174	128	18	7	4	0	350
LSE	664	1273	1943	5492	3133	1510	916	0	14931
USE	270	289	1326	3369	1678	812	397	0	8141
WEC		788	1739	1489	637	257	288	13	5211
YOP		883	1940	4965	2072	329	196	80	10465
MONTH TOTAL	934	4607	11255	20464	9545	4024	1912	144	**52885**

1991-1992 SEASON

AREA	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	AREA
FLE		1007	1879	2690	1361	596	139	6	7678
KIS		280	1235	1365	282	160	114	0	3436
LEP		98	193	356	177	126	69	18	1037
LSE	870	1713	4952	7482	5053	2853	1461	0	24384
USE	382	574	2040	3443	2363	961	1068	0	10831
WEC		754	1536	1727	884	461	177	39	5578
YOP		868	2054	3837	1658	581	238	39	9275
MONTH TOTAL	1252	5294	13889	20900	11778	5738	3266	102	**62219**

Appendix IV

COMPLIANCE PROTOCOLS



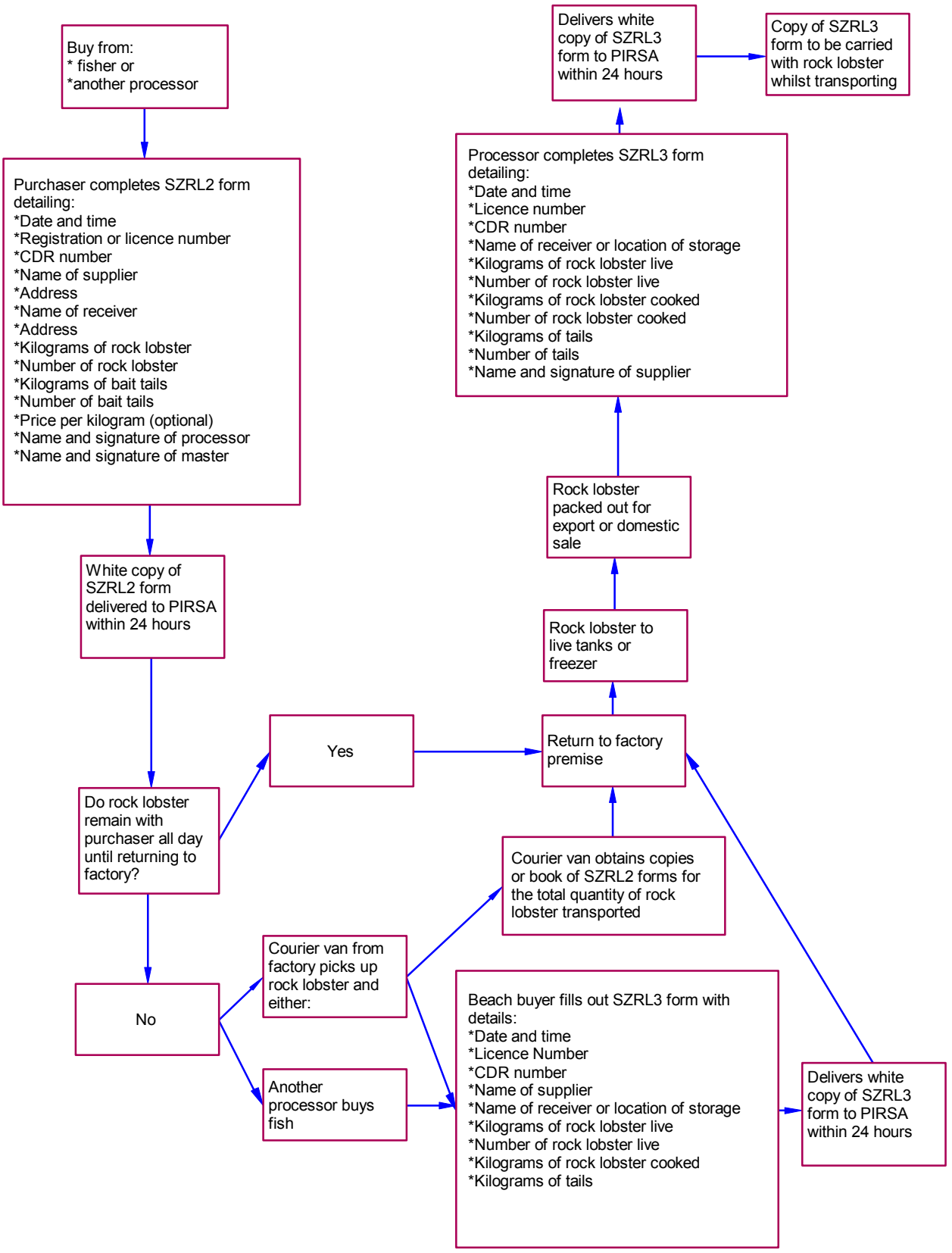
Note:
1) The SZRL 1 book must remain on board registered vessel at all times

2) Conclusion of a fishing trip means when rock lobster which were taken during fishing trip leaves the registered boat or when the registered boat containing rock lobster taken during a fishing trip is removed from the water.

3) No more than five King Crabs shall be on board the registered boat at any time.

4) Rock Lobster that are to be disposed as bait tails shall have the meat of the tail marked along its length with a conspicuous dye which is visible after any processing and when offered for sale.

Southern Zone Rock Lobster Fishery in South Australia - Fish Processor Flow Chart



Appendix V

MEMBERSHIP OF THE MANAGEMENT COMMITTEE

Independent Chairperson

7 voting members representing the commercial sector (one from each port - Kingston, Robe, Beachport, Southend, Carpenters Rocks, Blackfellows Caves and Port MacDonnell)

fishery manager (PIRSA) (non voting)

research scientist (currently SARDI) (non voting)

South Australian Fishing Industry Council (SAFIC) representative (non voting)

South Australian Recreational Fishing Advisory Council (SARFAC) representative (non voting)

1 adviser from the fish processing sector

1 adviser from the South East Professional Fishermen's Association

SOUTH AUSTRALIAN FISHERIES MANAGEMENT SERIES

Paper No.	Title	Issue Date
1	A draft management plan for the blue crab fishery in South Australia	August 1994
2	A discussion paper on the management options for the South Australian recreational rock lobster fishery	September 1994
3	South Australian Shellfish Quality Assurance Program Report no. 1	November 1994
4	A review of net fishing in South Australia	November 1994
5	A review of the management arrangements for the Southern Zone Rock Lobster fishery	September 1995
6	Options for the management of the White Shark in South Australia	May 1995
7	Cost recovery in South Australia's commercial fisheries	October 1995
8	The role of management committees, peak industry bodies and government in fisheries management decision making	October 1995
9	A review of the management and prioritisation of fisheries research	November 1995
10	A management proposal for the Northern Zone Rock Lobster Fishery's 1995/96 season and an assessment of the effort reduction package implemented during the 1994/95 season	October 1995
11	Management plan for the South Australian abalone fishery	February 1996
12	Assessment, management and research support for the Gulf St Vincent prawn fishery	November 1995
13	A management plan for the experimental Pilchard Fishery	November 1995
14	South Australian Shellfish Quality Assurance Program Report No .2	November 1995
15	A draft plan for the management of the specimen shell fishery in South Australia	March 1996
16	A discussion paper on issues relating to the development of rock lobster aquaculture and rock lobster holding systems at sea in South Australia	March 1996
	A draft plan for structural adjustment in the South Australian River Fishery	
17	Economic analysis of management options for the Gulf St Vincent Prawn Fishery	April 1996
18	The roles and structure of fisheries management committees and the responsibilities of chairpersons and members	April 1996
19	Review of research and management of the Spencer Gulf prawn fishery	
	South Australian Shellfish Quality Assurance program Report No. 3	October 1996
20	The cost recovery process for 1996/97	
	A discussion paper on the management and development of recreational	October 1996
21	fishing in South Australia	November 1996
22	Development of at-sea rock lobster holding systems in South Australia	November 1996
23	South Australian recreational fishing survey 1997	
	Fishcare South Australia - fish for the future	May 1997
24	Management plan for the South Australian abalone fishery	May 1997
25	Management plan for the South Australian northern zone rock lobster fishery	May 1997
26	Management plan for the South Australian southern zone rock lobster fishery	June 1997
27		September 1997
28		December 1997
29		December 1997

370.142 Spiny lobster trap certificate program.--

(1) INTENT.--Due to rapid growth, the spiny lobster fishery is experiencing increased congestion and conflict on the water, excessive mortality of undersized lobsters, a declining yield per trap, and public concern over petroleum and debris pollution from existing traps. In an effort to solve these and related problems, the Legislature intends to develop pursuant to the provisions of this section a spiny lobster trap certificate program, the principal goal of which is to stabilize the fishery by reducing the total number of traps, which should increase the yield per trap and therefore maintain or increase overall catch levels. The Legislature seeks to preserve as much flexibility in the program as possible for the fishery's various constituents and ensure that any reduction in total trap numbers will be proportioned equally on a percentage basis among all users of traps in the fishery.

(2) TRANSFERABLE TRAP CERTIFICATES; TRAP TAGS; FEES; PENALTIES.--The Fish and Wildlife Conservation Commission shall establish a trap certificate program for the spiny lobster fishery of this state and shall be responsible for its administration and enforcement as follows:

(a) Transferable trap certificates.--Each holder of a saltwater products license who uses traps for taking or attempting to take spiny lobsters shall be required to have a certificate on record for each trap possessed or used therefor, except as otherwise provided in this section.

1. The Department of Environmental Protection shall initially allot such certificates to each licenseholder with a current crawfish trap number who uses traps. The number of such certificates allotted to each such licenseholder shall be based on the trap/catch coefficient established pursuant to trip ticket records generated under the provisions of s. 370.06(2)(a) over a 3-year base period ending June 30, 1991. The trap/catch coefficient shall be calculated by dividing the sum of the highest reported single license-year landings up to a maximum of 30,000 pounds for each such licenseholder during the base period by 700,000. Each such licenseholder shall then be allotted the number of certificates derived by dividing his or her highest reported single license-year landings up to a maximum of 30,000 pounds during the base period by the trap/catch coefficient. Nevertheless, no licenseholder with a current crawfish trap number shall be allotted fewer than 10 certificates. However, certificates may only be issued to individuals; therefore, all licenseholders other than individual licenseholders shall designate the individual or individuals to whom their certificates will be allotted and the number thereof to each, if more than one. After initial issuance, trap certificates are transferable on a market basis and may be transferred from one licenseholder to another for a fair market value agreed upon between the transferor and transferee. Each such transfer shall, within 72 hours thereof, be recorded on a notarized form provided for that purpose by the Fish and Wildlife Conservation Commission and hand delivered or sent by certified mail, return receipt requested, to the commission for recordkeeping purposes. In addition, in order to cover the added administrative costs of the program and to recover an equitable natural resource rent for the people of the state, a transfer fee of $2 per certificate transferred shall be assessed against the purchasing licenseholder and sent by money order or cashier's check with the certificate transfer form. Also, in addition to the transfer fee, a surcharge of $5 per certificate transferred or 25 percent of the actual market value, whichever is greater, given to the transferor shall be assessed the first time a certificate is transferred outside the original transferor's immediate family. No transfer of a certificate shall be effective until the commission receives the notarized transfer form and the transfer fee, including any surcharge, is paid. The commission may establish by rule an amount of equitable rent per trap certificate that shall be recovered as partial compensation to the state for the enhanced access to its natural resources. Final approval of such a rule shall be by the Governor and Cabinet sitting as the Board of Trustees of the Internal Improvement Trust Fund. In determining whether to establish such a rent and, if so, the amount thereof, the commission shall consider the amount of revenues annually generated by certificate fees, transfer fees, surcharges, trap license fees, and sales taxes, the demonstrated fair market value of transferred certificates, and the continued economic viability of the

commercial lobster industry. The proceeds of equitable rent recovered shall be deposited in the Marine Resources Conservation Trust Fund and used by the commission for research, management, and protection of the spiny lobster fishery and habitat. A transfer fee may not be assessed or required when the transfer is within a family as a result of the death or disability of the certificate owner. A surcharge will not be assessed for any transfer within an individual's immediate family.

2. No person, firm, corporation, or other business entity may control, directly or indirectly, more than 1.5 percent of the total available certificates in any license year.

3. The commission shall maintain records of all certificates and their transfers and shall annually provide each licenseholder with a statement of certificates held.

4. The number of trap tags issued annually to each licenseholder shall not exceed the number of certificates held by the licenseholder at the time of issuance, and such tags and a statement of certificates held shall be issued simultaneously.

5. Beginning July 1, 2003, and applicable to the 2003-2004 lobster season and thereafter, it is unlawful for any person to lease lobster trap tags or certificates.

(b) Trap tags.--Each trap used to take or attempt to take spiny lobsters in state waters or adjacent federal waters shall, in addition to the crawfish trap number required by s. 370.14(2), have affixed thereto an annual trap tag issued by the commission. Each such tag shall be made of durable plastic or similar material and shall, based on the number of certificates held, have stamped thereon the owner's license number. To facilitate enforcement and recordkeeping, such tags shall be issued each year in a color different from that of each of the previous 3 years. The annual certificate fee shall be $1 per certificate. Replacement tags for lost or damaged tags may be obtained as provided by rule of the commission.

(c) Prohibitions; penalties.--

1. It is unlawful for a person to possess or use a spiny lobster trap in or on state waters or adjacent federal waters without having affixed thereto the trap tag required by this section. It is unlawful for a person to possess or use any other gear or device designed to attract and enclose or otherwise aid in the taking of spiny lobster by trapping that is not a trap as defined in rule 68B-24.006(2), Florida Administrative Code.

2. It is unlawful for a person to possess or use spiny lobster trap tags without having the necessary number of certificates on record as required by this section.

3. It is unlawful for any person to remove the contents of another harvester's trap without the express written consent of the trap owner available for immediate inspection. Such unauthorized removal constitutes theft. Any person convicted of theft from a trap shall, in addition to the penalties specified in ss. 370.021 and 370.14 and the provisions of this section, permanently lose all his or her saltwater fishing privileges, including his or her saltwater products license, crawfish endorsement, and all trap certificates allotted to him or her through this program. In such cases, trap certificates and endorsements are nontransferable. In addition, any person, firm, or corporation convicted of violating this paragraph shall also be assessed an administrative penalty of up to $5,000. Immediately upon receiving a citation for a violation involving theft from a trap and until adjudicated for such a violation or, if convicted of such a violation, the person, firm, or corporation committing the violation is prohibited from transferring any crawfish trap certificates and endorsements.

4. In addition to any other penalties provided in s. 370.021, a commercial harvester, as defined by rule 68B-24.002(1), Florida Administrative Code, who violates the provisions of this section, or the provisions relating to traps of chapter 68B-24, Florida Administrative Code, shall be punished as follows:

a. If the first violation is for violation of subparagraph 1. or subparagraph 2., the commission shall assess an additional civil penalty of up to $1,000 and the crawfish trap number issued pursuant to s. 370.14(2) or

(6) may be suspended for the remainder of the current license year. For all other first violations, the commission shall assess an additional civil penalty of up to $500.

b. For a second violation of subparagraph 1. or subparagraph 2. which occurs within 24 months of any previous such violation, the commission shall assess an additional civil penalty of up to $2,000 and the crawfish trap number issued pursuant to s. 370.14(2) or (6) may be suspended for the remainder of the current license year.

c. For a third or subsequent violation of subparagraph 1., subparagraph 2., or subparagraph 3. which occurs within 36 months of any previous two such violations, the commission shall assess an additional civil penalty of up to $5,000 and may suspend the crawfish trap number issued pursuant to s. 370.14(2) or (6) for a period of up to 24 months or may revoke the crawfish trap number and, if revoking the crawfish trap number, may also proceed against the licenseholder's saltwater products license in accordance with the provisions of s. 370.021(2)(i).

d. Any person assessed an additional civil penalty pursuant to this section shall within 30 calendar days after notification:

(I) Pay the civil penalty to the commission; or

(II) Request an administrative hearing pursuant to the provisions of s. 120.60.

e. The commission shall suspend the crawfish trap number issued pursuant to s. 370.14(2) or (6) for any person failing to comply with the provisions of sub-subparagraph d.

5.a. It is unlawful for any person to make, alter, forge, counterfeit, or reproduce a spiny lobster trap tag or certificate.

b. It is unlawful for any person to knowingly have in his or her possession a forged, counterfeit, or imitation spiny lobster trap tag or certificate.

c. It is unlawful for any person to barter, trade, sell, supply, agree to supply, aid in supplying, or give away a spiny lobster trap tag or certificate or to conspire to barter, trade, sell, supply, aid in supplying, or give away a spiny lobster trap tag or certificate unless such action is duly authorized by the commission as provided in this chapter or in the rules of the commission.

6.a. Any person who violates the provisions of subparagraph 5., or any person who engages in the commercial harvest, trapping, or possession of spiny lobster without a crawfish trap number as required by s. 370.14(2) or (6) or during any period while such crawfish trap number is under suspension or revocation, commits a felony of the third degree, punishable as provided in s. 775.082, s. 775.083, or s. 775.084.

b. In addition to any penalty imposed pursuant to sub-subparagraph a., the commission shall levy a fine of up to twice the amount of the appropriate surcharge to be paid on the fair market value of the transferred certificates, as provided in subparagraph (a)1., on any person who violates the provisions of sub-subparagraph 5.c.

7. Any certificates for which the annual certificate fee is not paid for a period of 3 years shall be considered abandoned and shall revert to the commission. During any period of trap reduction, any certificates reverting to the commission shall become permanently unavailable and be considered in that amount to be reduced during the next license-year period. Otherwise, any certificates that revert to the commission are to be reallotted in such manner as provided by the commission.

8. The proceeds of all civil penalties collected pursuant to subparagraph 4. and all fines collected pursuant to sub-subparagraph 6.b. shall be deposited into the Marine Resources Conservation Trust Fund.

9. All traps shall be removed from the water during any period of suspension or revocation.

(d) No vested rights.--The trap certificate program shall not create vested rights in licenseholders whatsoever and may be altered or terminated as necessary to protect the spiny lobster resource, the participants in the fishery, or the public interest.

(3) TRAP REDUCTION.--The objective of the overall trap certificate program is to reduce the number of traps used in the spiny lobster fishery to the lowest number that will maintain or increase overall catch levels, promote economic efficiency in the fishery, and conserve natural resources. Therefore, the 1Marine Fisheries Commission shall set an overall trap reduction goal based on maintaining or maximizing a sustained harvest from the spiny lobster fishery. To reach that goal, the 1Marine Fisheries Commission shall, by July 1, 1992, set an annual trap reduction schedule, not to exceed 10 percent per year, applicable to all certificateholders until the overall trap reduction goal is reached. All certificateholders shall have their certificate holdings reduced by the same percentage of certificates each year according to the trap reduction schedule. Until July 1, 1999, the Department of Environmental Protection shall issue the number of trap tags authorized by the 1Marine Fisheries Commission, as requested, and a revised statement of certificates held. Beginning July 1, 1999, the Fish and Wildlife Conservation Commission shall annually issue the number of trap tags authorized by the commission's schedule, as requested, and a revised statement of certificates held. Certificateholders may maintain or increase their total number of certificates held by purchasing available certificates from within the authorized total. The Fish and Wildlife Conservation Commission shall provide for an annual evaluation of the trap reduction process and shall suspend the annual percentage reductions for any period deemed necessary by the commission in order to assess the impact of the trap reduction schedule on the fishery. The Fish and Wildlife Conservation Commission may then, by rule, resume, terminate, or reverse the schedule as it deems necessary to protect the spiny lobster resource and the participants in the fishery.

(4) TRAP CERTIFICATE TECHNICAL ADVISORY AND APPEALS BOARD.--There is hereby established the Trap Certificate Technical Advisory and Appeals Board. Such board shall consider and advise the commission on disputes and other problems arising from the implementation of the spiny lobster trap certificate program. The board may also provide information to the commission on the operation of the trap certificate program.

(a) The board shall consist of the executive director of the commission or designee and nine other members appointed by the executive director, according to the following criteria:

1. All appointed members shall be certificateholders, but two shall be holders of fewer than 100 certificates, two shall be holders of at least 100 but no more than 750 certificates, three shall be holders of more than 750 but not more than 2,000 certificates, and two shall be holders of more than 2,000 certificates.

2. At least one member each shall come from Broward, Dade, and Palm Beach Counties; and five members shall come from the various regions of the Florida Keys.

3. At least one appointed member shall be a person of Hispanic origin capable of speaking English and Spanish.

(b) The term of each appointed member shall be for 4 years, and any vacancy shall be filled for the balance of the unexpired term with a person of the qualifications necessary to maintain the requirements of paragraph (a). There shall be no limitation on successive appointments to the board.

(c) The executive director of the commission or designee shall serve as a member and shall call the organizational meeting of the board. The board shall annually elect a chair and a vice chair. There shall be no limitation on successive terms that may be served by a chair or vice chair. The board shall meet at the call of its chair, at the request of a majority of its membership, at the request of the commission, or at such times as may be prescribed by its rules. A majority of the board shall constitute a quorum, and official

action of the board shall require a majority vote of the total membership of the board present at the meeting.

(d) The procedural rules adopted by the board shall conform to the requirements of chapter 120.

(e) Members of the board shall be reimbursed for per diem and travel expenses as provided in s. 112.061.

(f) Upon reaching a decision on any dispute or problem brought before it, including any decision involving the allotment of certificates under paragraph (g), the board shall submit such decision to the executive director of the commission for final approval. The executive director of the commission may alter or disapprove any decision of the board, with notice thereof given in writing to the board and to each party in the dispute explaining the reasons for the disapproval. The action of the executive director of the commission constitutes final agency action.

(g) In addition to those certificates allotted pursuant to the provisions of subparagraph (2)(a)1., up to 125,000 certificates may be allotted by the board to settle disputes or other problems arising from implementation of the trap certificate program during the 1992-1993 and 1993-1994 license years. Any certificates not allotted by March 31, 1994, shall become permanently unavailable and shall be considered as part of the 1994-1995 reduction schedule. All appeals for additional certificates or other disputes must be filed with the board before October 1, 1993.

(h) Any trap certificates issued by the Department of Environmental Protection and, effective July 1, 1999, the commission as a result of the appeals process must be added to the existing number of trap certificates for the purposes of determining the total number of certificates from which the subsequent season's trap reduction is calculated.

(i) On and after July 1, 1994, the board shall no longer consider and advise the Fish and Wildlife Conservation Commission on disputes and other problems arising from implementation of the trap certificate program nor allot any certificates with respect thereto.

(5) DISPOSITION OF FEES AND SURCHARGES.--Transfer fees and surcharges, annual trap certificate fees, and recreational tag fees collected pursuant to paragraphs (2)(a) and (b) shall be deposited in the Marine Resources Conservation Trust Fund and used for administration of the trap certificate program, research and monitoring of the spiny lobster fishery, and enforcement and public education activities in support of the purposes of this section and shall also be for the use of the Fish and Wildlife Conservation Commission in evaluating the impact of the trap reduction schedule on the spiny lobster fishery; however, at least 15 percent of the fees and surcharges collected shall be provided to the commission for such evaluation.

(6) RULEMAKING AUTHORITY.--The Fish and Wildlife Conservation Commission may adopt rules to implement the provisions of this section.

History.--s. 1, ch. 90-317; ss. 1, 3, 4, ch. 91-154; s. 5, ch. 91-429; s. 2, ch. 92-60; ss. 10, 12, ch. 93-223; s. 229, ch. 94-356; s. 994, ch. 95-148; s. 33, ch. 96-321; s. 98, ch. 96-410; s. 7, ch. 98-203; s. 156, ch. 99-13; s. 109, ch. 99-245; s. 41, ch. 2000-364.

1Note.--Transferred to the Fish and Wildlife Conservation Commission by s. 3, ch. 99-245.

370.13 Stone crab; regulation.--

(1) FEES AND EQUITABLE RENT.--

(a) Endorsement fee.--The fee for a stone crab endorsement for the taking of stone crabs, as required by rule of the Fish and Wildlife Conservation Commission, is $125, $25 of which must be used solely for trap retrieval under s. 370.143.

(b) Certificate fees.--

1. For each trap certificate issued by the commission under the requirements of the stone crab trap limitation program established by commission rule, there is an annual fee of $.50 per certificate. Replacement tags for lost or damaged tags cost $.50 each, except that tags lost in the event of a major natural disaster declared as an emergency disaster by the Governor shall be replaced for the cost of the tag as incurred by the commission.

2. Except for transfers to eligible crew members as determined according to criteria established by rule of the commission, the fee for transferring certificates is $2 per certificate transferred to be paid by the purchaser of the certificate or certificates. The transfer fee for eligible crew members is $1 per certificate. Payment must be made by money order or cashier's check, submitted with the certificate transfer form developed by the commission. In addition to the transfer fee, a surcharge of $2 per certificate transferred, or 25 percent of the actual value of the transferred certificate, whichever is greater, will be assessed the first time a certificate is transferred outside the original holder's immediate family. Transfer fees and surcharges only apply to the actual number of certificates received by the purchaser. A transfer of a certificate is not effective until the commission receives a notarized copy of the bill of sale as proof of the actual value of the transferred certificate or certificates, which must also be submitted with the transfer form and payment. A transfer fee will not be assessed or required when the transfer is within a family as a result of the death or disability of the certificate owner. A surcharge will not be assessed for any transfer within an individual's immediate family.

(c) Incidental take endorsement.--The cost of an incidental take endorsement, as established by commission rule, is $25.

(d) Equitable rent.--The commission may establish by rule an amount of equitable rent per trap certificate that may be recovered as partial compensation to the state for the enhanced access to its natural resources. In determining whether to establish such a rent and the amount thereof, the commission may consider the amount of revenues annually generated by endorsement fees, trap certificate fees, transfer fees, surcharges, replacement trap tag fees, trap retrieval fees, incidental take endorsement fees, and the continued economic viability of the commercial stone crab industry. Final approval of such a rule shall be by the Governor and Cabinet sitting as the Board of Trustees of the Internal Improvement Trust Fund.

(e) Disposition of fees, surcharges, civil penalties and fines, and equitable rent.--Endorsement fees, trap certificate fees, transfer fees, civil penalties and fines, surcharges, replacement trap tag fees, trap retrieval fees, incidental take endorsement fees, and equitable rent, if any, must be deposited in the Marine Resources Conservation Trust Fund. Not more than 50 percent of the revenues generated under this section may be used for operation and administration of the stone crab trap limitation program. The remaining revenues generated under this program are to be used for trap retrieval, management of the stone crab

fishery, public education activities, evaluation of the impact of trap reductions on the stone crab fishery, and enforcement activities in support of the stone crab trap limitation program.

(f) Program to be self-supporting.--The stone crab trap limitation program is intended to be a self-supporting program funded from proceeds generated under this section.

(g) No vested rights.--The stone crab trap limitation program does not create any vested rights for endorsement or certificateholders and may be altered or terminated by the commission as necessary to protect the stone crab resource, the participants in the fishery, or the public interest.

(2) PENALTIES.--For purposes of this subsection, conviction is any disposition other than acquittal or dismissal, regardless of whether the violation was adjudicated under any state or federal law.

(a) In addition to any other penalties provided in s. 370.021, for any person, firm, or corporation who violates rule 68B-13.010(2), Florida Administrative Code, or rule 68B-13.011(5), (6), (7), (8), or (11), Florida Administrative Code, the following administrative penalties apply.

1. For a first violation, the commission shall assess an administrative penalty of up to $1,000 and the stone crab endorsement under which the violation was committed may be suspended for the remainder of the current license year.

2. For a second violation that occurs within 24 months of any previous such violation, the commission shall assess an administrative penalty of up to $2,000 and the stone crab endorsement under which the violation was committed may be suspended for 12 calendar months.

3. For a third violation that occurs within 36 months of any previous two such violations, the commission shall assess an administrative penalty of up to $5,000 and the stone crab endorsement under which the violation was committed may be suspended for 24 calendar months.

4. A fourth violation that occurs within 48 months of any three previous such violations, shall result in permanent revocation of all of the violator's saltwater fishing privileges, including having the commission proceed against the endorsement holder's saltwater products license in accordance with s. 370.021.

Any person assessed an administrative penalty under this paragraph shall, within 30 calendar days after notification, pay the administrative penalty to the commission, or request an administrative hearing under ss. 120.569 and 120.57. The proceeds of all administrative penalties collected under this paragraph shall be deposited in the Marine Resources Conservation Trust Fund.

(b) It is unlawful for any person to remove the contents of another harvester's trap without the express written consent of the trap owner available for immediate inspection. Such unauthorized removal constitutes theft. Any person convicted of theft from a trap shall, in addition to the penalties specified in s. 370.021 and the provisions of this section, permanently lose all his or her saltwater fishing privileges, including saltwater products licenses, stone crab or incidental take endorsements, and all trap certificates allotted to him or her by the commission. In such cases, trap certificates and endorsements are nontransferable. In addition, any person, firm, or corporation convicted of violating the prohibitions referenced in this paragraph shall also be assessed an administrative penalty of up to $5,000. Immediately upon receiving a citation for a violation involving theft from a trap and until adjudicated for such a violation, or if convicted of such a violation, the violator is prohibited from transferring any stone crab or lobster certificates.

(c) Any person, firm, or corporation convicted of violating commission rules that prohibit any of the following, commits a felony of the third degree, punishable as provided in s. 775.082, s. 775.083, or s. 775.084.

1. The willful molestation of any stone crab trap, line, or buoy that is the property of any licenseholder, without the permission of that licenseholder.

2. The bartering, trading, or sale, or conspiring or aiding in such barter, trade, or sale, or supplying, agreeing to supply, aiding in supplying, or giving away stone crab trap tags or certificates unless the action is duly authorized by the commission as provided by commission rules.

3. The making, altering, forging, counterfeiting, or reproducing of stone crab trap tags.

4. Possession of forged, counterfeit, or imitation stone crab trap tags.

5. Engaging in the commercial harvest of stone crabs during the time either of the endorsements is under suspension or revocation.

In addition, any person, firm, or corporation convicted of violating this paragraph shall also be assessed an administrative penalty of up to $5,000, and the incidental take endorsement and/or the stone crab endorsement under which the violation was committed may be suspended for up to 24 calendar months. Immediately upon receiving a citation involving a violation of this paragraph and until adjudicated for such a violation, or if convicted of such a violation, the person, firm, or corporation committing the violation is prohibited from transferring any stone crab certificates or endorsements.

(d) For any person, firm, or corporation convicted of fraudulently reporting the actual value of transferred stone crab certificates, the commission may automatically suspend or permanently revoke the seller's or the purchaser's stone crab endorsements. If the endorsement is permanently revoked, the commission shall also permanently deactivate the endorsement holder's stone crab certificate accounts. Whether an endorsement is suspended or revoked, the commission may also levy a fine against the holder of the endorsement of up to twice the appropriate surcharge to be paid based on the fair market value of the transferred certificates.

(e) During any period of suspension or revocation of an endorsement holder's endorsement, he or she shall remove all traps subject to that endorsement from the water within 15 days after notice provided by the commission. Failure to do so will extend the period of suspension or revocation for an additional 6 calendar months.

(f) An endorsement will not be renewed until all fees and administrative penalties imposed under this section are paid.

(3) DEPREDATION PERMITS.--The Fish and Wildlife Conservation Commission shall issue a depredation permit upon request to any marine aquaculture producer, as defined in s. 370.26, engaged in the culture of shellfish, which shall entitle the aquaculture producer to possess and use up to 75 stone crab traps and up to 75 blue crab traps for the sole purpose of taking destructive or nuisance stone crabs or blue crabs within 1 mile of the producer's aquaculture shellfish beds. Stone crabs or blue crabs taken under this subsection may not be sold, bartered, exchanged, or offered for sale, barter, or exchange.

History.--s. 2, ch. 28145, 1953; s. 1, ch. 61-482; s. 1, ch. 63-3; s. 290, ch. 71-136; s. 1, ch. 71-335; s. 1, ch. 73-28; ss. 1, 2, ch. 74-141; s. 1, ch. 76-26; s. 1, ch. 77-142; s. 1, ch. 77-207; s. 1, ch. 80-299; s. 6, ch. 83-134; s. 2, ch. 84-121; ss. 11, 17, ch. 85-234; s. 5, ch. 86-219; ss. 1, 9, 19, ch. 86-240; ss. 4, 12, ch. 89-98; s. 227, ch. 94-356; s. 992, ch. 95-148; s. 36, ch. 95-196; s. 10, ch. 95-414; s. 9, ch. 98-203; s. 18, ch. 98-227; s. 106, ch. 99-245; s. 3, ch. 2000-153; ss. 11, 38, ch. 2000-364; s. 2, ch. 2001-272.

Appendix 4: Speaker Presentations

(Included on CD-ROM, available upon request)