

JUNE 86

No 19-85/67.....

FIRC 34

- NEW PROPOSAL
- CONTINUING PROJECT
- FINAL REPORT
- PROGRESS REPORT

FISHING INDUSTRY RESEARCH TRUST ACCOUNT

TITLE OF PROPOSAL/PROJECT: Purse seining for skipjack tuna and jack mackerel

ORGANISATION: _____

PERSON(S) RESPONSIBLE: Mr K. Warren

FUNDS SOUGHT / GRANTED		
YEAR	SOUGHT	GRANTED
<u>1985/86</u>	_____	<u>95,000</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____

RELATED APPLICATIONS: NIL

RECEIVED 11/6/1986 DISTRIBUTED/...../19...

.....
Secretary
Fishing Industry Research Committee

14 Chandos Street
EDEN NSW 2551

The Secretary
Fishing Industry Research Committee
C/- Australian Fishery Service
Department of Primary Industry
CANBERRA ACT 2600

Dear Sir

FIRTA PROJECT NO 85:67

Enclosed herewith my report in relation to the above project.

As you are aware, the principal vessel, the "Moriah" was lost on the 5 February 1986 and completion of the project as forecast in my application was not possible. However, taking into consideration sightings made the fish actually caught and those lost, I remain confident about the future of a purse seine fishery for several small vessels on the species involved.

Yours faithfully



K.W. Warren

FIRTA PROJECT 85:67

FINAL REPORT ON OPERATIONS

INTRODUCTION

1. Objectives:

- (1) Development of a purse seine fishery based on the Australian skipjack tuna resource; primarily to supply product to the cannery at Eden.
- (2) Development of a complementary purse seine fishery based on the jack mackerel resource off S.E. Australia, especially off N.S.W.

2. Vessel(s)

- | | | | |
|-----|--------------|---|---------------|
| (1) | Name | : | "Moriah" |
| | Length | : | 63 ft |
| | Beam | : | 18 ft |
| | Draught | : | 7'6" |
| | Construction | : | Wood |
| | Displacement | : | 37 tons (NRT) |
| | Main Engine | : | V12. 9.M |
| (2) | Name | : | "Dell R" |
| | Length | : | 57 ft |
| | Beam | : | 16 ft |
| | Draught | : | 5 ft |
| | Construction | : | Wood |
| | Main Engine | : | 6.9.M |

3. Gear

Using the funds granted from the FIRTA the vessel "Moriah", previously modified at the owner's expense for purse seining was fitted with:

purse seine net
Marco puretic power block
purse seine winch with attached hydraulics
gear incidental to use of the above.

In addition money saved in the purchase of the net, power block, and winch was, with the permission of the Committee, spent on purchase and installation of a sea crane. Installation of this crane markedly increased stability by lowering the vessel's centre of gravity. It also greatly facilitated pursing operations.

4. Operations

a. Skipjack tuna:

First sightings of skipjack tuna were made by the applicant company's spotting aircraft in December 1985 when two schools each of some thirty tonnes were sighted in forty fathoms about 4 miles East of Twofold Bay (Eden).

Catches

18 December 1985 The "Moriah" set on one of the above schools and landed five tonnes of fish.

19 December 1985, six schools ranging from five to fifteen tons each were sighted in the same position. The "Moriah" landed fourteen tonnes from one of those schools.

NB: The sets made on on 18 and 19 of December were made without the assistance of the bait boat or any chumming up.

Following these catches, bad fishing weather, strong winds and high seas prevented further fishing for several weeks. In fact the weather was so bad during this time that the large bluefin tuna fishing vessels from South Australia were unable to operate. No southern bluefin was taken off N.S.W. during that time.

Also during this period no sightings of skipjack were made either by the large bluefin vessels or by the applicant company's spotter aircraft.

5 February 1986, twelve patches of skipjack tuna were sighted ranging in size from six to thirty tonnes in forty to forty-five fathoms of water about eight miles east of Twofold Bay.

The "Marine Countess" whose co-operation in the project had been arranged between her owners and the applicant, set on one patch of twenty five tonnes but failed to take any of the fish. The "Moriah" set on a thirty tonne patch some ten miles south of "Marine Countess" but in the process of pursuing up the purse line (new wire) fouled the propeller. In endeavouring to clear this the propeller shaft and stern gear was so damaged that the "Moriah" filled up and sunk.

The resultant loss of the vessel and all her equipment ended any prospect of the project being carried out to finality as originally proposed. Also lost was the vessel's log book in which was recorded all information relating to fish, water temperatures, fishing practice and such matters.

The power skiff was saved and was used to save the crew which was taken back to Eden by the pole boat "Naomi B".

Following this the project continued with the applicant's vessel "Dell R" working with the "Marine Countess". Under this arrangement the following sightings and catches resulted:

11 February 1986, six schools were sighted ranging in size from thirty to fifty tonnes each in some forty to fifty fathoms of water. Sightings were made between Merimbula and Green Cape. From these patches, the "Dell R" poled two tonnes while the "Marine Countess" set on one school and landed some fifteen tonnes.

14 February 1986, working in the same area, the 'Dell R' in conjunction with the "Marine Countess", set on a thirty tonne patch. The "Marine Countess" landed five tonnes, most of the fish escaping through a large hole which was burst in the net. The "Dell R" poled two tonnes.

Following this, the "Marine Countess" was recalled to Tasmania by her owners to operate in the mackerel fishery off Triabunna. In the result the project was left without a purse seine vessel.

In all, forty three tonnes of skipjack had been landed by then. However, taking into account the schools lost by the "Marine Countess" and also subsequent sightings of skipjack, it is the view of the applicant company that the applicant's original estimate of four hundred tonnes of tuna would easily have been taken by the "Moriah" had the vessel not been lost.

Subsequent to 14 February 1986, schools of skipjack tuna were sighted as follows:

20 February 1986, between Tathra and Golden Head in forty fathoms, some twelve schools ranging in size from five to fifteen tonnes were sighted. On this day the "Dell R" poled one tonne and "Naomi B" in the same area poled seven tons. The water temperature was recorded at sixty nine degrees Fahrenheit.

24 February 1986, in forty five fathoms of water off Green Cape, three patches were sighted each of approximately twenty tonnes. The "Dell R" poled two tonnes of skipjack.

26 February 1986, eight patches of skipjack were sighted off North Head, Eden the patches ranging in size from five to thirty tonnes. The "Dell R" poled one tonne, and the "Naomi B" four tonnes.

9 March 1986, the applicant company's spotting aircraft sighted several patches of skipjack one mile off Twofold Bay, the patches ranging in size from five to fifteen tonnes, however, no fishing took place owing to high winds and rough seas.

Following this the "Naomi B", which had been sharing spotting costs, left fish for yellow-fin tuna. In the result it was unprofitable for the applicant company to operate the aircraft spotting for the "Dell R" alone which, for the purposes of the project, had been fitted out as a bait and supply vessel for the "Moriah" and not specifically as a fishing vessel.

During the course of the project two long range spotting flights were made by the applicant company's spotting aircraft, these flights extended as far north as Port Macquarie.

On the first flight on 15 December 1985, no fish were sighted primarily, it is believed, because of extremely adverse weather conditions and the effect of on-shore flooding. The second flight was undertaken on 20 May, over the same area, no fish were sighted in the Eden area, but two large patches of some forty tonnes each were sighted eight miles to the east of Port Stephens.

All sightings during the term of the project were, because of the size of the plane, made within ten miles of the shore. The applicant company believes that using larger aircraft and vessels the fishery could be extended much further off-shore

Summary: The project was not as successful as it had been anticipated owing to the loss of the "Moriah". However, it is the intention of the applicant company to continue, using its own resources, to take skipjack next season. At that time it is intended to use the "Dell R" fitted with a thirty tonne purse seine net, although a replacement purse seine vessel for the "Moriah" is being sought and if one is obtained and fitted out in time the fishery will be extended accordingly. The applicant company will be pleased to make information obtained available to the Australian Fishery Service and N.S.W. State Fisheries

b. Jack mackerel:

Co-existent with the skipjack fishery jack mackerel was taken by the project vessels as follows:

23 December 1985, eight tonnes of jack mackerel was taken by the vessels "Dell R" and "Moriah" working together.

24 December 1985, twenty tonnes of jack mackerel taken by the project vessels in Merimbula Bay.

27 December 1985, twelve tonnes of jack mackerel taken by these vessels in Merimbula Bay.

These catches were taken at the end of the jack mackerel season which had commenced during the previous winter. A considerable quantity of jack mackerel had been taken by the project vessels prior to commencement of the project.

Loss of the "Moriah" meant further fishing on these fish was confined to catches made by the "Dell R" commencing in May 1986 as follows:

5 May 1986, in Disaster Bay sixty three tonnes were taken. Assistance in the carrying of these was given by the fishing vessels "Robin 2" and "Catriona B".

9 May 1986, 9 tonnes caught in Disaster Bay by the "Dell R".

1 June 1986, forty five tonnes by the "Dell R" in Twofold Bay.

SUMMARY

Once again catches were well short of those projected in the application, owing to the loss of the "Moriah". In all, 157 tonnes were landed. The quantities landed by "Dell R" during May/June 1986, in conjunction with sightings, confirm that considerable quantities of this species can be taken complementary to the skipjack fishing.

Marketing

No problem was experienced in selling all the fish caught during the course of the project. H.J. Heinz Cannery at Eden, Uncle Ben's at Wodonga and co-operatives North of Eden readily bought all fish offered. An important result of the project has been the development by the applicant company of further markets for its catches.

Expenditure of Grant Money

Money from the FIRTA grant was expended as follows and supporting bank statements and invoices can be supplied if required:

Nets Landed Eden	33,000.00
Purse Seine Winch to buy (Melbourne)	6,210.00
Power Skiff 16' Aluminium	2,600.00
Purse Rings (Eden)	1,824.00
Fish Pump 10" (Lakes Entrance)	3,500.00
Hydraulics (Sydney)	7,661.35
Power Block (Marco 31) (Lakes Entrance)	4,600.00
Hiah Sea Crane (London, Eden, Melbourne)	16,000.00
Purse Wire (Sydney)	2,800.00
Twofolds Bay Marina (Eden)	
Convert Purse Winch	
Fit Hydraulics and Controls	22,139.00
Broadwater Engineering (Eden)	
Fit main Hydraulics to Main Engine	3,208.38
Vaxer Wood Engineering (Eden)	
Supply steel and manufacture net-bin and supply steel and fit Sea Crane to deck	5,062.54
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	\$108,605.27
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Attached are several photographs which illustrate the vessels' fitting out and operations, and also fish occurrence.

K. Warren

K.W. WARREN
PROJECT SUPERVISOR