

DISCUSSION PAPER

A PROPOSAL TO RESTRICT FISHING ON THE ABROLHOS ISLANDS SCALLOP STOCK AND ITS IMPLICATIONS FOR OTHER SMALL WESTERN AUSTRALIAN FISHERIES.

NOTICE OF MEETING

An open meeting to discuss the Abrolhos Islands Scallop Fishery and its implications for other small Western Australian fisheries will be held in Geraldton at 2.30pm Wednesday, February 6, 1985 at the Geraldton Entertainment Centre, Urch Street, Geraldton, W.A. All members of the fishing industry are welcome. In particular, Abrolhos Island scallop fishermen and those who have an interest in the implications outlined in this Discussion Paper are urged to attend.



DEPARTMENT OF FISHERIES AND WILDLIFE
PERTH WESTERN AUSTRALIA

OCTOBER 1984

A PROPOSAL TO RESTRICT FISHING ON THE ABROLHOS ISLANDS
SCALLOP STOCK AND ITS IMPLICATIONS FOR OTHER SMALL
WESTERN AUSTRALIAN FISHERIES

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Saucer scallop stocks at the Abrolhos Islands have proven to be a commercially viable resource in recent years. In 1980 two boats caught approximately 12 tonnes (live weight). Since then both catches and boat numbers have continued to increase each year, with a catch of approximately 210 tonnes in 1984 from some 40 boats. Over the longer term, however, catches have been more variable. A fishery existed in 1967 - 68 during which approximately 30 tonnes was taken, while sporadic landings were made between 1969 and 1977. The increased catches from the Abrolhos Islands since 1980 parallel improvements in catches in Shark Bay and off Rottnest and appear to reflect above average levels of recruitment.

Management measures currently in force for scallop fishing at the Abrolhos Islands relate to the duration of the season and the permissible net and mesh size. The rapid escalation in boat numbers has, however, led to concern among existing operators and a request from these fishermen to limit further entry of vessels into the fishery. This discussion paper on the subject of limited entry has been written to assist in the industry consideration of the Abrolhos Islands Scallop Fishery. However it is most important that all sections of industry consider the matters raised because ^{the} outcome ^{of} the Abrolhos Islands scallop discussions will have implications for fisheries in other areas, e.g. snapper in Shark Bay, mussels in Cockburn Sound, southern rock lobster and shark.

On September 8, 1984, the Minister for Fisheries and Wildlife, Dave Evans, issued a press release setting out that scallop fishermen operating at the Abrolhos Islands had requested action to limit the further entry of vessels into the fishery. The text of the press release is reproduced as an appendix to this paper. The Minister concluded that "whilst the Government considered this request from scallop fishermen for restrictions on entry, it would not be prudent for any additional fishermen to spend money on gearing up for that fishery for the 1985 season."

Because the issues raised will need full discussion throughout industry, a decision may not be made before the commencement of the 1985 Abrolhos scallop season on March 15. Accordingly, the Minister has directed that as an interim measure, only those vessels with a history of fishing for scallops at the Abrolhos Islands since 1980 will be permitted to take scallops in that area in 1985. Consequently, fishermen wishing to take scallops at the Abrolhos Islands in 1985 will need to apply to the Department for an endorsement on the licence of the vessel involved.

Objectives and Criteria for Limited Entry Management

Firstly it is important to identify the basic objectives of limited entry fishery management and the criteria to be considered when examining the appropriateness of such a management strategy.

The prime objectives of a limited entry policy are firstly to maintain the resource and secondly to optimise the economic return from the resource. Economic considerations are therefore taken into account, but the economic viability for individual operators is not guaranteed.

Noting the past usage of limited entry strategies in fisheries management, the principal criteria which have emerged are:-

- (a) stocks must occur consistently from year to year, i.e. recruitment is reliable enough to allow a continuous fishery;
- (b) the average catch must be large enough to justify the management costs involved.

At this point it is perhaps of value to quote from a paper by Dr. Donald Hancock and myself on the limited entry prawn fisheries of Western Australia: "Nearly twenty years of experience has now been gained in relation to the administration of prawn limited entry fisheries and its relative success has resulted in other fisheries being considered for limited entry. In retrospect, the developing Shark Bay Prawn Fishery was one which had many of the attributes required for the successful administration of a limited entry philosophy."

"Some of the major attributes were:-

- (a) The whole of the life cycle, or at least that segment likely to be exploited, of the prawn species involved in the fishery was encompassed within the limited entry boundary.
- (b) The fleet had not developed to the extent that there was already more catching capacity than required to successfully exploit the stocks.
- (c) The stock had the potential to provide a resource which could be exploited by the authorized fleet for at least the major portion of the year.
- (d) With the exception of the seasonal fishery on snapper, which was then being exploited only by limited entry rock lobster fishermen from farther south, there were no fisheries in the area to which the prawn trawlers might be attracted as a sideline activity and thus be a cause for concern by other fishermen."

Experience has shown that the administration and usefulness of limited entry management is made much more difficult if any one of these four attributes do not apply.

Practical Implications for Limited Entry Management

Even given favourable circumstances, the implementation of past limited entry management regimes has generated both positive and negative consequences for the industry. Some of the advantages and disadvantages of the existing limited entry management system already observed in Western Australian fisheries are listed below.

a) General Advantages of Limited Entry:-

- i) competition from additional entrants is avoided;
- ii) a finite group of fishermen exploiting the particular fish stock(s) is identified thus assisting in industry/government discussions;

- iii) fishermen may have an added incentive to maintain the fishery over time;
- iv) provides a potential for the orderly utilization of fishing industry facilities;
- v) the overtures by those who believe they will gain entry will have been responded to by Government;

b) Disadvantages of Limited Entry:-

- i) Limitation on entry aids in the control but does not prevent the growth in fishing pressure on the species being fished.

For example in the Western Rock Lobster Fishery there has been continued growth in fishing pressure and thus exploitation rate despite the introduction of limited entry fishing in 1963. Scientists estimate that about 80% of all legal size rock lobsters are taken during a season.

A reason for this increased effort is that the rock lobster is a valuable commodity and good profits have been made over a period of time. This profitability is manifest in a "good will" value of the fishing unit (or pots) when the fishing unit, and its associated benefit of a rock lobster licence, is sold. The new owner has to catch sufficient rock lobsters to show a return on the capital invested in the industry which leads to an increased fishing pressure.

Since 1963, the increased fishing pressure by the rock lobster fleet has been generated by an array of methods including:-

- better use of available time;
- better vessels, enabling the operator to shift gear quicker and fish on days previously considered too rough;

- better fish finding devices; and
- more efficient rock lobster pots.

ii) Limited entry introduced at an appropriate stage of development generates profitability, but usually leads to external pressure to add additional vessels because of this observed profitability.

For example when the prawn fisheries commenced in Shark Bay and Exmouth Gulf in the 1960's the numbers approved were less than they are today. Because the fisheries were profitable there were consistent overtures from fishermen who did not have licences to gain entry on the basis that the fishery could cope with additional vessels. Their overtures were judged to be valid in relation to the fishing pressure generated by the type of vessels in the fleet at that time and additional boats were added to the approved fleet.

iii) Limitation on entry to a fishery tends to focus the fleet onto that fishery.

For a number of years scallops have been caught in Shark Bay by some of the prawn trawlers and a number of other trawlers taking scallops as part of their fishing strategy. During 1982 and 1983 additional trawlers were attracted to Shark Bay to take scallops and a decision was taken to restrict entry. The vessels holding the scallop authorizations now generate a consistent, and perhaps heavy, fishing pressure on the stocks and are often referred to as the scallop fleet. The fleet has focused on scallops as the resource to provide its basic, and in some cases total, return from the fishing industry.

iv) Limitation on entry divides the fishing industry.

Those who are successful in gaining access to a resource are pleased with the result, whilst those who desire to gain access but are unsuccessful have a markedly different point of view. Even after a fishery has been the subject of limited entry for many years, such as the Western Rock Lobster Fishery, there is a continuing debate within industry about the exploitation by rock lobster fishermen of other species. This has been evident in relation to the capture of snapper in the Shark Bay area.

v) Limitation on entry increases the Government's cost of administration and, ultimately, inspection.

If initial limitation on entry leads to a fishery becoming a "limited entry fishery" there is a significant staff involvement in the administration of licencing, boat replacement and transfers. This is especially so if the rules include a restriction on replacement boat size.

This matter of additional cost becomes more important as the number of restricted entry fisheries increases. It is no longer possible to consider limitation of entry and its associated administrative and inspectional implications without at the same time considering the additional staff and equipment requirements.

Consequences of Introducing Limited Entry to the Abrolhos Islands Scallop Fishery

Limitation on entry to the Abrolhos Islands Scallop Fishery may have the following impact on the management of Western Australian fisheries generally:-

- a) Affirmative action will probably result in there being increasing pressure from other small sector fisheries for similar restrictions. Such other fisheries include Shark Bay snapper, Cockburn Sound mussels, southern rock lobster and shark.

- b) Freedom of movement by fishermen would become further reduced and may eventually result in fishermen being dependent on a single species for their livelihood;
- c) A clearer nexus will be established between the cost of management and the fees charged in relation to specific fisheries.

A limited entry strategy for the Abrolhos Islands Scallop Fishery may also have the following specific consequences:

- a) The State will be dependent upon the Commonwealth Government to use its powers under the Commonwealth Fisheries Act to enact parallel limited entry regulations if the area extends into Commonwealth waters. The Commonwealth is unlikely to favour use of its Act to limit entry in relation to "State-based" fisheries, particularly whilst the Commonwealth Government is considering its attitude to the Offshore Administrative Arrangements developed but not yet implemented. As a consequence there could be different strategies operating in State and Commonwealth waters.
- b) The establishment of an Abrolhos Islands Limited Entry Scallop Fishery may have the impact of generating capital investment and fishing pressure simply by changing the perspective of the operators in the fishery and by giving investors unreal expectations about the value and long term persistence of the stock being exploited.
- c) All fishermen with authorizations for an Abrolhos Islands Limited Entry Fishery are likely to continue to exploit that stock even in years of low stock abundance.

Decision-making process for Limited Entry

Before limitation on entry to a fishery can be undertaken a number of steps are required:

- a) The issue of a bench mark date which excludes later entrants and which can be legally defended;

- (b) The definition of the area to be considered;
- (c) The establishment of entry criteria which are sufficiently clear for both Industry and the Department to have a common understanding and for that understanding to be shared by any independent Court of appeal;
- (d) The establishment of regulations relating to:-
 - (i) the replacement of vessels,
 - (ii) the sale of vessels,
 - (iii) gear size.
- (e) The mechanism for inviting and considering applications;
- (f) The mechanism for considering appeals from those who are aggrieved by a decision taken by the Minister.

Should limitation on entry to the Abrolhos Islands Scallop Fishery be adopted, the following may be appropriate in relation to the points raised above:-

- (a) Bench mark date. The Minister has issued a press release on 8 September, 1984 a copy of which is appended to this paper.
- (b) Fishing area. The restricted scallop fishing area could be either the State coastal waters of the Abrolhos Islands, or the definition of the Abrolhos Islands area for rock lobster purposes, if the Commonwealth Act is also being used.
- (c) Criteria for entry. There are a number of different criteria for boat authorisation which could be adopted. For example, the simplest criteria would be to allow continued entry for those boats which had been operating in the Abrolhos Islands Scallop Fishery prior to the date of the Ministerial press release (8th September, 1984). Another criterion could be one which includes boats with a prior history of fishing but do not hold a licence for another limited entry ~~in a~~ of

restricted entry fishery. This criterion could be applied to the circumstances as they existed on 8 September, 1984. However, it should be recognised that the development of the Abrolhos Islands Scallop Fishery has been largely by vessels from other limited entry trawl fisheries and has provided an alternative fishing area when those fisheries have suffered poor catches. Under these circumstances it could be argued that the criteria should be such that it includes only those boats which have an existing trawling concession.

It should be noted that all of the above criteria would exclude those who have either planned or committed expenditure to fish for scallops at the Abrolhos Islands but have not done so. Similarly, the provision of processing facilities would not be recognised in terms of gaining vessel entry to the scallop fishery.

If limited entry were extended to Commonwealth waters, the criteria would have to follow those generally adopted by the Commonwealth in considering such measures, i.e. history of performance or demonstration of a substantial financial commitment prior to the bench mark date.

- (d) Vessel Regulations. The Abrolhos Islands Scallop Fishery is very much an unknown resource in terms of persistence from year to year, and the levels of recruitment of the past few years may not persist in future years. Many of the vessels operating on scallops at the Abrolhos Islands have been used in other fisheries prior to the capture of Abrolhos Islands scallops and this will almost certainly be necessary in the future.

(i) Replacement of Vessels

It would appear reasonable to not allow the replacement of vessels during the next two years and that the matter of a replacement policy be held over for consideration at the same time as the Shark Bay Scallop Fishery review in 1986/87.

(ii) Sale of Vessels

It would appear reasonable to not allow the sale of a vessel with its Abrolhos Island Scallop Fishery authorization at least during the next two years and perhaps beyond.

(iii) Gear Size

It would appear appropriate that net size in terms of total head rope length be held at 14 fathoms at least during the next two years and that the mesh specification of a scallop net be maintained.

(e) Mechanism for inviting and considering applications.

It would appear reasonable that a standard application form should be used, including a requirement for certification of fishing history by the applicant.

(f) Mechanism for considering appeals.

It is anticipated that once a set of criteria are adopted, there would be a simple but clear distinction between successful and unsuccessful applicants. However, because any criteria have the potential for dividing industry, it would be necessary to have an appeal mechanism. This could take the same form as that set up for the Shark Bay Scallop Fishery provided industry is in general agreement.

SUMMARY

I hope that the foregoing comments have been useful in drawing to the attention of industry some of the philosophical and technical matters which impinge upon a decision whether or not to proceed to introduce a system of restricted entry to the Abrolhos Islands Scallop Fishery, and its implications for other similar small fisheries.

It is important that industry views be made known to me so that they can be passed to the Minister for Fisheries and Wildlife to assist him in making a decision on the request of the Abrolhos scallop fishermen to limit further entry of vessels into the Abrolhos Islands Scallop Fishery.

Accordingly, I invite the following actions by members of the fishing industry:-

- (a) Consider the document generally;
- (b) Consider the entry criteria options and rules for limitation if Government were to adopt the proposal that entry to the scallop resource at the Abrolhos Islands be limited;
- (c) Provide me with a written response to this document by 31st December 1984;
- (d) Attend a meeting under my chairmanship in Geraldton at 2:30 p.m. on Wednesday, 6th February 1985, at the Geraldton Entertainment Centre, Urch Street, Geraldton to discuss the proposal by the Abrolhos Islands Scallop fishermen that entry to the scallop resource at the Abrolhos Islands be limited. All members of the fishing industry are welcome. In particular Abrolhos Islands scallop fishermen and those involved in other similar type fisheries are urged to attend.

B. K. Bowen
DIRECTOR

APPENDIX 1

MINISTERIAL PRESS RELEASE

P84/28

8 September 1984

SCALLOP FISHING AT THE ABROLHOS

Scallop fishermen operating at the Abrolhos Islands, at a recent meeting in Geraldton have appealed through the Director of Fisheries to the Minister for Fisheries and Wildlife, Dave Evans, to limit the further entry of vessels in the fishery.

Mr. Evans said that scallop fishermen were concerned at the high levels of exploitation on limited scallop stocks. Increased entry of boats would add to competition between fishermen and the prospect for increased growth overfishing, i.e. the harvesting of small scallops.

Fishermen were also concerned at the prospect of overfishing the scallop breeding stock even though scallops exhibited high fecundity.

The Minister said that in June last year he had announced that the Abrolhos Islands would remain an open entry fishery. However, because of the interest shown by the fishing industry during 1984 there may now be a case for restricting entry.

Mr. Evans said that he had requested the Director of Fisheries to prepare a brief discussion document for distribution to industry. A further meeting will be held in Geraldton between the Director and members of the Fishing Industry. The Minister said that he would also be seeking the advice of the Australian Fishing Industry Council (W.A. Branch).

In the interim, Mr. Evans said, whilst the Government considered this request from scallop fishermen for restrictions on entry, it would not be prudent for any additional fishermen to spend money on gearing up for that fishery for the 1985 season.