



PO Box 873
Nelson
2 March 2014

Shellfish Submissions
Fisheries Management – Inshore Fisheries
Ministry of Primary Industries
PO Box 2526
Wellington 6140

Dear Sir/Madam,

Review of Southern Scallop Sustainability measures

The Cissy Bay Community Association (CBCA) is a community based organisation which serves the Cissy Bay/Te Towaka area at the head of Hallam Cove in the outer Marlborough Sounds.

The Association manages a water supply for the residents, undertakes a variety of project to improve local facilities and acts as a voice for the community on issues that directly affect them.

Our community has 32 properties with ten permanently occupied and the rest holiday homes. Virtually all of the residents in the area are keen recreational fishers who place great importance on seeing that marine resources in the area are managed in a sustainable way to ensure that enjoying of fishing will continue for future generations.

In this regard, many residents become very upset about the impact of commercial fishing in the Sounds and the clear evidence of the influence that commercial fishing industry lobbyists have on government policy.

One example of this inconsistency is the policy that forces recreational fishers to only take catch in a 30-35cm slot range on the basis of a debatable scientific justification, while still permitting commercial fishers to take fish greater than 35cm. The result has been a significant increase in the commercial blue cod catch taken in the Sounds at a time when the focus is on trying to conserve the fisheries.

The extension of submissions on the scallop fisheries appears to be a clear response to pressure from commercial interests. While the initial reduction proposed for the commercial catch from 747 tonnes to 46 tonnes is significant, the actual tonnage taken is significantly less than the early quota of 747 tonnes. As the attached data from MPI's own website indicates, the commercial take over the past few years has been as follows taken from the graphs provided (approx figures)

2007 80 tonnes
2008 150 tonnes
2009 120 tonnes
2010 140 tonnes
2011 100 tonnes

Cissy Bay Community Association PO Box 873 Nelson

2012 70 tonnes
2013 50 tonnes

This is vastly less than the 416 tonnes now being proposed after commercial lobbying

Reducing the commercial quota to 416 tonnes will not reduce pressure on the scallop fisheries and might even increase pressure. If MPI wishes to even simply maintain current catch levels the quota on these figures could be reduced to 100 tonnes at most.

There appears to be a pattern of scallop beds being developed to a sustainable level then being depleted through overfishing as these declining figures above suggest

This has already happened in the Golden Bay Tasman Bay region and there is a risk that this will happen to the small and localised beds of scallops in the outer Pelorous Sounds.

In particular there are small beds in Ketu Bay and nearby locations in Pelorous Sound close to our location that have been subject to heavy fishing as a response to contracted scallop fishers having to meet their quotas.

There is a concern by local recreational fishers that this bed will be wiped out in the same way that has happened in Golden Bay/Tasman Bay.

At the same time, local people are becoming aware of rumour that the individual daily take for recreational purposes will be significantly reduced next year even though the recreational quota overall remains unchanged.

There is some scepticism by recreational fishers that the stated recreational quota (40 tonnes) is actually taken given the depletion of the beds in Golden Bay and Tasman Bay. A more likely figure is 10 tonnes. However if it is necessary to put in place steps to reduce the overall recreational take, it would make far more sense to reduce the catch season rather than reduce the daily take.

At present the season extends from mid July to mid February – seven months. However the shellfish early in the season (July) are often very small and it would be more logical to return the season opening date to a later date (eg mid August) which was previously the case and when the blue cod catching season has closed.

Given the fragility of these resources, we support a policy of reducing the total allowable catch to help sustain the fishery. This should apply to both commercial and recreational fishers.

Furthermore we would support closing small local beds within the Marlborough Sounds to allow these to only be available to recreational fishers under quotas that will ensure the resource can be sustained

Yours sincerely

Richard Kearsley (Chairperson)
John Cretney (Secretary Treasurer)

For Cissy Bay Community Association

Cissy Bay Community Association
PO Box 873 Nelson

Scallop Southern scallop fishery (SCA7)

Maori name
Multiple names
Scientific name
Pecten novaezelandiae



Overview
Catch
Value
Sustainability

2009 2010 2011 2012 2013 2014
for the 12 month period to 31/03/2014

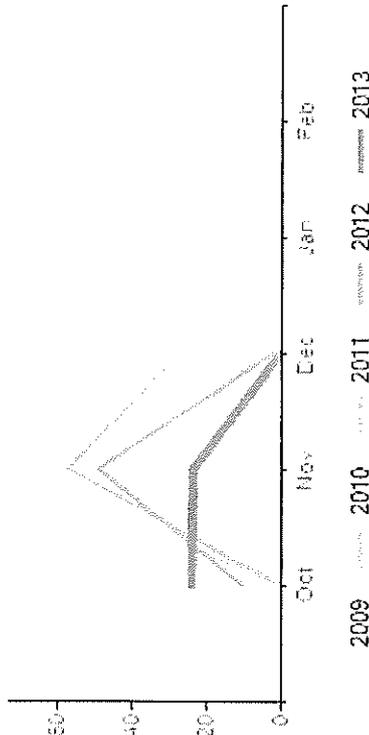
Commercial use		Customary use	
Reported catch MHR (kg)	42,950	Customary allowance (kg)	40,000
Commercial allowance TACC (kg)	747,000	Customary take (kg)	Unknown
Estimated domestic consumption (kg)	Unknown	Recreational use	
Reported catch by month* - Trend		Recreational allowance (kg)	40,000
		Recreational take (kg)	Unknown
		Other sources of mortality	
		Other mortality allowance (kg)	
		Illegal take (kg)	Unknown
		Commercial Catch vs. Allowance* - Trend	

Chairman: Dick Kearsley Ph 035765527 email hc@vodafone.net.nz
Secretary/Treasurer John Cretney Ph 035473326 email johncretney@gmail.com

**Cissy Bay Community Association
PO Box 873 Nelson**

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	TACC
2009	0	0	0	0	0	0	0	0	0	0	0	0	0
2010	0	0	0	0	0	0	0	0	0	0	0	0	0
2011	0	0	0	0	0	0	0	0	0	0	0	0	0
2012	0	0	0	0	0	0	0	0	0	0	0	0	0
2013	0	0	0	0	0	0	0	0	0	0	0	0	0

Reported catch by month* - Seasonality



From: Richard Cox !
Sent: Thursday, 27 February 2014 12:52 p.m.
To: FMSubmissions
Subject: Submission on SCA7 commercial scallop management

In brief, I submit that all efforts should be directed to making bottom contact dredging a disallowed fishing method for commercial scallop harvesting. Other methods of commercial take should be allowed, given that damage to the seabed be reduced to a minimum level or zero impact.

Economic determinants will allow (or not) any scallop fishery or cultivation methods outside of bottom contact dredging. Aquaculture opportunities should be maximized. Should the wild fisheries rebuild there is no reason to allow bottom dredging or the same cycle of habitat destruction will reoccur. This lesson has been learned in a several overseas scallop fisheries and need not be relearned here. Research should continue in scallop management and the impact of fishery methods as well as pollutants and sedimentation.

Yours,

Richard Cox

From: richard.craig
Sent: Thursday, 6 March 2014 9:30 p.m.
To: FMSubmissions
Subject: SCA 7 Submission Kaikoura Boating Club

Kaikoura Boating Club resolved at its monthly committee meeting on the evening of Tuesday 3rd March to submit to SCA 7

We resolved to support the NZSFC submission, our club is not affiliated to NZSFC.

A number of our members fish for scallops in the Marlborough Sounds, just as Marlborough fishers visit Kaikoura. We have great concerns about the sorry state of SCA 7 which has led to the recent commercial 'over fishing' of Marlborough Sounds.

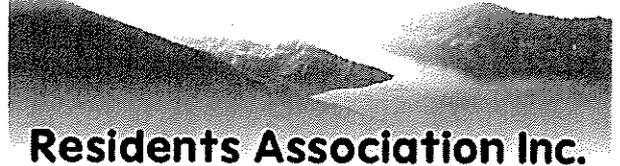
We fear they'll keep going at those scallops until that area is stuffed too.

I'm sorry that this submission is late, hopefully you can still use it.

Regards
Richard Craig

Vice President, Kaikoura Boating Club

Kenepuru & Central Sounds



Kenepuru & Central Sounds Residents Association Inc.

The Chief Executive Officer
Inshore Fisheries Management
Ministry for Primary Industries
Wellington 6011
Email: FMsubmissions@mpi.govt.nz

*Ross Withell
(President)
Kenepuru Road
RD 2
Picton 7282*

16 Feb 2014

Dear Sir/Madam

Kenepuru and Central Sounds Residents' Association Submission on Review of Sustainability Measures for Southern Scallops (SCA 7) Discussion Paper 2014.07

I write in my capacity as President of the Kenepuru and Central Sounds Residents' Association Inc.

Introduction

1. The Association was established in 1991 and currently has over 260 household members whose residents live full time or part time in the Kenepuru and Pelorus Sounds. The Association's objects include, among others, to coordinate dealings with central and local government and promote the interests of residents of Kenepuru Sound and adjacent areas and to promote and act in the best interests of residents, ratepayers and persons associated with the Kenepuru and Central Sounds area. AGM's of the Association are well attended. The Association receives no government funding.

Kenepuru & Central Sounds Residents Association Inc.

President	Ross Withell
Vice President	Adrian Harvey
Vice President	Andrew Caddie
Secretary	
Treasurer	Stefan Schulz
Chairman Roding Committee	Robin Bowron

withell@clear.net.nz
mountstokes@xtra.co.nz
andrew.caddie@xtra.co.nz

kcsra@pws.co.nz
info@thenikaus.co.nz

2. The recreational opportunities afforded by the Marlborough Sounds are much appreciated by our members. Like Maori, our members view the opportunity for the recreational fishing of scallops as extremely important. Accordingly, we have canvassed our members using our electronic newsletter facility, reviewed that feedback and tasked Committee members with reviewing the Ministry's Discussion Paper.

MPI Discussion Paper

3. It is fair to say that your Discussion Paper is a most dispiriting read, recording as it does yet another instance of the seemingly poor management and consequential collapse and closure of the scallop fisheries in the Tasman Bay and Golden Bay areas. The Association finds it distressing that notwithstanding the known collapse of the scallop fishery in these areas, this is the first review since 2002 (almost exactly the time of the start of the current collapse). It defies logic that for a decade there has been a total allowable commercial catch (TACC) of over 800 tonnes per annum when the actual commercial take appears to have been in the region of 40 tonnes per annum over that period.
4. We are slightly encouraged by the Paper's confirmation that having identified changes in benthic habitat in Tasman and Golden Bay as a potential causal factor, there appears to be some ongoing investigation as to why this is so (see paragraph 31 of the Paper). The question we ask of the Ministry is just exactly what are the terms of reference of these investigations, do they cover reasons as to why the benthic habitat is degrading and when will the reports be available? The Association regards this as an Official Information Act request.
5. Against this depressing background, the Association's prime focus is the preservation of the recreational and customary take in the Marlborough Sounds area of SCA 7.

Association's Recommendations

6. Accordingly, we find it a "no brainer" to make it clear that the Association rejects Option 1 (the status quo) and supports Option 2,

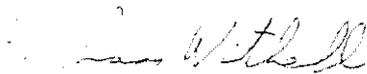
which quite correctly maintains recreational and customary take at a maximum of 40 tonnes and still gives the commercial operators a generous 46 tonnes TACC resulting in a TAC (including a mortality allowance) of 130 tonnes.

7. At paragraph 45 of the Discussion Paper you note that industry levies are around \$200,000 and while that is not commensurate with the value of recent landings, the industry representative has stated that they are agreeable to continue to pay levies at this level. Accordingly, we do not understand why at paragraph 55, the Ministry appears to recommend that the levy be decreased to around \$15,000. The Association **recommends** that there be no change to the quantum of the levy.
8. We also **recommend** that for the commercial fishers the maximum dredge size and number, number of days fished and the length of the commercial season be reduced.

Availability for Discussion

9. If in the course of compiling the Ministry's final advice paper, the Ministry would like to talk to the Association, we would be pleased to arrange a mutually convenient time and place.

Yours faithfully



Ross Withell

President

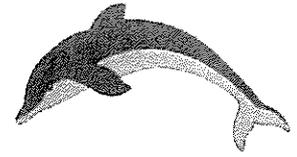
Kenepuru and Central Sounds Residents' Association

c/- 2725 Kenepuru Road

RD 2, Picton 7282

Email: withell@clear.net.nz

Cc Minister of Fisheries, Parliament Buildings, Wellington



Pelorus Boating Club Inc.
PO Box 1 Havelock
Marlborough 7150

FMsubmissions@mpi.govt.nz

Submission on the
"Review of sustainability measures for southern scallops (SCA 7)"

Introduction

1. The Pelorus Boating (P.B.C.) welcomes the opportunity to submit on the "Review of sustainability measures of the southern scallops (SCA 7)".
2. P.B.C. is an incorporated society formed in 1968 with clubrooms in the Havelock marina at the head of the Pelorus Sounds.

Current membership stands at 515 boats registered to the club and with most boats family owned. The P.B.C represents the interest of over two thousand (2000) people using the Marlborough Sounds.
3. P.B.C. has had members attend Challenger Scallop Enhancement Company (CSEC) meetings for the recreational fishers for the last 15 years to protect the access for the recreational fishers and protect the sustainability of the scallop fishery.
4. P.B.C also has members on other committees advocating for the sustainable utilization of the fisheries resources in the Challenger area.

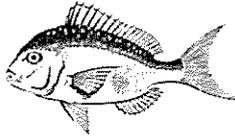
Our Interests

5. P.B.C. interest in the review of sustainability measures for the southern scallops (SCA7) is as follows.
Over the last three years the commercial catch is now coming from small bays in both the Queen Charlotte and the Pelorus Sounds, average 40 to 45 tons per year. These small Bays in the sounds are showing marked decline after the last 3 years of commercial activity. After the complete failure of both Tasman and Golden Bay fisheries, we need a vastly improved management regime to halt the decline of the fishery.
The health of the scallop resource and the social and cultural benefits that scallop fisheries provide are crucially dependent on them being well managed and maintained at sustainable level.
6. P.B.C. therefore support **OPTION TWO** of the MPI Discussion Paper No: 2014/07 .

Yours sincerely

Michael Connolly
Commodore
ph 0274 732 677

commodore@pelorusboatingclub.com



Marlborough Angling & Surfcasting Club Inc.

PO Box 419, Blenheim 7240

18 February 2014

Ministry of Primary Industries
P O Box 2526
WELLINGTON 6140

Submission on the Review of Sustainability Measures for Southern Scallops (SCA 7)

Introduction

1. The Marlborough Angling and Surfcasting Club represents over 100 financial members. There are many more people who, as past members now following new interests or no longer being able to actively fish, would welcome our comments on their behalf too.
2. Our Club has been active in Marlborough for over 60 years now. We have a good relationship with the Marlborough Recreational Fishers' Association, Soundfish, and other fishing organisations in the Top of the South. We are in contact with the Marlborough reps to the MPI's Top of the South Regional Recreational Forum.
3. The Club is interested in promoting the enjoyment of the sport of angling and to this end are always keen to be involved with anything that affects the ability of people to catch fish, especially in the Marlborough Sounds. Many of our members own boats. We have regular Club outings with charter operators for catching fish. The Club owns a property in the Kenepuru Sound. Lots of members enjoy collecting shellfish.

Response

4. The Club's members were interested to have a say on this IPP and discuss any possible effects on their ability to continue collecting scallops in the Sounds. We strongly support the proposal to review the catch limits for southern scallops in the quota management area SCA 7.
5. Having studied the IPP and discussed the ideas with other groups we now provide our **full support to Option 2**. In our view there is no other option given the drastic decline in commercial landings since the last review in 2002. The

TAC and TACC have been artificially high for far too long and, considering the lack of the scallop resource in Tasman and Golden Bays, should have been decreased sooner than now.

Supporting comments

6. After reading and discussing the IPP documents our members were appalled that such a lengthy delay was taken to re-adjust the TAC, and TACC. We are hoping that the horse hasn't bolted and we are now left trying to close the gate?
7. We are wondering if the management of the scallops by the Challenger Scallop Enhancement Company (CSEC) should have been under closer scrutiny by MPI? The combination of their work and reporting has not exactly been positive for the health and abundance of this shellfish. The decision by MPI not to react sooner on this stock is also concerning to our members.
8. If scallops are a SCA 7 'Group 2' stock and the objective for this shellfish is to enable annual yield from the fishery to be maximised while maintaining the stock size at or above the level required to ensure sustainability and the spawning stock biomass, then it clearly appears that this target has been badly missed when we read of the continuing decline in mwt landings.
9. The Club wonders if rotational & enhanced fishing systems were left too long before assessing the effectiveness of these practices, and whether any study was done using independent scientists? How do we know that these practices are not a major cause for the decimation of the scallop stocks?
10. It does seem odd that MPI gets CSEC to provide the information on which to manage the resource when the company's owners are the profit takers. We believe this is hardly impartial or in the best interests of sustainability. We are unsure if this is a model that many successful modern day companies or corporations would engage in.
11. A question that we think needs further research on is, did the scale of the dredging ultimately lead to the destruction of the benthic habitat in Tasman and Golden Bays. And also is it wise to now to divert effort into using the same methods of harvest in the Marlborough Sounds?
12. Perhaps it is timely that we go more cautiously in harvesting and that greater resources are directed into investigating alternative methods of commercial harvesting, before the TAC has to be further reduced, or before we have no stock left worth collecting commercially?
13. The collapse of the scallop fishery in Tasman and Golden Bays has meant greater pressure by commercial interests in the Marlborough Sounds now. Nearly all the scallops gathered in the Top of the South are coming from Marlborough. We would caution against allowing large scale commercial dredging of the beds in Pelorus and Queen Charlotte Sounds. Nobody would want the Sounds to go the same way as the Bays.
14. History records many examples where, whether for private enterprise or to assist with bolstering the Government's overseas funds, our guardians of the fish stocks have erred in allowing over fishing of the ocean's apparent bounty. We

don't seem to have learnt that it is wiser, even if not as lucrative, to make less haste when trying to reap some of this bounty. Instead we need to invest in more independent, thorough research and study so that we can make better sustainable use of our aquatic environment. There has been too much over-fishing of too many stocks. Our in-depth knowledge of much of the aquatic environment and its inhabitants is very limited when compared with what we know and how we use our land resources.

15. There should be a greater focus on working together with all sectors of the community and stakeholders to manage resources for the future. Recreational groups want to be involved with consultation before things get to the state of this stock. Fair use for commercial harvesting is accepted but with strong management to maintain fisheries should be the mind-set. It is not acceptable to have stocks degraded into an unusable or nearly lost state before taking action. The mentality of plundering for immediate profit-taking and a lack of foresight for the future should be avoided at all costs because it benefits no-one in the end.

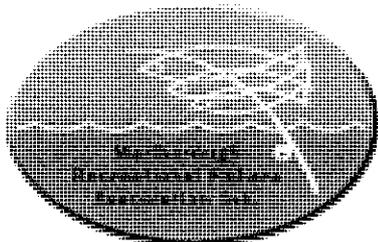
Summary

Marlborough Angling and Surfcasting Club Inc. members support Option 2.

Yours faithfully,

Shirley Chesmar
Secretary

Marlborough Recreational Fishers Association Inc



— P O Box 384 —
BLENHEIM 7240

www.mrfa.co.nz
www.fishthesounds.com

February 2014

SUBMISSION TO :

MINISTRY OF PRIMARY INDUSTRIES

*Review of Sustainability Measures for Southern Scallops
(SCA7)*

PREAMBLE:

1. The Marlborough Recreational Fishers Association (MRFA) is essentially an advocacy group for Marlborough recreational fishers. It has a strong allegiance to wise fisheries management and the marine environment.
2. The Association was formed in response to fisheries mis-management and commercial over fishing in the Marlborough Sounds, Tasman and Golden Bays.
3. MRFA are represented on the CSEC recreational stakeholders forum, MS Blue Cod Management Group and Top of the South Recreation Forum.
4. MRFA through their representation on the SCES recreational stakeholders forum have witnessed the continual declining scallop stock status and a management culture of unsustainable commercial overfishing which is now threatening the recreational and Maori customary scallop allocation. No fishery can survive with the continued downward trend, and this is getting close to a vote of no confidence in the management group.
5. The MRFA supported the recommendation from the recreational representatives on the CSSES stakeholders forum not to endorse last season's commercial scallop fishing plan.
6. MRFA appreciate the opportunity to make this submission.

**REVIEW OF SUSTAINABLE MEASURES FOR SOUTHERN SCALLOPS (SCA7)
MPI Discussion Paper No: 2014/07**

7. After considering the information provided in this MPI discussion paper and the following recommendations and comments, MRFA will support:-

Option 2: TAC(t)	TACC(t)	Maori Customary	Recreational(t)	Mortality
130	46	40	40	4

Recommendations and comments:

8. Retain the existing QSC voluntary commercial dredging areas (Ship Cove - Dieffenback)
9. Retain the existing 200-300 metre no dredging buffer zones between the shore line and dredging area boundary to protect the sensitive Blue Cod habitat
10. Retain the existing voluntary 'no commercial' dredging area in Pig Bay - Port Gore between Taratara Pt and Hunia Pt.

11. Discussion paper #13 page 3. MRFA supports this statement in principle on the understanding that the word “enhance” does not mean seeding or the transfer of stock in or out of the whole of the Marlborough Sounds (MS). A previous MFish report concluded that there should be **no seeding** in the MS.
12. Better and more professionally run consultation forums should be introduced where information is received well in advance of the meeting date. More accurate meeting records kept and extra meetings held when necessary. Stakeholders expenses reimbursed.
13. Discussion Paper #38 & 39. MRFA supports a review of catches taken under s111 and recommend that scallop catches taken under this section of the Act will only be taken using a recreation sized dredge (Size and specification to be decided). The MPI figures quoted in this discussion paper are totally inadequate.
14. MRFA believe the MPI LSMS recreation catch records and figures quoted are unrealistic and the recording methodology unreliable.
15. Discussion Paper #47. This talks about SCA7 being a “rotational and enhanced” fishery under the Act. The fishery is not no an “enhanced” or rotational” fishery but a “wild stock” fishery all being fished from the MS. A change to the Act is required and the CSEC MoU should be reviewed to reflect this change. This is important if MPI are intending to be more “hands on” in their management of this fishery.
16. The MRFA supports the Top of the South Recreation Forum proposal that “**there be no commercial scallop fishing the the Marlborough Sounds this coming season**” but with an addition “**or until it can be proven commercially sustainable**”.
17. The Marlborough Sounds marine environment and benthic habitat can not be compared to Tasman and Golden Bays and MPOI’s Environmental Principles for setting a TAC or TACC, should be based totally on a “precautionary approach”. The MS is a quality marine area that contains large numbers of identified ecologically significant marine sites.
18. MRFA and Marlborough people consider the MS as a “National Treasure” and will be expecting MPI to protect this fragile Public Domain, marine environment and fish habitat. Serious consideration should be given to losing Queen Charlotte Sounds to all commercial scallop dredging.
19. The commercial scallop fishery generates almost no economic benefit to Marlborough. Any economic benefit goes directly to Nelson to the detriment of the MS environment and marine habitat.

ADDENDUM

Preparation of the submission of the MRFA involved a number of meetings and exchange of views. The original submission was the result of serious consideration of alternatives. It was therefore more than a trifle disappointing to find that the original two options had been amended, at short notice and after the MRFA submission and others, had been prepared, to include a third option, namely the proposal (Option

3) to reduce the TAC to 500 tonnes (from 827) and the TACC to 416 tonnes (from 747).. This addendum addresses this Option 3, while deprecating the short time frame for its consideration. If MPI is seriously committed to management of the fishery for the benefit of ALL stakeholders, then it might be expected to offer a more inclusive framework of discussion. The present proposal has an undercurrent of accommodation to commercial interests. MRFA has considered these Options in consultation with TasFish and with LegaSea, and broadly supports their submissions. However, MRFA dissociates itself from the proposal by LegaSea to reduce the recreational and customary catch. It has been the experience that a voluntary reduction in entitlement by recreational fishers is never restored.

1. No justifiable argument is offered to support this Option, other than the weak suggestion that it “offers some headroom”. Catch returns over the past ten years show that this is a completely unrealistic allowance for a fishery which is inexorably proceeding to total extinction.
2. The Minister has the unenviable task of reconciling commercial, recreational and customary interests, and of ensuring long-term sustainable management of the scallop fishery. The discussion paper admits that the existing TACC is unlikely to be achieved given current biomass estimates. This must apply equally to the proposed TACC in Option 3.
3. The MRFA therefore reiterates its support for Option 2, but with the proviso that, given the fragile nature of the fishery, it would be preferable to act with urgency to close the fishery to commercial activities until it can be demonstrated that there is a sustained recovery in the biomass.
4. MRFA notes that there is virtually no socio-economic benefit to the Marlborough region from the commercial scallop fishery in the Sounds.
5. MRFA notes with concern that a reduction in the TACC may lead to a situation where commercial fishers may ignore the present voluntary exclusion of areas of particular ecological importance due to their fragile nature. Such areas may require formal recognition.
6. Dredging for scallops is an activity which does extensive and long-lasting damage to the sea bed, with consequent far-reaching effects on the overall ecology of the region. As a group of citizens with a direct stake in the sustainable future of the Sounds, MRFA can offer a valuable contribution of local knowledge and expertise, and would therefore seek to be able to provide input into the future management of the fishery, through representation on the Scallop Forum Stakeholders Group..
7. MRFA notes with dismay the final paragraph of the paper concerning Option 3. MRFA is greatly concerned that the only action MPI is proposing to take is to monitor the performance of the fishery during 2014. A cursory examination of the past ten years of catch records show that the decay in returns is following an exponential curve towards zero. A further year of inaction will lead inexorably to a further deterioration in the stock. The Minister should be advised to take immediate action.
8. Finally, MRFA would draw the attention of the Minister to the extent of the interest shown recently by snapper fishers in Northland to proposals affecting their catch allowance. Recreational fishers number in the hundreds of thousands, generate considerable commercial activity, and feel strongly about rules which impinge on their hobby.

SIGNED: Ian Anderson (Chairperson MRFA)

e-mail: boto@slingshot.co.nz

Review of Sustainability Measures for southern Scallops (SCA 7)

Submission of the Marlborough Recreational Fishers Association

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From: Yvonne Mead [mailto:Yvonne.Mead@fish.govt.nz]
Sent: Thursday, 20 February 2014 8:07 p.m.
To: FMSubmissions
Subject: SCA7 southern scallops submissions

Submission to review of sustainability measures for Southern Scallops (SCA7)

Option 1 (Status Quo) absolutely no

Option2

Better than option 1 but commercial TACC to high.

The wild fishery in the Marlborough Sounds only produced 43 tonnes of scallop meat 2013 so 46 tonnes is to high
Option two doesn't address half the problems the fishery faces.

Okiwi bay, Ketu Bay and Ships Cove should be set aside for recreational fishing only.

Recreational quotas should not change but the minimum size should be increased from 90mm to 100mm for all fishing, Commercial, Maori Customary and Recreational.

I would like to have the opportunity to supply more information on this subject before the final decisions are made

Yours sincerely
Kevin Mead

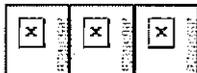
From: Rob Paulin [mailto:rob@paulin.co.nz]
Sent: Sunday, 2 March 2014 10:48 a.m.
To: FMSubmissions
Cc: secretary@nzsportfishing.co.nz; Allan Davidson
Subject: Marlborough Sounds scallop fishery
Attachments: SCA7-submission-NZSFC-Feb14.pdf

I have been actively involved in recreational boating in the Marlborough Sounds for the last 30 years. The only time that scallop numbers seem to reduce is when the sounds (Queen Charlotte and Pelorus Sounds) are exposed to commercial dredging activity, last season is a good example. This activity is most noticeable when Tasman and Golden bays are not producing. They are not producing because of years of intensive dredging. I would be very disappointed if these areas are not given significant time to rebuild. This would be particularly detrimental if the commercial pressure that has caused the collapse of Tasman and Golden Bays was also allowed to cause the collapse of the Marlborough sounds scallop fishery. With this in mind I fully support the legasea submission. Copy of their submission attached.

Regards
Robert Paulin



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From: clare pinder [mailto:clare.pinder@nzsportfishing.org.nz]
Sent: Monday, 3 March 2014 10:25 a.m.
To: FMSubmissions; secretary@nzsportfishing.org.nz
Subject: Scallop SCA 7 sustainability

I have owned property in the Sounds for nearly 30 years and I am very concerned about commercial dredging for scallops in the Sounds. With the collapse of the Scallop stocks in Tasman Bay a move to commercially dredge the Sounds is not a sustainable proposition.

Please note that I am opposed to any commercial dredging for Scallops in the Marlborough Sounds

Clare Pinder



N Z RECREATIONAL FISHING COUNCIL

PO Box 276
Motueka

Phone: 03 5287511
E-mail: NZRFC@kinect.co.nz
Website: www.recfish.co.nz

Submission from NZRFC re SCA7.

In general the NZRFC supports the submission made by our regional affiliate TASFISH.
(copy attached)

In addition we submit the following:

1. SCA7 has been in decline for a number of years with unexplained die-offs occurring for at least the last 8 years. This in spite of reasonably well controlled commercial fishing where at times attempts were made to increase the shell harvest size.
2. The NZRFC submits that industry and/or MPI failed to do adequate research into the reasons for these stock failures instead choosing to spend a considerable portion of the enhancement levies collected from fishermen to fight access rights based issues with the marine farming sector.
3. A slashing of the TACC at this point will have significant implications for legal proceeding presently before the court. The NZRFC, although very concerned at the present state of the fishery, do not have sufficient information to judge if this would be good or bad for the fishery in the long run. We can only point out that during periods of better abundance public fishers enjoyed very good access to the fishery.
4. The NZRFC submits that the behavior of the Challenger Scallop Enhancement Company in providing for public access to scallops in the various sections of the fishery used to be very good. As abundance has declined, rotational fishing decreased and commercial demanded access to areas previously happily set aside for public use.
5. We submit that the problems with the fishery have nothing to do with public fishing and therefore there should be no reduction in either our allowance within the TAC or in our bag limit of 50 scallops per person.
6. Scallops are an extremely variable species and our observers have noticed signs of a return of scallops to the Tasman and Golden Bay areas. Any kneejerk reaction now should be avoided. In simple terms while there are less scallops about, few go fishing and those that do make do with whatever they catch. The bag limit is irrelevant to the sustainability of the fishery.

7. In the same way the TACC is irrelevant so long as Challenger control the Quota shares and only release sufficient ACE to cover the available catch calculated from the annual survey.
8. The NZRFC accepts this process but does agree with TASFISH and others who argue the scallop industry have been very difficult to consult with in recent years. If the TACC isn't decreased to the option 2 figure then Challenger must be held to task over providing good and proper access to scallops within the various sections of the fishery as occurred in the past.
9. NZRFC accepts that CSEC have the ability to manage the fishery on a much finer scale than MPI and would like to see them able to continue to do that. On the other hand we want MPI to point out to CSEC they have some very real obligations to the public if they wish to retain their privileged management role. We expect if the TACC is reduced to the lower level CSEC will die and management will revert to MPI. Without closure of many areas permanently to commercial scallop fishers, this will be a disaster for public fishers as you will apply the "one size fits all" approach.

From: NZ Scallop Company Ltd [nz.scallops@xtra.co.nz]
Sent: Friday, 28 February 2014 11:56 a.m.
To: FMSubmissions
Subject: SCA 7 Review

To Ministry for Primary Industries

This submission is on behalf of the following SCA 7 stakeholders:

Lex Ernest Wells
Judith Anne Wells
Gavin Robert Wells
Harold Jordan
Ron Bennett

Each above stakeholder owns 12,000 kilo of SCA 7 quota and are all Shareholders / Directors of The New Zealand Scallop Company Ltd (NZSC) and shareholders of Challenger Scallop Enhancement Company Ltd (CSEC). All of the above stakeholders initial choice is option 1 (status quo), option 3 (new) would be considered on the following bases.

- 1/ Customary and Recreational allowances are reduced at the same level as Commercial.
- 2/ SCA 7 stakeholders are fairly compensated for their loss of TACC.
- 3/ MPI levies payable by SCA 7 stakeholders to be based on actual quota utilized each fishing year.

The following comments support the stakeholders above decision.

The SCA 7 fishery has been depleted by factors beyond the control of the SCA 7 stakeholders eg. other industry and natural events.

The SCA 7 stakeholders through CSEC have managed their own fishery at their own cost, while still paying full MPI levies to fund MPI initiatives like the Review of Southern Scallop Sustainability Measures, yet you choose only to bite the hand that feeds you.

Stakeholders have voluntarily reduced their annual catch through CSEC so as to keep their industry sustainable (last full quota caught 2001), SCA 7 area recreational daily limits are still 30 scallops per person per day more than anywhere else in New Zealand.

Shame on you MPI for only targeting the commercial sector .

The undersigned (13 years livelihood from SCA 7 industry) also supports the above submission and comments

Yours sincerely

Tony Eden (Manager)
The New Zealand Scallop Company Ltd
Phone / Fax 03 5441297
Cell 0274 481688
E-mail nz.scallops@xtra.co.nz

Mark Connor
President
NZ Sport Fishing Council
PO Box 93
Whangarei
secretary@nzsportfishing.org.nz



Inshore Fisheries Management
Ministry for Primary Industries
PO Box 2526
Wellington 6011
FMsubmissions@mpi.govt.nz

28 February 2014

NZ Sport Fishing Council submission on the review of sustainability measures for southern scallops (SCA 7) for 1 April 2014

Recommendations

- The southern scallop fishery (SCA 7) is rebuilt within a reasonable timeframe to restore abundance and diversity in the marine ecosystem.
- That a rebuilding plan be implemented to achieve the necessary rebuild and better achieve the purpose of the Fisheries Act 1996, including:

The Minister agrees to reduce the Total Allowable Catch (TAC), Total Allowable Commercial Catch (TACC) and allowances for SCA 7 as follows –

- Set the TAC at 64 tonnes
 - Make an allowance for Maori customary non-commercial fishing interests of 30 tonnes
 - Make an allowance for recreational interests of 30 tonnes, maintaining current controls
 - Make an allowance for fishing related mortality of 4 tonnes
 - Set a TACC of zero in Golden Bay, Tasman Bay and the Marlborough Sounds.
- Any scallops within the Marlborough Sounds above the non-commercial yield are required to remain in the water to support the marine ecosystem and contribute to the rebuild.
 - Current closures to commercial dredging within the Marlborough Sounds are retained.
 - When the fishery has rebuilt the Minister consult with tangata whenua and the local community prior to reopening one or more of the commercially closed areas of Golden Bay, Tasman Bay and the Marlborough Sounds.

NZ Sport Fishing Council - LEGASEA

1. The New Zealand Sport Fishing Council and our outreach LegaSea (the submitters) appreciate the opportunity to submit on the review of sustainability measures for southern scallops (SCA 7). The Ministry for Primary Industries (MPI) released their Discussion Paper on 27 January 2014 with submissions due by 21 February. Any changes will apply from 1 April 2014.
2. The submitters object to the Ministry's tight consultation timetable, initially giving only 18 working days to respond to the complex sustainability measures for SCA 7 and selected crayfish stocks. It is even more offensive for Ministry to advise on February 20th that the 21st February deadline has been

extended by six working days, because they are consulting on another option. This is unacceptable consultation and, in our opinion most likely unlawful, as judged by the Court of Appeal¹.

3. It is unreasonable to expect non-commercial interests to respond with adequate information to inform the Minister's decision in the time allowed, as required by ss 12 and 13 of the Fisheries Act.
4. NZSFC representatives are available to discuss this submission in more detail if required. We look forward to positive outcomes from this review and would like to be kept informed of future developments. Our contact is Roz Nelson, secretary@nzsportfishing.org.nz.
5. The NZ Sport Fishing Council is a national sports organisation with over 32,000 affiliated members from 55 clubs nationwide.
6. The New Zealand Sport Fishing Council has initiated LegaSea to generate widespread support for the ongoing effort to protect and enhance the public's access to abundant fisheries in a healthy marine environment. Also, to broaden NZSFC involvement in marine management advocacy, research, education and working together on behalf of our members and LegaSea supporters. www.legasea.co.nz
7. We are committed to ensuring that sustainability measures and environmental management controls are designed and implemented to achieve the Purpose and Principles of the Fisheries Act 1996, including "maintaining the potential of fisheries resources to meet the reasonably foreseeable needs of future generations..." [s8(2)(a) Fisheries Act 1996]

Scallop 7 fishery (SCA 7)

1. Scallop abundance is naturally highly variable between and within seasons. Scallops in SCA 7 are at the lowest levels since surveys began in 1998. SCA 7 extends east from Cape Farewell to the Tory Channel and includes Golden Bay, Tasman Bay and the Marlborough Sounds.
2. Low abundance in Golden and Tasman Bays has led to a recent voluntary commercial closure in these areas. Commercial effort is now focused within the Marlborough Sounds. This has led to increased conflict with recreational interests.
3. SCA7 has been managed on an enhanced and rotational basis since the 1990s, by the Challenger Scallop Enhancement Company (CSEC), owned by SCA7 quota owners. The last fishing season was the first where the CSEC and recreational fishers could not agree on a closure strategy for the Marlborough Sounds.
4. Average commercial landings have been less than 50 tonnes (t) over the past few years. MPI's proposed Total Allowable Commercial Catch (TACC) in option 2 reflects average survey biomass of the Marlborough Sounds over the past five years, with a 20% exploitation rate applied. MPI's latest, proposed option 3 TACC of 416t is justified on the basis of "*having regard to socio-economic factors*".
5. Commercial controls include a 90mm Minimum Legal Size (MLS), a maximum dredge size and number, number of days fished, daylight fishing only and a season from 15 July to 14 February.
6. Scallops are highly valued by recreational interests and a taonga [treasure] for customary interests. Scallops are harvested by dredging or diving. The recreational MLS is 90mm. The daily bag limit is 50 per person.
7. SCA 7 is managed under ss 310 and 14 of the Fisheries Act 1996.
 - Section 310 enables the Minister to implement an enhancement programme developed by stakeholders, and after consultation with other interests and the Minister.

¹ International Airport Ltd and Air New Zealand (CA 23/92, 73/92[1993] 1 NZLR 671).

- Section 310(4) says, in part, “...or where, in the opinion of the Minister, the enhancement programme, once implemented, fails to enhance the fishery, the Minister may cancel the enhancement programme, in whole or in part, and, upon cancellation in whole, the Minister may recommend the removal of the stock from Schedule 3 in accordance with section 14”.
- Section 14 of the Act enables the Minister to set a Total Allowable Catch (TAC) to *better achieve* the purpose of the Act.
- Section 14(4) enables the Minister to set the TAC at or to zero.
- Section 20(3) enables the Minister to set or vary a Total Allowable Commercial Catch (TACC) at, or to, zero.

NZSFC Submission

8. The submitters propose the Minister implement a rebuild plan to restore abundance and diversity in the marine ecosystem at the top of the South Island. There is legislative support and an obligation for the Minister to do so, pursuant to the purpose of the Act. Section 8(2) of the Fisheries Act 1996 (the Act), “*The purpose of this Act is to provide for the utilisation of fisheries resources while ensuring sustainability*”.

“...ensuring sustainability means –

- (a) maintaining the potential of fisheries resources to meet the reasonably foreseeable needs of **future generations**; and
- (b) avoiding, remedying, or mitigating any **adverse effects** of fishing on the aquatic environment.

utilisation means conserving, using, enhancing, and developing fisheries resources to enable people to provide for their **social, economic, and cultural well-being**.”

9. Under s14 of the Act the TAC is set to **better achieve** the Act’s purpose. The Minister cannot **ensure sustainability** of SCA 7 if commercial effort is moved into the Marlborough Sounds because–
- The Minister must not knowingly risk the productivity and fragile nature of the Marlborough Sounds. Years of commercial dredging has contributed to the massive collapse of stocks in Golden and Tasman Bays, the lack of regrowth, the acknowledged poor survival of spat and lack of adequate habitat in these areas. This has jeopardised future productivity in these areas.
 - The Minister has a lawful obligation to avoid any adverse effects of fishing on the marine environment. There are already numerous threats to the ecosystem, both landbased and water borne invasive species.
 - The Minister must not risk the sustainability or productivity of other species within the Marlborough Sounds. Blue cod is currently subject to a controversial and strict management regime that limits only recreational access.
 - Already there has been increased inter-sector conflict in the Sounds, because commercial effort is concentrated in areas that were previously the domain of local fishers seeking to find food for their family and friends.
10. The level of Maori customary harvest is uncertain. Only interim estimates of recreational catch are available and MPI advise these cannot be used as a basis for making an allowance for recreational interests.
11. The submitters propose no changes to recreational bag or size limits. The Minister must attribute the necessary rebuild to the responsible sector and method, namely commercial dredging.

12. We support the following management regime until the southern scallop (SCA 7) fishery rebuilds –

Table 1: Proposed TAC, TACC and allowances for southern scallops (tonnes, meatweight)

Option	TAC (t)	TACC (t)	Allowances		
			Maori customary (t)	Recreational (t)	Other mortality (t)
MPI option 1 (status quo)	827	747	40	40	0
MPI option 2	130	46	40	40	4
MPI option 3	500	416	40	40	4
NZSFC/LegaSea	64	0	30	30*	4

* No change to recreational controls.

MPI option 1 (status quo)

13. The current catch levels were set in 2002. Given the current stock status and the Minister's duty to sustainably manage this fishery, it is inconceivable the Total Allowable Catch (TAC), the TACC and zero allowance for fishing related mortality remains intact.
14. When there is known fishing related mortality the Minister is obliged to set aside a tonnage to allow for it -
- There is relatively high mortality associated with dredging scallops and this cannot be ignored.
 - While unknown, there will be a level of illegal or unreported scallop harvest. That mortality must be allowed for within the TAC.
15. In option 1 MPI ignores the lost productivity associated with ongoing dredging of the seabed, despite their acknowledgement of environmental changes. MPI note *"it appears that the benthic habitat in Golden and Tasman Bays is no longer suitable for scallops.....reasons for the decline in Golden and Tasman Bays are being investigated. Other shellfish stocks in this area have also declined and it appears that the suitability of benthic habitats for scallops might be lower now than in the past"*.
16. Commercial interests have hammered this fishery since the early 1960s. By 1975 landings reached 1244 t from a fleet of 245 vessels. The fishery was closed by 1980. It later reopened with an agreed enhancement and rotational programme in place. Last season Golden and Tasman Bays were closed and 11 boats fishing in the Marlborough Sounds landed 43 tonnes.
- Given the purpose and principles of the Fisheries Act 1996 the Minister cannot lawfully agree to option 1 for the SCA7 fishery.

MPI option 2

17. MPI propose to reduce the TAC from 827 to 130 tonnes, and the TACC from 747 to 46t. MPI also propose the Minister sets aside 4t to allow for fishing related mortality. In the absence of any data in the MPI Discussion Paper it is impossible to determine if the proposed 4t allowance is sufficient.
18. MPI consider option 2 better meets the requirement to set a sustainable TAC, under s14 of the Fisheries Act and complies with the draft National Fisheries Plan objective, to protect spawning stock by limiting catch to recent low levels until the fishery rebuilds.
- How does MPI expect the fishery to rebuild unless actual catch levels are reduced?
19. The Directors of the Challenger Scallop Enhancement Company (CSEC) do not support a TAC change even though option 2 would reduce cost recovery levies from around \$200K to less than \$15K.
- Industry cannot lay claim to non-existent scallops. SCA 7 is a public resource and the Minister can lawfully reduce the TACC for sustainability purposes.

20. Most commercial scallop fishers are sole operators selling to a processor. A 94% cut to these individuals' quota/ACE will probably spell the end of the smaller fisher who cannot afford to buy ACE and stay afloat. The companies and bigger boats will likely take over what is left. That is the nature of quota, and the quota management system.
21. Despite the Ministry's initial view, commercial interests are likely to challenge the 40t allowances for Maori customary and recreational interests, and highlight the imprecise data associated with our harvest levels. Interim survey estimates indicate around 11t of recreational harvest, mostly from the Marlborough Sounds. About 60% of overall recreational catch is reported as coming from Cape Komaru to D'Urville Island. The harvest estimates exclude catch taken from charter vessels or commercial crews using s111 approvals.
22. Not all customary catch is reported as there are two regimes operating, one is a voluntary scheme, the other has mandatory permit reporting requirements. MPI is not clear if the limited number of issued authorisations reflects the level of concern by tangata whenua for the low stock levels, the lack of issuance of mandatory reporting permits or whether tangata whenua are still operating under the voluntary regime. The Minister must do more to determine if tangata whenua are not issuing permits due to their concerns about the poor state of the scallop fishery.
 - Option 2 will not reduce real-time commercial catch and a rebuilt fishery is unlikely.
 - Option 2 does not enable the Minister to meet his obligations to current and future generations, as required by the Fisheries Act.
 - The Minister has an obligation to have particular regard to kaitiakitanga [guardianship of the resource], as per s12(1)(b) of the Act.

MPI option 3

23. MPI propose to reduce the TAC from 827 to 500 tonnes, and the TACC from 747 to 416t. MPI also propose the Minister sets aside 4t to allow for fishing related mortality. In the absence of any data in the MPI Discussion Paper it is impossible to determine if the proposed 4t allowance is sufficient.
24. The Minister cannot take this option seriously. Its late arrival for consultation and lack of any meaningful basis apart from providing "*some headroom*" just intensifies the notion that this is merely pandering to commercial interests, at the expense of environmental and public interests.
25. It seems industry wants to hold onto quota in the event that scallops regenerate to commercially viable levels in Tasman and Golden Bays. If this rebuild occurs and adequate science is produced confirming this regeneration then the Minister will have the opportunity to revisit management controls at that time. In the interim, there is no justification for the Minister to provide "headroom".
26. MPI note in their letter (20 February) that reducing the TACC from 747 t 416t provides "*a balance between the need to ensure long term sustainable management of the scallop fishery and the economic impacts of reducing the TAC*". Quota owners have made it quite clear they do not want the TACC to be reduced, even though they are paying levies for their quota holdings. This option is a fraudulent attempt at protecting quota holders' interests at the expense of environmental and public interests.
27. It is unfathomable that the Minister would make 416t of catching rights available, knowing the two Bays are closed, and then unleash the commercial fleet into the Marlborough Sounds. The potential for disaster is very high and poses unacceptable risk.
28. MPI note that option 1 does not address legal requirements under s14 of the Act, and that the existing TACC is "*likely to be unobtainable given current biomass estimates*". This equally applies to the proposed TACC in option 3; therefore this option 3 is redundant.

NZSFC/LegaSea

29. A rebuild is necessary both for the fishery and to enable the Minister to fulfil his obligations to enable residents and visitors of the Marlborough Sounds to provide for their social, economic and cultural wellbeing.
30. The Minister has a lawful duty to 'allow for' our non-commercial interests in southern scallops, pursuant to s21 of the Act.
31. The Minister must sustainably manage this fishery for future generations. Given current conditions the best available information indicates the most practical remedy is to reduce the TAC from 827 to 64 tonnes, reduce the TACC from 747 to zero tonnes, make a 4t allowance for fishing related mortality and reduce the non-commercial allowances, from 40 to 30 tonnes, while maintaining current controls.
32. The current 747t TACC was set in 2002-03 and has never been caught. Commercial catch has not exceeded 200t since 2003-04. A more realistic and lawful TAC and TACC is long overdue.
33. Setting a zero TACC in SCA 7 until the fishery is rebuilt will mean that any scallops within the Marlborough Sounds, above that required to provide for non-commercial yield, will remain in the water to support the marine ecosystem and contribute to the productivity and rebuild of the fishery.
34. After the fishery has rebuilt, and prior to any future change in the TAC and TACC or any reopening of closed areas, the Minister must consult with tangata whenua and the local community to determine their non-commercial interests so those can be allowed for in any management processes.
35. We acknowledge the reality that commercial operators supply retail outlets so the wider public can enjoy scallops if they are not active harvesters. However, commercial harvest must not jeopardise the necessary rebuild of the scallop fishery or pose undue environmental risks.
36. The submitters acknowledge the Marlborough Recreational Fishers Association's concerns that if the overall recreational allowance is reduced it will not be restored in the future, and that a reduced allowance will likely mean lower bag limits and possibly an increased size limit. These are valid concerns given historic, inadequate management practices, the lack of Ministry support for local concerns, and intense commercial lobbying.
37. The submitters also acknowledge the need to act conservatively, to protect the remaining scallop fishery and habitat for future generations. As such, we propose a 25% reduction to the overall non-commercial allowances, from 40 to 30 tonnes, and an allowance of 4t to for other sources of mortality. The Minister is obliged to 'allow for' all mortality associated with non-commercial use and fishing related activities. Given the unknown extent of that mortality, the absence of commercial dredging under this option, and the paucity of information, these allowances ought to suffice.
38. Recreational fishers are also concerned that a reduced TACC will lead commercial fishers to ignore existing agreements to voluntarily close selected areas in the Marlborough Sounds to commercial dredging. These areas are closed due to their fragile nature and to provide a life-sustaining ecosystem for other species, including blue cod, which is subject to a strict management regime. Current closures within the Sounds must be retained.
39. When making his decision the Minister must take into account the local community's concerns and address those by regulatory or other means.
40. Scallop 7 is a public fishery and neither the fishery nor the locals ought to be held to ransom merely to appease quota owners' interests.



Ngāti Kuia
Te Iwi Pakohu

3 March 2014

Inshore Fisheries Management
Ministry for Primary Industry
P.O. Box 2526
Wellington 6011

SUBMISSION ON REVIEW OF SUSTAINABILITY MEASURES FOR SOUTHERN SCALLOPS (SCA7)

INTRODUCTION:

This submission is on behalf of the legal entities of Ngāti Kuia Iwi:

Ngāti Kuia Holding Company Limited is a wholly owned commercial subsidiary of Te Rūnanga O Ngāti Kuia Charitable Trust (TRONKCT) and the owner of Scallop 7 Quota Shares.

TRONKCT is the Mandated Iwi Organisation (MIO) and the Iwi Aquaculture Organisation (IAO) for Ngāti Kuia. This entity is required to be compliant to the relevant Acts pertaining to our Fisheries Settlement Assets.

MPI discussion paper for Review of sustainability measures for Southern Scallops (SCA 7).

The Ministry had presented an IPP paper with Options 1 & 2, and then a supplementary paper proposing a new option 3.

Table 1: Proposed TAC, TACC, and allowance options for SCA7 (tonnes, meatweight)

Options	TAC (t)	TACC (t)	Customary (t)	Recreation (t)	Other sources
Option 1 (status quo)	827	747	40	40	0
Option 2	130	46	40	40	4
Option 3	500	416	40	40	4

CONSULTATION:

Ngāti Kuia has concerns with the MPI Scallop consultation document and the process that has taken place with iwi. MPI engagement timeframe plus the original IPP requirements did not provide Iwi with adequate information nor did it indicate they were going to put forward option 2, which has huge impacts on Iwi.

This option will have a major effect on the devaluation of our Treaty Settlement Asset and also impacts on the economic viability of the Scallop Area 7 Commercial Fisheries.

Ngāti Kuia believe that MPI initiated the IPP without utilising all the tools that are already in place under the MOU with Challenger Scallop Enhancement Company (CSEC), which has effectively over ridden the intent of the MOU. At no time did MPI activate the disputes clause with regards to management processes in the fisheries.

In summary;

- The original IPP reflected MPIs position of not engaging with CSEC to look at all solutions within the MOU.
- The CSEC were never given the opportunity to activate the disputes provisions contained in the MOU, with regards potential disputes between commercial and recreational fishers.
- Poor consultation with iwi. MPI should have engaged with iwi much earlier and provided better information to help iwi make an informed decision.
- The implications of what MPI is proposing in option 2 are huge.

OUR POSITION:

Option 1:

We don't agree with the TAC being altered.

- Devalues Settlement quota, which under our Deed of Settlement, the Crown and its agents are required by legislation to ensure that Settlement Assets are enduring.
- The management process of the TACC by CSEC ensures that there is an annual biomass survey and a projected fishing TACC is set, which is pro-rated to quota holders, with the balance of their quota, effectively shelved for the ACE year.
- The disputes clause in the MOU with regards to commercial & recreational issues was not triggered. This disagreement the first in 14 years doesn't constitute a crisis requiring an IPP.

Under options one and three we consider MPI should review the way they recover cost so that SCA7 quota owners do not pay for uncaught ACE. MPI should adjust the cost recovery regime to enable government levies to be worked out on the previous year's catch as opposed to the TAC. We can appreciate this will create a fundamental change to the way MPI does its cost recovery but it will be an improvement to their system not a detraction. This achieves what MPI and iwi are trying to do – reduce levies.

Industry needs to invest money into research and ongoing monitoring.

We suggest CSEC do their annual survey of the Marlborough beds and set a TACC as per usual. During the season sectors should discuss finding a long term solution to addressing declining CPUE in Marlborough.

Nelson and Golden Bay iwi and stakeholders need to continue to support the NIWA plan for research and advocacy for the area. Stakeholders need to identify and stop doing the things that have contributed to the demise of the Golden / Tasman Bay stocks, such as recognising the negative impact land activity has on the habitat of the seabed and actively resource the minimising of this negative affect.

RECOMMENDATION:

1. Support option 1 to retain current TAC as first option
2. Support option 3 as second option.
3. MPI to review their cost recovery regime to enable levies to be based upon previous years actual catches
4. Do a survey in the Marlborough area and set a TACC based upon survey results.
5. Retain non-commercial allowances
6. Continue research and advocacy in the Golden/Tasman Bay.
7. Reject option 2.



NGĀTI TAMA
MANAWHENUA KI
TE TAU IHU TRUST

3 March 2014

Shellfish Submissions
Fisheries Management – Inshore Fisheries
Ministry for Primary Industries
PO Box 2526
Wellington 6140

Re: FMA 7 Submission

My name is Fred Te Miha, Chair of Ngāti Tama Manawhenua ki Te Tau Ihu Trust and Ngāti Tama Te Waipounamu Trust. We are one of the eight Iwi Trusts of the top of the South Island.

We have been owners of Scallop quota since the Sealord deal of 1992. At present Ngāti Tama holds 31 tons of Scallop quota. That amount makes Ngāti Tama the second largest quota owner. We have fished our own quota for a number of years but now we lease out our ACE on a yearly basis.

Ngāti Tama have a direct influence on all things cultural and customary across the top of the South Island in collaboration with all South Island Iwi. We have scholarships available to our owners or shareholders of our tribe and have helped many of our young ones to better and build their education to a higher standards. Ngāti Tama works very hard with their partners (Crown Agencies) with the Crown trying to uphold the principals of the Treaty of Waitangi and through that the partnership with the Crown.

The proposal that MPI landed with us, was quite a shock at the time because they had not consulted with us properly, this was a bad mistake on MPI's part. One comment I want to make is that I believe deeply that the problem is environmental, there are a number of factors that contribute to the environmental problem. I will try to name them:-

Exotic forestry clearance, releasing a huge amount of soil, sediment etc into the waterways and then into the two bays, Golden Bay and Tasman Bay.

The next is rare storms which brought down many slips and erosion that occurred in the big storm of 2010. This has had a big effect on the two bays, with mud and siltation minimising scallop beds with a covering of mud and silt.

Chemical leaching from sites close to Nelson and also drains from industrial areas working their way into Tasman Bay. Orchard spraying will have an effect.

And another factor that is not discussed very often is the strong winds from the east. These winds do not allow the flooded rivers to disperse properly in a fan like way into the bays. The strong easterly winds hold the fresh water in close to the shore, killing all marine life that can't move out of the way.

Whāia to ōi kahurangi
- ki ke tuohu kōe, mē he maunga tēte

The impact that MPI's proposal has on Ngāti Tama is that it will lower our ability to be able to use the book value of our scallop quota with the banks on their reviewing their lending criteria to Ngāti Tama. And will also lower the book value of our assets.

Recommendations

1. Reduce TACC from 747 M/T to 576 M/T.
2. I support for ongoing management of SAC 7 fishery by the Challenger Scallop Enhancement Company.
3. Reduce recreational daily limits from 50 Scallops to 40 Scallops per person with a 240 Scallop as the boat limit daily for Golden Bay and Tasman Bay. Keeping Marlborough Sounds at 50 per person.
4. The enhancement scheme, the spat catching and re-seeding of rotational beds and management of TACC are all interlocked. Industry or fishing quota owners cannot fund the enhancement scheme and manage the enhancement scheme if MPI set the fishing tonnage on an annual basis at very low tonnages. If so the Scallop fishery will eventually die out because no one will be enhancing it.
5. Option one is where I would like to stay but are prepared to consider option 3 if more consulting was done on it.

Hei Te Mana

Chair

From: Jennie Smeaton [jennie.smeaton@ngatittoa.iwi.nz]
Sent: Tuesday, 4 March 2014 5:01 p.m.
To: FMSubmissions
Subject: Scallop 7

Tena koe

I make this submission on behalf of Te Runanga o Toa Rangatira the incorporated body for Ngati Toa Rangatira.

Please note this is an extremely brief submission however given the consultation period we have not been able to provide a more comprehensive overview of our position.

Essentially we have reviewed the options as proposed by MPI for the scallop 7 fishery and our position is to support option 1 which retains the status quo.

In selecting this option we are of the belief that more emphasis should be placed on working collaboratively with other groups involved in the fishery with the aim to enhance the fishery.

Should you have any questions please contact me on 027 378 2691.

Nāku noa, nā
Jennie

Jennie Smeaton
Resource Management &
Communications Advisor
Te Runanga O Toa Rangatira inc
Ph 04 238 4952
Fax 04 238 4702
Email jennie.smeaton@ngatittoa.iwi.nz
Web www.ngatittoa.iwi.nz

From: Winston Rountree [
Sent: Tuesday, 25 February 2014 6:10 p.m.
To: FMSubmissions
Subject: SCA/7 Quota reduction.

Regarding your letter to reduce SCA/7 quota.
I hold SCA/7 and our FIN no is 8482523.
I would like to see the TAC be 500 tonnes.
If that tonnage is not there it won't be caught!
Fishers will only fish down to an economic level and move on.
Scallop/7 fishery has wide ranging unknown areas to explore.
I believe if the commercial sector has to suffer Large cuts I fully support lowering the
daily catch for Challenger recreational fishers.
Challenger is the only scallop fishery that supports 50 per person.
Yours

Winston Rountree

Joanne & Winston Rountree



3 March 2014

Mr M Dunne
Chief Executive
Ministry for Primary Industries
PO Box 2526
Wellington 6140

By e-mail

Dear Mr Dunne

Submission on Sustainability Measures for Southern Scallops (SCA7)

1. Seafood New Zealand appreciates the opportunity to comment on the Ministry's proposal to review the sustainability measures for Southern Scallops (SCA7).

Background

2. MPI proposes to review the TAC/TACC and other catch allocations for SCA7 in recognition that the Golden and Tasman Bay scallop grounds are now no longer suitable benthic habitat for scallops as a result of habitat degradation. While the cause of that degradation is being investigated, it appears not to be related to fishing pressure or fishing practices and may be more related to adverse effects of terrestrial activity. It is also uncertain whether the degradation is a temporary or permanent condition. The Challenger Scallop Enhancement Company which represents the interests of commercial fishers is committed to restore the Golden Bay and Tasman Bay fisheries to their previous productive state.
3. The current TAC/TACC was set at a time when the fishery was at its peak but as discussed below, this is not the operational catch limit.
4. The fishery has been managed on a regional basis of self-management for the past 25 years. At the heart of the management process is an annual business plan that engages all the stakeholders in the fishery – commercial, recreational and customary fishers and MPI. An MOU between the Challenger Scallop Enhancement Company and the Crown defines the management process and the need for engagement and consultation. The objective of the business plan is to produce an integrated agreed fishery management plan which is based on an annual bio-mass survey. The fishery has been divided into 12 zones for management purposes. Annual catch limits are determined by agreement with the Ministry for the zones in SCA7 based on those surveys.
5. In addition to the management plan, Challenger Scallop Enhancement Company operates an enhancement and rotational fishing programme. The company's enhancement programme typically consists of seeding a zone with scallop spat and then leaving it locked for two years or until sufficient mature scallops are available for harvesting. As a consequence of the seeding programme, commercial fishers have been able in the past to voluntarily not fish some areas of the Marlborough Sounds and leave them for the exclusive use of recreational and customary fishers.

6. Owing to spat survivability, the seeding programme is not having the success of previous years and the commercial fishers voluntarily agreed in 2010 not to fish the Golden Bay area in the hope that the grounds might show some improvement without any fishing pressure. Commercial fishers had agreed not to fish the Tasman Bay beds in 2005. Accordingly, they are now forced to fish only the Marlborough Sounds areas. Commercial activity is restricted in inner sounds by regulation. Needing to spread effort over the Marlborough beds, commercial fishing was unable to set aside beds for exclusive non-commercial fishing and no agreement between the industry and the other sectors as to fishing areas was possible last season.

The Proposals

7. There are three options provided:
 - a. Option 1: the status quo, a TAC and TACC of 827 tonnes and 747 tonnes respectively;
 - b. Option 2: a reduction in the TAC and TACC to 130 tonnes and 46 tonnes respectively; and
 - c. Option 3: a reduction in the TAC and TACC to 500 tonnes and 416 tonnes respectively.
8. The consultation document originally contained only the first two options, the third added after an approach from industry.

Option 1: The Status Quo and Option 3: Reduction of the TAC/TACC

9. Option 1 is the status quo with a TAC of 827 tonnes, a TACC of 747 tonnes, a recreation allowance of 40 tonnes, a customary allowance of 40 tonnes and an other sources of fishing related mortality ("OSFRM") of 0 tonnes.
10. The MOU between the Challenger Scallop Enhancement Company and the Crown requires an annual bio-mass survey to be undertaken each year and a business plan with catch limits for each zone. While the current TAC and TACC appear high relative to the areas now to be fished and the current catch levels, in reality the TACC, and thus the TAC, is reviewed annually based on the annual bio-mass survey. The sustainability of the fishery is thus protected not by the nominal TAC settings but more by the annual bio-mass survey. The nominal TACC settings however do impact on the expectations of the sectors when discussing the business plan.
11. That the recreation sector and the commercial sector were unable to agree last year on the respective areas to be fished is seen as relating to acceptance of the changed state of the fishery rather than a fundamental failure of the process. The management process has served the stakeholders and the fishery well in the past 25 years, dealing with both prosperous and more recently poor fishery performance. There is no need to change that process, particularly since the decision not to fish the Golden Bay beds is seen as a temporary move to allow the beds to recover and undertake appropriate research to assess and mitigate the environmental issues affecting the beds.
12. Accordingly, we see no reason to reject the status quo management systems, or the TAC settings given that they are in reality nominal.
13. Option 3 provides an alternative lower TAC/TACC setting but retains the management system that has operated for the past 25 years and will not radically change the expectations of the various sector groups.
14. Accordingly, we can support either Option 1 or Option 3.

Option 2 Reduction of TAC to 130 tonnes and TACC to 46 tonnes.

15. Option 2 proposes that the TAC should be set at 130 tonnes with a decrease in the TACC to 46 tonnes, the retention of existing 40 tonne allowances for each of the recreational and customary allowances and a 4 tonne allowance for OSFRM. In essence, the commercial sector will be required to bear the full brunt of the TAC reduction, notwithstanding:
 - a. it is not responsible for the decline, and

- b. the recreational and customary sectors:
 - i. have benefited from the scallop enhancement programme;
 - ii. will continue to fish outside the Marlborough Sounds area; and
 - iii. their catches are significantly less than the 40 tonne allowances for each sector.

16. We cannot agree that the proposal is fair, balanced, equitable or appropriate at this time. We provide a fairer alternative allocation in the following paragraphs, notwithstanding our lack of support for this Option.

17. Table 3 of the November 2012 Plenary document provides the following commercial catch information:

COMMERCIAL LANDINGS SCA7						
	Catch limits		Landings by region			Total
	TACC	MSCL	GB	TB	MS	
1990-91	-	-	154	8	66	228
1991-92	-	-	629	9	20	659
1992-93	-	-	269	247	157	674
1993-94	1,100	-	208	461	129	798
1994-95	850	70	415	394	16	825
1995-96	720	73	319	92	67	479
1996-97	720	61	123	47	61	231
1997-98	720	58	239	2	58	299
1998-99	720	120	353	78	117	548
1999-00	720	50	514	155	7	676
2000-01	720	50	303	19	16	338
2001-02	720	76	660	32	25	717
2002-03	747	-	370	39	62	471
2003-04	747	-	28	107	71	206
2004-05	747	-	20	47	51	118
2005-06	747	-	35	5	116	157
2006-07	747	-	26	0	43	68
2007-08	747	-	128	0	6	134
2008-09	747	-	76	0	28	104
2009-10	747	-	19	0	101	120
2010-11	747	-	10	0	74	85
2011-12	747	-	1	0	60	61
2012-13	747	-	0	0	48	48

18. The above table indicates that there has always been a significant level of commercial catch in the Marlborough Sounds zones. In the period from 1990 to 2013, that catch has averaged 61 tonnes, ranging from 6 tonnes to 157 tonnes. In the past decade, the average catch was again 60 tonnes. The

consultation document should have contained this information to provide submitters with all relevant and available information.

19. The latest estimate for the recreational catch of SCA7 scallops is available from the 2011-12 Large Scale Multi Species survey commissioned by the Ministry. The interim estimate is 11 tonnes. The consultation document notes that the survey is available only as background information and cannot be used to set allowances. The Marine Amateur Fisheries Working Group has reviewed and supported the methodology of the LSMS and there are no reasons to doubt the validity of the methodology or the results. The interim estimate of 11 tonnes is similar to the 2003-04 survey total of 9.4 tonnes but significantly lower than the pre-2000 estimates which are regarded as being highly inaccurate. While the LSMS estimates do not include charter boat catch or s111 catch, it is known that both charter boat activity and s111 catch have declined in recent years.
20. We have commented previously on the need for improved reporting from the recreational charter boat sector and note that the proposals relating to the inclusion of snapper and other species have yet to be enacted. Given the concentration of activity in the Marlborough Sounds, we consider that the inclusion of scallop catch should be added to the recreational charter boat catch reporting as a mandatory return.
21. Noting the need for caution in the document in using the interim estimate, given the above information, it is highly unlikely that the recreational catch totals 20 tonnes.
22. The level of customary catch is also unknown. While customary fishing under the Fisheries (Kaimoana Customary Fishing) Regulations or the Fisheries (South Island Customary Fishing) Regulations 1999 requires notification to the ministry of any fishing undertaken under those regulations, customary fishing under section 50 or section 52 of the Fisheries (Amateur Fishing) Regulations 2013 have no reporting requirements. We note that such fishing is under terms and conditions to be determined by the chief executive. We have previously deplored the low level of discipline and rigour applied to the collection of customary catch information by the Ministry and its predecessors. We see no reason for such poor low levels of performance. While there is an allowance for customary catch of 40 tonnes, we consider this to be grossly excessive and would be surprised were the total of permitted customary catch to exceed 5 tonnes.
23. We note that recreational and customary fishers are not bound by any agreements as to the areas fished. Such fishers have normally fished within the Tasman and Golden Bay areas now being avoided by commercial fishers and continued to fish those areas last season when commercial fishers avoided the areas. The SCA7 catch levels of recreational and customary fishers in those areas is not known.
24. Re-setting the TAC, TACC while maintaining the recreational and customary allowances, as proposed will change the expectations of the stakeholders in approaching the CSEC business plan and effectively undermine the regional management process. We see no reason for such a fundamental shift given the past success of the management process.
25. The 130 tonne TAC is derived from the average survey biomass of the Marlborough Sounds over the last 5 years with a 20% exploitation rate applied. While the results have not been reviewed by any working group, MPI considers the recruitment and the fishery has been stable over the period where the exploitation has been 20% or less. In the absence of any information to the contrary, we accept that a TAC of 130 tonnes appears reasonable for the Marlborough Sounds zones, noting that if the biomass survey indicates a significant variation from that level, there is provision in the Act for an adjustment of the TAC.
26. The catch information indicates that the commercial sector was catching around 62 tonnes from the Marlborough Sounds. The commercial catch has occurred over a period when the commercial sector was catching an additional 20 tonnes from the Golden Bay area. The total catch for the commercial sector over the last five years averaged 82 tonnes. We consider that that level is more representative of the current productivity of the SCA7 fishery in the absence of an enhancement programme.
27. Given what we now accept as reliable estimates of the recreational catch of SCA7 and assumed customary catch of SCA7, an aggregate estimate of catch for those sectors of 60 tonnes, as would be

derived from assuming a total Marlborough Sounds take of 126 tonnes and a commercial take of 62 tonnes, appears a significant over-estimate. We consider that a recreational and customary aggregate catch of say 25 tonnes is more appropriate, probably being an over-estimate on the basis of information available.

28. Using a commercial catch of 82 tonnes, a recreational catch of 25 t and a customary catch of 5 t, this would give a total current catch of 112 tonnes. Factoring the relative proportions up to a proposed 130 tonne TAC and allowing for a OSFRM of 10%, gives a TACC of 90 tonnes, a recreation allowance of 26 tonnes, a customary allowance of 6 tonnes and a OSFRM allowance of 8 tonnes. We consider that if the Minister determines to use a TAC of 130 tonnes, such an allocation would be fairer and more equitable, reflective of current recreational and customary catch levels and would provide commercial with a fair allocation of the available TACC. More importantly, it would provide all stakeholders with a fairer expectation of allocations to be used in the management process and preparation of the business plan.
29. We note that the only catch component that can be managed is the TACC. Recreational and customary catches are not managed and their catch might be expected to vary in accordance with changes in abundance. The commercial sector practically carries all the risk associated with a need to change the TACC as a result of the bio-mass survey.
30. We note that the consultation contains no reasoning as to why the recreational and customary catch allowances should not be reduced to parallel the decline in the commercial TACC setting. Forcing the TACC to carry the full impact of the TAC reduction implies that the decline is solely due to the actions of the commercial sector. We reject that proposition.
31. In the event that the level of recreational catch exceeds the above estimates and the commercial catch is constrained to a low level, we consider there would be a need for the Ministry to take action to constrain the recreational catch. At present, the daily bag stands at 50 scallops per person per day. Given that each recreation vessel dredging for scallops will have at least two persons on board, that means a daily bag limit of at least 100 scallops. Where charter boats have a number of clients on board, the daily catch limit will in some circumstances approximate that of a commercial vessel's daily catch. We fail to see any equity or balance in such an outcome.
32. We consider the proposal to reduce the TAC/TACC is inappropriate at this time. Such a proposal would only be appropriate if the Tasman and Golden Bay habitats were so degraded as to provide no scallop population and the stakeholders had abandoned the fisheries. That is not the case. The scallop company has research underway to assess the cause and impact of the degradation as a means to identify and remedy the problem. They have not abandoned their intent to assist the recovery of the fisheries. A reduction in the TAC is therefore not appropriate.

Bio-Mass Survey

33. While the biomass survey may currently be structured to provide a target confidence level across the Tasman Bay, Golden Bay and Marlborough Sounds fisheries, given the dependence on the Marlborough Sounds fishery and the environmental and fishing pressure impacts on that area, we consider it appropriate that the biomass survey plan should be reviewed to ensure higher levels of confidence in the biomass estimates for the Marlborough Sounds area to protect the sustainability of that fishery. The survey plan could be re-addressed in the future when fishing in Golden and Tasman Bay becomes possible.

Yours sincerely



Tom Clark
Policy Manager

R S Sellers

28 January 2014

Shellfish Submissions
Fisheries Management – Inshore Fisheries
Ministry for Primary Industries
PO Box 2526
WELLINGTON 6140

REVIEW OF SHELLFISH SUSTAINABILITY MEASURES FOR 1 APRIL 2014

This entire review is totally flawed and biased in my opinion. There are a number of other issues affecting scallops that have no relevance to commercial scallop fishing. I have fished scallops since 1972 inner out outer Pelorus Sound, inner and outer Queen Charlotte, Croisselles, Tasman and Golden Bays, Chatham Islands (developed the scallop fishery there) and Whitianga, Coromandel. Scallops need clean, fresh water and semi-enclosed areas and unobstructed to survive and thrive. Most of those habitats have been taken away by run off from forestry and farming choking them, salmon farming and the excrement and fish food pollution

And mussel farming and the break in the water flow, excrement and taking of fighter plankton out of the water. Scallops in the inner Pelorus Sound have been starving and dying for years. Total area of aquaculture is ever increasing. This is the reason Golden Bay is virtually useless for scalloping anymore, Tasman Bay is heading that way and in the Sounds scallops are only on the outer edge. There has been no compensation to existing scallop licence holders and existing users for this. The ocean cannot simply support the aquaculture expansion that is going into these areas, so we the scallop fishermen have been dispossessed. The Maoris have fought the government on this stand and received 20 per cent of all new and existing aquaculture permits issued. They own also 20 per cent of our fishery which was never there. The government allocated them 170 tonnes of scallop quota that was never there diluting the value of our quota even more. The simple answer is to allocate the scallop quota holders the spat collecting site in Tasman and Golden Bays which is already penciled in as compensation (1000 hectares I believe) but not legally owned by us. We have fought councils and government and spent millions when we had a productive scallop fishery and we had the funding to do so. Government has a clear policy to support aquaculture and it needs to tidy up things for other users that have been dispossessed as a result of this. There has been some progress made with the Ringroad Consortium and they have allocated 170 hectares to the scallop quota holders so they are unable to process their water space application in Golden Bay. There are numerous other applications pending for more water space which I am sure will all get approval eventually. There seems to be a disjointed approach to dealing with other users. This could be addressed easily by having a meeting of other water space users and getting some consensus to a way forward. I am guessing none of this will happen so let's look at Option 1 and Option 2.

We all know full well when a TACC is reduced it will never be given back. So you want us to take a 93 per cent cut with no compensation and say nothing about it. By your own admission Maori customary harvest has been two tonnes over last five years. Most of this was caught by commercial scallop boats on their behalf, in fact I have caught some myself. So says the government let's allocate them 40 tonne because they had two caught by commercial boats, but let's remember they have already been allocated 170 tonne to catch commercially. Then we have recreationals at 40 tonne, but you really have no clue as to what is being caught by either. The only survey you have is the one paid for by commercial scallop fisherman and done by Challenger Scallops to your standards. There have been

no survey done in Tasman and Golden Bays because we do not have the money for this. Queen Charlotte Sound is only 4 per cent surveyed as that is the agreed fishing area.

Obviously MPI is determined to tax us off the face of the earth. We are now paying \$4.50 a kilo levy for the right to catch scallops. This is more than Paua, crayfish the most valuable fisheries in NZ. The value of our quota is minimal, decreased 80 per cent in last 10 years and the government still does not address the problem that they have sold the seabed to aquaculture users with no compensation to scallop quota holders.

I believe MPI of 150 tonne is about right but I do not trust the government to do the right thing so I would rather stick with the status quo and take my chances in the hope that some disease might attack all the mussel and salmon farms, all of those assets will be worthless like ours has, and nature will take over and the scallops will grow back just like they have done for millions of years before aquaculture took over. Do the right thing and allocate us that 1000 hectares in Tasman Bay and Golden Bay as a scallop spat collecting site or any other purpose we think fit and your problem may disappear.

Yours faithfully

A handwritten signature in black ink, appearing to read 'Rex Sellers', written in a cursive style.

REX SELLERS

From: Hugh Shields
Sent: Sunday, 2 March 2014 9:40 p.m.
To: FMSubmissions
Cc: secretary@nzsportfishing.org.nz
Subject: Scallop Submission
Attachments: SCA7-submission-NZSFC-Feb14.pdf

Submission on the Sustainability Measures for Southern Scallops SCA 7 for 1 April 2014

I support the attached LEGASEA – New Zealand Sports Fishing Council submission.

The commercial harvesting of scallops in the top of the south region should be suspended for 4 or 5 years or until there are genuine signs that both the benthic habitat and scallop stocks have regenerated.

The environmentally destructive harvesting practice of dragging dredges through the life giving benthic habitat of the fragile ocean ecosystem is so archaic as to have no place in a modern, well managed fishery.

There needs to be an active program of benthic habitat enhancement such as the planting of sea grass, funded and carried out by MPI and the commercial sector.

There needs to be an active programme of re-seeding of spat, funded and carried out by MPI and the commercial sector. Past re-seeding attempts have failed possibly due to a lack of benthic habitat, such as sea grass, for the young spat to attach to.

ALL dredging, both commercial and recreational must cease.

Future commercial and recreational harvesting must be by hand gathering only, the same as for paua.

There will be an added cost to the consumer resulting from this labour intensive harvesting method, however, consumers are becoming increasingly environmentally conscious and want to know where the produce they are eating came from and whether it was harvested in an environmentally friendly and whether the resource is being managed in a sustainable manner. MPI and the commercial industry will need to develop a comprehensive marketing strategy to get the consumer to pay a little bit extra in exchange for sustainable practices. Imagine if the restaurant menu had the words, "All scallops served here are harvested by hand gathering only, which is both environmentally friendly and sustainable." The discerning dinner would happily pay an additional \$5 for that label and it helps secure New Zealand's "*Clean green image.*"

Thank you for considering this submission.

Regards,

Hugh Shields

From: chris simpson
Sent: Wednesday, 19 February 2014 1:22 p.m.
To: FMSubmissions
Subject: Scallop submission SCA7

Hi. I wish to lodge a submission on the scallops for Marlborough Sounds. I go out scallop fishing maybe 4 times during the scallop season in Okiwi Bay. This is a natural bed and so far has held up but the time is coming when it will not.

1. I think that Okiwi Bay Ketu and Ships Cove in the Marlborough Sounds should be set aside for recreational only as they are all natural seeding beds.
2. If these areas were left for recreational only it would be more safer for boaties with small craft.
3. Make the size 100m not the 90mm as now. Bigger scallops produce more spat and it gives them a chance to multiply.
4. Leave the number at 50 scallops per person but a boat limit of 200.
5. No chits for taking large amounts for birthdays, weddings etc. This is just greed.
6. Have a no scallop day like they did carless days. Say a Wednesday no scalloping. Thus that makes it one seventh less scallops taken.

Thank you

Christine Simpson



Review of sustainability measures for southern scallops (SCA7)

February 2014

Submission is on behalf of Soundfish Incorporated

**Marlborough Sounds Integrated Fishery and Marine Environment
Management Group**

Introduction

- 1) Soundfish is an Integrated Fishery and Marine Environment Multi Sector Management Group that focuses on the fishery and marine environmental issues of the Marlborough Sounds. We are a community-based group having representatives from customary, commercial and recreational interests. Further information can be found at www.soundfish.org.nz

Concerns

- 2) Soundfish (SF) supports the review of the SCA 7 fishery as it is a concern of SF as to how the MS is now the only northern scallop fishery of any significance; all the past data and management principals are taken from a now collapsed fishery in Tasman and Golden Bay and applied to a very different environment which must be taken in to account when assessing the SCA 7 TACC.
- 3) Given the history of the SCA 7 fishery it is very obvious that the harvesting and management practice in Tasman and Golden Bay has not been as successful as they first promoted, whether the problem stemmed from a biological, environmental influence one could only add that dredging may have spread the problem that they currently experience and if that is the case caution must be placed on the manner in which the MS is commercially harvested.

Recommendations

- 4) SF recommends that the management group/MPI should consider setting a bay aside where no dredging occurs which includes recreational dredging, this Bay can be harvested by hand picking only and monitored over a period of years to compare the SCA biomass and the health of the seabed. This is a management system that has been adopted in areas of the north eastern USA state of Maine with great success and has added 3x the value for the commercial harvesters, biomass is strong, habitat is back to pristine.
- 5) **SF Supports:**
**Option 2:- TAC 130t TACC 46t Customary 40t Recreational 40t
Mortality 4t (all meat weight tonne)**

- 6) SF supports the recommendations of the Marlborough Recreational Fishing Association and strongly supports a change in the management practice of the CSEC to have a greater recognition of and the importance of the MS as not being the same environment as the Tasman and Golden Bay fishery or ecosystem. MS is not to be made the last place a scallop has been harvested from.
- 7) SF acknowledges the commercial utilisation of the MS but strongly advocates that commercial must be responsible in the practice they bring in to the MS environment both vessels and management. If a TACC cannot be managed in the area that has been set aside for commercial harvesting in the MS then consideration must be given to rest the area so the biomass can be sustainably managed.

On behalf of the Soundfish Committee



L J Wichman
Interim Chairman
wichy@clear.net.nz

**Submission to the Ministry for Primary Industries
Review of Sustainability for Southern Scallops (SCA 7)
January 2014**

Submission prepared by Peter Brierley for the SMW Consortium

Contacts:

Peter Brierley

p.brierley@xtra.co.nz

027 433 5421

or John Wilson

c/- Sealord Group Limited

PO Box 11, Nelson 7040

jaw@sealord.co.nz

027 248 8064

20 February 2014

SUMMARY

SMW submits that the MPI's position paper is an accurate picture of the state of the SCA7 fishery.

We strongly endorse Option 2 and submit that a continuation of the current management regime (Option 1) does not meet the purposes of the Act and undermines the integrity of the entire QMS. We submit that there is a strong case for the removal of SCA 7 from the QMS as an alternative to option 2

SMW CONSORTIUM

SMW Consortium thanks MPI for their invitation to comment on their discussion paper. SMW is a consortium of commercial entities which came together to promote mussel farming in Tasman District.

SMW includes Sealord, MacLab, Wakatu Incorporation and Westhaven Shellfish.

SMW has a particular interest in the scallop fishery as the Challenger Company has been the principal objector to allowing for an expansion of mussel farming in Area 7.

SMW may have to pay some compensation to Challenger if it is deemed that part of the new mussel area exceeds the 5% threshold. It is therefore very important to us that the QMS is working as the Act intended, as the aquaculture compensation provisions are based on the assumption that the TACC fairly reflects the actual commercial catch.

SUSTAINABILITY

The Fisheries Act is designed to manage fish species in a sustainable manner, and for QMS species, the intent is to manage the risk of over fishing by setting TACCs that reflect the sustainable catch.

There can be an issue in short lived species where some flexibility for in-season management is desirable, and we note the ability for in-season adjustments incorporated in MPI's preferred option. It is apparent that the "hands off" management of the last 15 years has contributed to the decline of the fishery.

In terms of the legislation it is clear that the legal options for future management are either Option 2 or the removal of this species from the QMS.

THE QUOTA MANAGEMENT SCHEME

There are many reasons why species managed under the QMS need to be managed with care and that the TACC must be set at a sustainable level of harvest, including;

1. The integrity of the entire QMS relies on setting of scientifically accurate TACCs. If some species have TACCs of 10 times the sustainable catch the entire scheme is open to question.
2. The sustainability of species such as scallops requires active intervention by the regulatory authority when areas of the fishery are in marked decline.
3. As the MPI Review paper records, the scallop fishery has collapsed in Golden Bay and Tasman Bays. In the absence of sustainable yield, there is no reasonable argument for including any allowance for catch from these areas in setting the TACC.
4. The new Aquaculture legislation has mechanisms to allow for the interface between aquaculture and quota species. The legislation was developed on the assumption the quota scheme is being used to manage quota species by setting scientifically accurate TACCs that, as accurately as possible, reflected the actual sustainable catch. The compensation provisions, in particular, rely on this assumption. To have a fisheries quota set at 10 times the sustainable catch increases the possibility of distortions in the use of the compensation provisions. SMW notes that Challenger has advised MPI that it is willing to continue to pay an additional \$185,000 (approximately) per year in levies if the quota is not adjusted.
5. Quota represents a major asset on the books of most fishing companies, and managers and lenders (amongst others) rely on the integrity of the quota setting mechanisms in the QMS. Systematic overstatement of quota assets threatens to undermine the reliability placed on the QMS to the potential disadvantage of the entire industry.

RECOMMENDATION

SMW strongly supports the adoption of Option 2. We see the only viable alternative as the removal of SCA 7 from the QMS.

**Further Submission to the Ministry for Primary Industries
Review of Sustainability for Southern Scallops (SCA 7)
Additional option (Option 3) notified 20 February 2014**

Submission prepared by Peter Brierley for the SMW Consortium, 10 March 2014

Contacts:

Peter Brierley

p.brierley@xtra.co.nz

027 433 5421

or John Wilson

c/- Sealord Group Limited

PO Box 11, Nelson 7040

jaw@sealord.co.nz

027 248 8064

This submission is additional to the SMW submission lodged on 21 February 2014 and should be read in conjunction with that earlier submission.

Summary

SMW is strongly opposed to Option 3 as set out in MPI's letter of 20 February 2014 emailed to John Wilson of SMW on 25 February 2014. Option 3 will not meet sustainability requirements and the justifications provided for a TACC of 416 tonnes do not appear to be lawful. SMW requests the withdrawal of Option 3.

Legal

SMW has sought legal advice on the "Option 3" proposal, and this is attached as a part of this submission for your information.

Process

It seems extraordinary to introduce a third option for consultation and notify submitters of this after the submission period was meant to have closed.

Discussion

We remind MPI of the 2013 Scallop 7 plenary (see page 411) where the probability of the current TACC causing biomass to remain below, or decline below limits was greater than 90%. Option 3 would not change this.

The governance arrangements currently in place have not prevented the decline in the fishery. It is essential that MPI takes a more active role in the management of the fishery, in particular by setting realistic catch limits.

SMW is strongly opposed to Option 3 and suggests that MPI revert to its original well argued paper supporting Option 2.

03 March 2014

The Chief Executive
Ministry of Primary Industries
P O Box 2526
WELLINGTON 6011

By email: FMSUBMISSIONS@MPI.govt.nz

**RE REVIEW OF SCALLOP SUSTAINABILITY MEASURES – SUBMISSIONS
BY CHALLENGER SCALLOP ENHANCEMENT COMPANY LIMITED**

Background

1. I act upon behalf of the Challenger Scallop Enhancement Company Limited and am authorised by the Directors of the Company to make a submission in relation to the proposals in relation to TACC levels in the Scallop 7 fishery.
2. We thank you for the opportunity to comment on the review of the sustainability measures and more particularly the letter of the 20th of February 2014.
3. As part of the submission process, I have read the initial discussion paper but do not need to make any detailed submissions in relation to that given the amendment to the general proposals set out in the 20th February 2014 consultation letter.

Options

4. Challenger has reviewed the Option 1 (status quo) and would prefer to maintain the status quo to enable the continued operation of the fishery in a sense it has been operated since effectively 1989. MPI has detailed information on that operation and the Memorandum of Understanding, and I need not address it further.
5. However, Challenger recognises the obligations incumbent upon the Minister as is set out in the discussion papers and accepts that the proposal in Option 3 (new) reflecting a TAC of 500 tonnes and a TACC of 416 tonnes with appropriate Maori and recreational interests is an appropriate level for the fishery recognising the interests of both the fishery, its continued enhancement, and the interests of commercial stakeholders.
6. Challenger agrees with the Option 3 analysis contained in the 20th of February 2014 letter to stakeholders, and in particular supports the view

Tracy Stallard - Director
Belinda Clark - Registered Legal Executive, Fellow NZILE
Anna O'Toole - Registered Legal Executive
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that the particular option reflects a proper and responsible balance between the obligations incumbent upon the Minister and the interests of the commercial stakeholders to further develop and enhance the fishery.

7. There is a significant risk in relation to both the Memorandum of Understanding and the Self Management regimes active in this fishery, together with the future enhancement of the fishery, if the Option 2 status was adopted, or any other option that is submitted that reflects an even lower TAC and subsequent TACC.
8. The future building of the fishery is an important imperative, and Option 3 recognises the importance of the future of the fishery and will ensure continued enhancement operations.

Responsible Approach

9. As such, the "Option 3" reflects a responsible approach. There are early indications this year of an excellent spat fall and while it is early on in the process to indicate how that will reflect in the fishery, constraints imposed upon the fishery that are too tight, will mean that the ability to future manage the fishery will be significantly restricted.
10. It is submitted that in relation to self management it is of critical importance to maintain credibility in relation to self management of fisheries and the Memorandum of Understanding between the parties over a number of years.

Summary

11. I have not sought to highlight all of the background in relation to the scallop fishery, as it seems to me that Option 3 reflects an appropriate balance between the respective needs of commercial stakeholders and the Crown's obligations under the Fisheries Act.
12. Submissions received in respect of a proposed zero TAC are irresponsible, fail to recognise interests of commercial or Iwi stakeholders (although I do not purport to speak for them) and fail to recognise the input of commercial fishers over the years in relation to the enhancement of this iconic fishery.
13. If additional information is needed, please advise.

Yours faithfully

STALLARD LAW LIMITED



Tony Stallard

Email: tony@stallardlaw.co.nz

From: iain storrie
Sent: Tuesday, 4 February 2014 2:52 p.m.
To: FMSubmissions
Subject: rock lobster and shellfish quotas

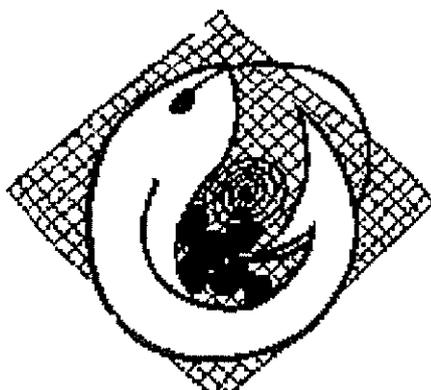
Dear sir/madam,

I think you are doing a great job and I think the quotas are probably adequate but I think the policing of the quotas should be increased and the penalties should be higher and enforced.

Regards, Iain.

Tasman and Sounds Recreational Fishers' Association (Inc)

TASFISH



**Submission
February 2014**

**Review of sustainability
Measures for southern scallops (SCA7)**

Inshore Fisheries Management
Ministry for Primary Industries
P O Box 2526
Wellington 6011
FMsubmissions@mpi.govt.nz

Introduction

1. The Association can be contacted through President, Martyn Barlow, P O Box 3399 Richmond, Nelson, phone (03) 540 3545, email mbarlow@tasmanbay.co.nz
2. TASFISH is committed to the sustainable use of our marine resources in the Top of the South Island and good management of our marine ecosystems.
3. Tasman Bay Amateur Marine Fishers' Association was formed in the 1980's in response to proposals to introduce large scale farming of scallops in the Croisilles Harbour a popular recreational fishing area on the coastline north of Nelson city. Since that time it has been renamed TASFISH and become involved in many fishery allocation and management issues affecting all the major species of interest to recreational fishers.
4. This has included being part of many of the species specific working groups set up by MPI, we have worked closely with both MPI and The Challenger Scallop Enhancement Company in ongoing management and annual allocations within the scallop fishery. We were involved in the attempts to set up multi sector Fisheries Plans for in Area 7 and we have members on the FMA7 recreational forum.
5. We have been regularly involved in space allocation issues for marine farming and in particular limiting their placement over habitat of recreationally important species. This has included many hundreds of submissions to Marlborough District Council on Marine Farm Resource Consent applications and also to MPI on Marine Farming Permits on how these farms affect fish or fishers. Our toughest case was taking MPI to judicial review over one permit. We recognise the importance of suitable habitat for all species and accept the need for careful management of marine ecosystems.
6. Membership of TASFISH is both individual and affiliate. While individual membership is relatively low at less than 50 many of the fishing and boating clubs in the Top of the South Island, from Golden Bay to Nelson and the Marlborough Sounds, affiliate to TASFISH along with several ratepayer groups particularly in the Marlborough Sounds. We represent a membership in excess of 1000 members and TASFISH is itself affiliated to the New Zealand Recreational Fishing Council and the organisation is recognised as a consultative body representing amateur fishers by MPI.
7. TASFISH participates as fully as possible for a voluntary organisation in the annual management rounds and in addition we have made submissions on many of the recent Bills before Parliament relating to our marine systems.

Southern Scallops (SCA7)

8. The Ministry of Primary Industries (MPI) proposes the following options in reviewing the Total Allowable Catch (TAC) and Total Allowable Commercial Catch (TACC) for scallop (SCA) stock in the Challenger Fisheries Management Area 7 (FMA7).

Proposed options for the TAC, TACC and allowances for SCA 7					
	TAC (t)	TACC (t)	Customary Maori (t)	Recreational (t)	Other sources of fishing related mortality (t)
Option 1 (Status quo)	827	747	40	40	0
Option 2	130	46	40	40	4
Option 3 ("Talleys" option)	500	416	40	40	4

9. TASFISH supports option 2.
10. TASFISH also supports the submissions made by the Marlborough Recreational Fishers Association and the Pelorus Boating Club.
11. The SCA7 fishery is a highly regarded and valuable recreational target fishery and TASFISH acknowledge the importance industry has played over the years in the management of this fishery with enhancement, biomass surveys and harvest strategies such as rotational fishing that has ensured access for the recreational sector.
12. We are dismayed that the industry and recreational sectors were unable to agree on a harvest strategy for the fishery for the 2013-14 fishing year, particularly given the recent poor performance of the SCA7 fishery.
13. The collapse of the fishery in Tasman and Golden Bays and the poor survival rates of spat released for enhancement is alarming for all parties and fisheries managers should be considering not only supporting Option 2 in their final advice paper to the Minister but also implementing management measures that protect the seabed in these bays from destructive bottom contact fishing method across all stocks.
14. These bays are extremely important spawning areas for other species and unless the benthic habitat receives some protection from dredging, bottom trawling and sedimentation that will allow recovery from its altered state other species could be at risk in the long term.
15. TASFISH agrees with MPI in that Option 2 better addresses the requirement under s 14 of the Act to set a TAC that is sustainable. Option 2 reflects the recent poor performance of the fishery while better meeting the objective within the draft National Fisheries Plan for Inshore shellfish of protecting the spawning stock by limiting catch to recent low levels.

16. TASFISH acknowledges that reducing the TAC is only one step in the rebuild of the SCA7 stock and therefore submits that any other management measure discussions it is imperative the recreational sector has input and we request representation into all future management decision making.
17. The existing MOU for management of the fishery has not been adhered to, measures such as rotational fishing for example ceased several years ago and when industry do not honour their obligations, then measures and procedures must be available for non-industry sectors to ensure the integrity of any agreement upheld in the best interest of all stakeholders and the long term sustainability of the fishery.
18. In supporting Option 2 TASFISH submits that MPI must ensure that fine scale management is implemented to manage annual harvest and protect important recreational areas such as Croisilles Harbour, Ketu Bay and Queen Charlotte Sound from being overfished by industry.
19. While there may be a degree of spatial separation among sectors there is nothing to legally ensure spatial separation is maintained and if the fishery continues to decline spatial conflict is a very real risk; furthermore there is no provision to prevent all of the TAC being taken from one area such as Queen Charlotte Sound.

Consultation

20. TASFISH objects to MPI's tight consultation period where we were given only 18 working days to respond to the Options proposed for SCA 7 and other stocks. It is beyond unreasonable to expect recreational volunteers to respond with adequate information to inform the Minister's decision.
21. To further compound the situation on 21st February 2014 the day the SCA7 consultation process was to close we received a letter from MPI dated 20th February 2014 advising a 3rd option has been added to the SCA7 IPP and that consultation has been extended by 10 days and will now close on 3rd March 2014.
22. The 3rd option is clearly the "Talleys" option after MPI and the Minister have undoubtedly been lobbied so hard and so extensively that the quota holders now have their commercial interests put ahead of the long term sustainability of the SCA7 fishery.
23. MPI claims that based on initial reactions they are "concerned that this paper may not have been sufficiently clear on the strength of MPI's willingness to consider options between the status quo TAC 827t (Option 1) and a reduced TAC of 130t (option 2).
24. Option 3 "Talley's" option places greater weight on the economic consequences of reducing the TAC than option 2. TASFISH submits that economic consequences are separate and exclusive from sustainability issues and the short and long term sustainability of the SCA7 fishery alone should be determining the Minister's decision.
25. This consultation process shows no genuine regard for the public's interests. The public's interest and wellbeing are largely ignored or passed over and with the introduction of "Talleys" option the sense of frustration and bewilderment with regard to the consultation time period has been amplified.

26. Given MPI's strong willingness to consider options between the status quo of Option 1 and Option 2, as well as other management measures the truncated timeframe is even more frustrating as it restricts our ability to fully explore and submit on other options.
27. TASFISH submits we are tired of MPI using short timeframes for submission preparation and consultation so offensively. We question the legality of this process and whether it complies with the Court of Appeal's definition of effective consultation –
- “Consultation must allow sufficient time, and a genuine effort must be made. It is a reality not a charade. To consult is not merely to tell or present. Nor, at the other extreme is it to agree. Consultation does not necessarily involve negotiation towards an agreement, although the latter not uncommonly can follow, as the tendency in consultation is to seek at least consensus. Consultation is an intermediate situation involving meaningful discussion.....Consulting involves the statement of a proposal not yet fully decided upon, listening to what others have to say, considering their responses and then deciding what will be done.
- “Implicit in the concept is a requirement that the party consulted will be (or will be made) adequately informed so as to be able to make intelligent and useful responses. It is also implicit that the party obliged to consult, while quite entitled to have working plan in mind, must keep its mind open and be ready to change and even start afresh. Beyond that, there are no universal requirements as to form.”⁽¹⁾”
28. This current process has compromised our ability to offer our members and affiliates and TASFISH supporters the opportunity to review and provide input to our draft submission.



Martyn Barlow
President - TASFISH



Tennyson Inlet Boat Club Inc

P.O. Box 1090 NELSON

Submission on the "Review of sustainability measures for southern scallops (SCA 7)"

MPI Discussion Paper No: 2014/07

Introduction

- 1 The Tennyson Inlet Boat Club Inc (TIBC) welcomes the opportunity to submit on the "*Review of sustainability measures for southern scallops (SCA 7)*".
- 2 TIBC is an incorporated society that was formed in 1958 and whose membership is made up of 184 families that predominately live or have holiday baches in the Tennyson Inlet area of the Marlborough Sounds. The Club owns and maintains launching ramps, swimming platforms and jetties in Duncan Bay and Penzance Bay. It also plays a leading role in representing and generating responses on:
 - I. Legislative and regulatory proposals affecting the recreational fishing in the Pelorus Sound area,
 - II. Advocating for the sustainable utilisation of fisheries resources;
 - III. Active participation in fisheries management initiatives that are in the best interests and for the benefit of the members of TIBC and the wider recreational fishing sector.

Our Interest

- 3 – TIBC's interest in the "Review of sustainability measures for southern scallops (SCA7)" is twofold:
 - The decreasing commercial catch rate in the SCA7 fishery is alarming and a vastly improved management regime needs to be implemented to halt the decline in this fishery.
 - The health of the scallop resource and the social & cultural benefits that scallop fisheries provide are crucially dependent on them being well managed and maintained at a sustainable level.
- 4 - TIBC therefore support Option Two of the MPI Discussion Paper No: 2014/07

Yours Sincerely

Roger Smith

Commodore – ph 0273663195 solarplus2@paradise.net.nz

4 March 2014

SCA7 Submissions
Fisheries Management - Inshore
Ministry for Primary Industries
P O Box 2526
WELLINGTON 6140
FMSubmissions@mpi.govt.nz

Tena Koe

RE: MPI Proposals for SCA7

Introduction

Te Ohu Kaimoana Trustee Ltd (Te Ohu) welcomes the opportunity to submit on the Ministry for Primary Industries (MPI) Initial Position Paper (IPP) proposals for SCA7.

MPI Proposals

MPI is currently consulting tangatawhenua and stakeholders on proposals to adjust the SCA7 TAC. The proposals are set out in Table 1.

Table 1: Proposed TAC, TACC, and allowance options for SCA7 (tonnes, meatweight)

Options	TAC (t)	TACC (t)	Customary (t)	Recreation (t)	Other sources
Option 1 (status quo)	827	747	40	40	0
Option 2	130	46	40	40	4
Option 3	500	416	40	40	4

Our Position

Te Ohu:

1. Recommends option 1 - to maintain the status quo
2. Recommends the Minister endorse a working group comprising Challenger Scallop Enhancement Company (CSEC), Iwi and recreation, to develop a scallop plan for the Marlborough Sounds, and the Nelson and Golden Bay areas
3. Recommends the Minister endorse the working group doing a review of the current TAC and cost recovery issues
4. Recommends the Minister provide immediate financial relief to quota owners by only charging levies on the previous year's catch.

Who are we?

The purpose of Te Ohu is to advance the interests of Iwi individually and collectively, primarily in the development of fisheries, fishing and fisheries-related activities. Amongst other things, this purpose is intended to:

- a) Ultimately benefit the members of Iwi and Maori generally
- b) Assist the Crown to discharge its obligations under the 1992 Fisheries Deed of Settlement and the Treaty of Waitangi and
- c) Contribute to the achievement of an enduring settlement of the claims and grievances referred to in the 1992 Fisheries Deed of Settlement.

In developing this submission we have maintained open dialogue with Iwi having interests in the SCA7 fishery.

This submission does not seek to take away the right of Iwi to make their own submissions on the SCA7 proposals. Indeed we encourage Iwi to make their own submissions on such important issues.

Support the status quo.

This IPP has in the main resulted from the Challenger Scallop Enhancement Company (CSEC) being unable to reach agreement on how the Marlborough Sounds should be managed in the 2013-14 fishing season. The recreational sector did not want a commercial season in 2013/2014 while the commercial sector and Iwi did. The MPI response to the situation has been the release of an IPP. We have been working closely with Iwi who do not support this approach for a number of reasons.

1. The approach and the proposed solutions are considered to be extreme. This is the first time in 14 years that the CSEC has not been able to reach an agreement and as far as we can tell no alternative options were explored. In the first instance MPI should have worked with CSEC to resolve the problem.
2. MPI have ignored the Memorandum of Understanding they have in place with CSEC and in doing so, is not recognizing the value the company brings to the management of the SCA7 fishery. If MPI continues with this process, it will destroy economic, cultural and

recreational value and undermine the systems and processes that are in place for managing the fishery.

3. The Fisheries Act provides for alternative ways of setting the TACs. In this case, because of the management system that is in place, there is no need to make any changes to the TAC. CSEC have mechanisms to shelve ACE and to put in place other management measures if and when they are required.
4. The most appropriate action MPI could have taken was to support the matter being put through the disputes resolution process set out in the MOU. But unfortunately this did not occur.
5. Consultation should have been done much earlier than November 2013 and the potential implications of the proposals on Iwi clarified. We note the recent treaty settlements with local Iwi and the Crown's obligations to treat Iwi fairly and in good faith.

Moving Forward

We consider it very important to develop plans for the Marlborough Sounds and the Nelson Golden Bay areas that can be agreed by Iwi and other stakeholders. The poor state of the fishery in the Nelson/Golden Bay areas is obvious and clearly we need to do more to ensure land and water activities are no longer contributing to the problem. In the Marlborough Sounds we are concerned about the declining CPUE and the factors that may be driving this trend.

In the immediate future we would like to see the Minister endorse a working group comprising members of CSEC, Iwi and the recreational sector. Te Ohu would be willing to be part of this group. The group could be tasked with the job of developing plans for the SCA7 fishery within a short timeframe, and it could review the need for a TAC adjustment. This information could then inform a decision on whether there is a need for any formal TAC or other regulatory adjustments in the future.

Government Levies

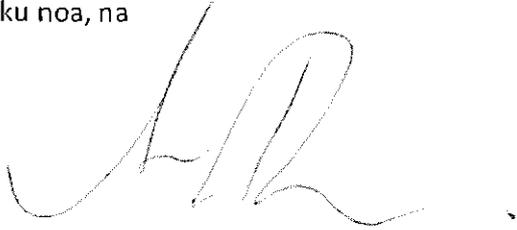
We would like the Minister to consider alternative and fairer ways of levying industry in these situations. MPI's response to this problem is to drop the TACC. But as noted earlier this ignores the CSEC and erodes the value it generates for all fishers. We recommend that the Minister endorses this matter being reviewed in the working group, as proposed above. We also recommend the Minister consider providing immediate financial relief to quota owners by only charging levies on the previous year's catch.

Conclusion

We have chosen not to comment on a range of matters discussed in the IPP because it will be more constructive to deal with them via the CSEC and the proposed working group. In any case we do not wish to pre-empt any decisions that could be made by CSEC in the future.

If you would like to discuss this submission please do not hesitate to contact me on 049310512 or 0212275289.

Naku noa, na

A handwritten signature in black ink, appearing to be 'AR', with a small dot at the end.

Alan Riwaka
Senior Fisheries Management Advisor

From: Warwick Walbran i.
Sent: Monday, 3 March 2014 9:05 a.m.
To: FMSubmissions
Cc: secretary@nzsportfishing.org.nz
Subject: NZSFC Scallop 7 submission

Follow Up Flag: Follow up
Flag Status: Completed

I support the submission of LEGASEA – NZ Sport Fishing Council on SCA7.

Warwick Walbran

From: Matt Watson [mattwatson@thefishingshow.co.nz]
Sent: Thursday, 6 March 2014 11:46 a.m.
To: FMSubmissions
Cc: Mike Sabin
Subject: SCA7 Submission

To Whom it may concern,

Below is my submission on the management of SCA7. I am disappointed to hear that such an important management decision has such a short submission period, and the last minute introduction of an option to set the quota at 416 tonnes seems to be a very cynical attempt to sneak it past the the ever more organised and environmentally conscious recreational fishers of New Zealand.

The late introduction of the option to set the commercial quota at 416 tonnes is unsustainable. Last seasons commercial catch was just 43 tonnes, clearly indicating that the stocks are depleted. To suggest a quota of 416 tonnes effectively makes it an open and uncapped fishery as it is set almost ten times more than what the fishermen are currently capable of catching, and there is no science to suggest that the scallop biomass can rebuild in one season. Even the suggestion makes a mockery of the QMS and will have a negative impact on the perception of fisheries management, even though the QMS is working effectively in many fisheries.

Matt Watson SCA 7

I would like to see a more conservative quota allocation, or even a temporary closure to the fishery to allow it to rebuild. The fishery should become a hand take only fishery as is the case with Paua. The damage that dredging does to the fragile benthic eco system is well documented. It ruins habitat not only for scallops, but for several of our most important commercial and recreation fishes during their juvenile stages.

Dredging is also a wasteful method of extraction, many scallops are wasted with dredging, crushed and left behind on the sea floor. There is no question that the best move for the marine environment and the sustainability of the scallops is to phase out the use of dredges for commercial and recreational.

A practical step would be to ban all recreational and commercial dredging in waters less than 35 meters deep.

- It is these shallower waters that have the most sensitive habitat in particular seagrass that is that is vital in the juvenile stages of shellfish and our valuable inshore fish species.
- The shallow waters are more accessible for safe extraction by recreational divers, and potentially commercial divers.

The environmental benefits of this move to sustainable harvesting and conservative quota allocation are obvious and significant. But the economic benefits, particularly long term should be considered. Consumers are moving toward environmentally friendly and sustainable options, there is potential for hand gathered scallops to be marketed both domestically and international, adding value to the NZ pure brand. And an guaranteed abundant stock of scallops every year that are harvested rather than having to hunt down the shellfish in a depleted fishery. This will create a high value, and highly anticipated season like the Bluff oyster season, and fishers will have less overheads travelling shorter distances to make their annual harvest. There will also be greater certainty of supply, not just for the fishermen, but for the wholesale and retail chains.

It is time we consider a long term approach to the management of our fisheries. Fisheries around the world are being depleted, and demand for protein is increasing, so it is basic economics, if we conserve our stocks now, we control the market in the future.

Lastly the minister should consider the social benefit of having an accessible and abundant scallop fishery. It makes people happy to be able take a few scallops home to feed their family and friends, it is part of what makes us kiwi's. please consider the negative effect to every day kiwi's if the Scallops ion SCA 7 are over fished.

Matt Watson

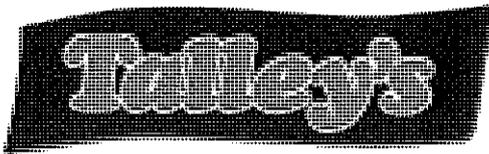
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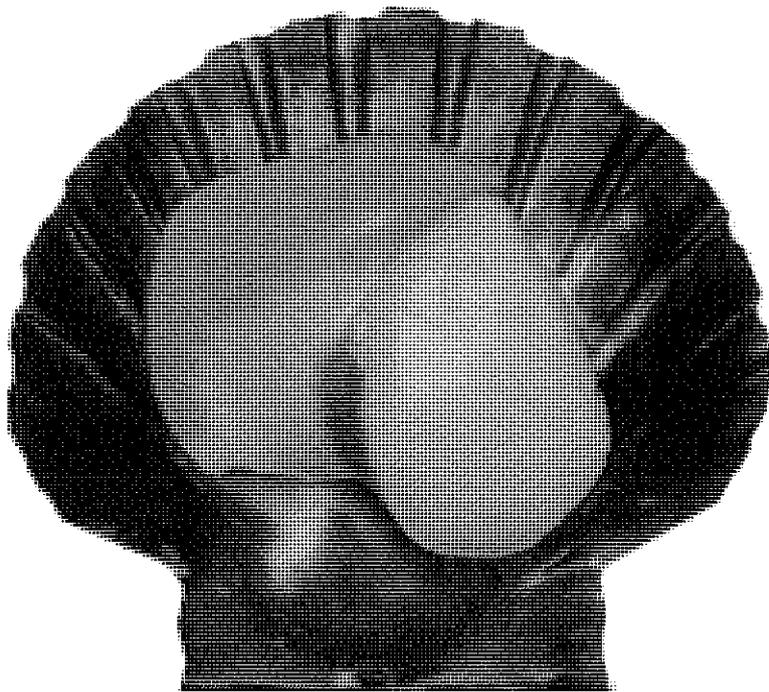
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SHELLFISH SUSTAINABILITY MEASURES REVIEW

SOUTHERN SCALLOP SCA7



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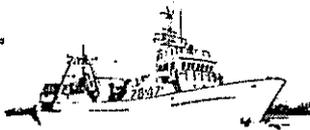
TALLEY'S GROUP LTD

11 FEBRUARY 2014

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Talley's Group Ltd – Southern Scallop Fishery

- TACC of SCA (7) = 747 M/T.
- Talley's Group Ltd own 309 M/T SCA 7 of Scallop quota (representing 41% of the fishery).
- 100% of Talley's SCA (7) ACE is assigned to privately owned inshore fishing craft operating in the Area 7 Management Zone.
- The New Zealand scallop fishery began in Tasman Bay in 1959 and over the following 10 years spread to cover grounds in Golden Bay and the Marlborough Sounds. The fishery, now known as the Southern Scallop Fishery, has undergone significant management change since that time. Harvesting began under open access which was subsequently constrained by various effort controls and vessel licensing regimes.
- Catches peaked in mid 1970's at 1246MT of meat weight. At this time 245 boats were operating in the fishery.
- The fishery was closed in 1980 for two seasons after producing only 41MT of meat weight.
- Rotational area harvesting of scallops was introduced to the commercial fishery in Tasman Bay and Golden Bay in 1989. Reseeding began 1983. Up to ninety percent of all scallops taken from the fishery in a year may come from reseeded stock.
- The size limit was reduced from 100mm to 90mm in 1989.
- Challenger Scallop Enhancement Co Ltd was formed in 1994.
- Up to 65 vessels operated in the fishery from 1994 until 2003. In 2003 the company introduced polices aimed at reducing the number of vessels permitted to operate in the Southern Scallop Fishery.
- This fleet reduction policy has been achieved by setting a minimum holding of quota per vessel.

2003 63 vessels operated in the fishery
2004 42 vessels operated in the fishery
2005 38 vessels operated in the fishery
2006 31 vessels operated in the fishery
2007 31 vessels operated in the fishery
2008 30 vessels operated in the fishery
2009 24 vessels operated in the fishery
2010 20 vessels operated in the fishery
2011 15 vessels operated in the fishery
2012 14 vessels operated in the fishery
2013 11 vessels operated in the fishery

MPI – Review Paper for Scallops (SCA 7)

MPI consultation process has been inadequate:

Quote –

“Between September and November 2013 MPI had preliminary discussions with some stakeholder representatives”.

It is an indictment on MPI’s interpretation of the term consultation when they consider consultation had taken place without having the courtesy of consulting any quota holders other than a few Iwi representatives.

Furthermore the release of the review paper in early 2014 is inappropriately timed given the fact that many fishing company Resource Management personnel do not return to work prior to the conclusion of the school holidays on the (28th January for secondary school and the 7th February for primary school).

The deadline for the filing of submissions set down for 21st February is therefore totally impractical.

The time frame set by MPI appears to be strategically established to restrict the time available to construct a meaningful response to the MPI review paper which is proposing a significant change to the current management model (without consultation).

The lack of consultation has serious ongoing implications should MPI decide to advance their option 2 proposal, including a major breach of the Crown/Iwi Treaty Settlement.

Practicality of In-season TACC Increases as Proposed by MPI as an Alternative Fisheries Management Tool

MPI essentially wants to take a ‘system’ that works and replace it with a system that has a historic track record of not working (Section 14).

Section 14 mechanisms provided for in the 1996 Fisheries Act which enables ‘in-season’ management is too cumbersome and too slow for utilization in the Southern Scallop Fishery.

The provisions for in-season management TACC adjustments cannot accommodate the parameters and flexibility required in an enhanced fishery that is highly variable.

Quote – (section 11)

“The Management Framework for the fishery allows the TAC to be rapidly increased within a fishing season should new surveys show the stock has rebuilt”.

In-season TAC adjustments are a ‘failed’ theory – they simply do not work as the bureaucracy moves too slowly to ensure that the fleets fishing cycle is seamless.

The in-season TAC increases are permitted under Section 14 of the Fisheries Act. Past experience in the Flatfish (3) and Red Cod (3) fishery have proven beyond all doubt that the system to implement the TAC increases is too slow and cumbersome to ensure a seamless fishing pattern for the fleet. It is simply not economic to shut down the fleet and skilled processing staff even for a short period mid-season whilst awaiting a management decision from MPI staff. Once a specialized fishery such as Scallops is commenced it is imperative that the flow of produce to the processing plant is uninterrupted for the duration of the season.

To be forced to stop even for a period of 1 or 2 weeks mid-season would be economically disastrous for both the catching and processing sectors plus of course the resulting disruption to the marketing schedule for the Scallops sold and delivered daily as fresh produce.

M.O.U. – Memorandum of Understanding

- MOU was actioned in July 1997.
- In approving the MOU the Minister of Fisheries noted “This relationship has been characterized by the high quality of information routinely provided to the Ministry by the Company”.
- The MOU safeguards the Government’s ability to deliver on its core responsibilities ensuring sustainability and fulfilling environmental principles, meeting Treaty of Waitangi and International obligations, enabling resource use and ensuring the integrity of management systems.
- The MOU provides the information for the Minister to set sustainability and other management measures and to determine required services including research.

Environmental Effects – Scallop Spat Survival

The current problems with the Southern Scallop Fishery are environmental problems – they are not fishery management related.

The management system in place for the Southern Scallop Fishery should not be read as a simplistic TACC based management regime – rather it is a complex and integrated set of management measures set across years and involving rotational fishing, enhancement, area closures, intersecting oral agreements, size limits and quality limits which collectively provide the justification for s14 treatment.

The industry’s decision to close the fishery voluntarily in Golden and Tasman Bay due to recruitment failure caused by adverse environmental conditions over recent years is simply an extension of that management approach.

- Tasman Bay was closed to commercial scallop fishing in 2005.
- Golden bay was closed to commercial scallop fishing in 2010.

There is no reason for MPI to intervene in the successful management actions taken over the last 20 years and to do so would severely undermine the incentives in effect for industry to exercise good management and work constructively and effectively with the recreational sector. It would remove the very flexibilities that have enabled the industry to innovate to improve management.

A TAC reduction in this respect will result in no improvement in the fishery status over the status quo and on the contrary will undermine the incentive structure in place for the last 20 years that has proven effective. In particular, the industry has maintained year on year a level of enhancement activity aimed at capitalizing on favourable environmental conditions. That these conditions have been adverse in the last period is not a reason to intervene. A review of the historical record shows that such conditions do recur. For example there was a large recruitment failure in the early 1980's that led to the closure of the fishery – in that case Government needed to intervene because there were no quota rights allocated in the fishery and the industry could not collectively control its actions. Such intervention has not been needed over the last 20 years when the fishery has been managed by industry and including the last few years when the fishery has faced a downturn in recruitment. To suggest that these issues can be resolved or even improved by simplistic interventions in the TAC setting process shows a flagrant disregard to 20 years of management effort investment and collaboration. It is also an ineffective decision as it will cause no improvement and leave the management system worse off.

To suggest that the future of the scallop fisheries in Golden and Tasman Bay is in doubt for the future and in essence take steps to close down a effective management system would be antithetical to the purpose of the Act (to provide for utilization (ie: enable wellbeing) while ensuring sustainability). At present both utilization and stock sustainability are being addressed within the stock management approach being implemented by Challenger.

The real management problem in Golden and Tasman Bay is the uncontrolled run off from local rivers causing excess sedimentation and nutrient loading's that have demonstrably affected scallop recruitment and survival.

MPI should employ its resources in trying to establish the reason for successive years of spat non-survival in both Golden and Tasman Bay.

MPI should concentrate its management efforts on addressing economic externalities within the wider ecosystem that are outside of the control of the scallop industry to manage. This would involve consolidating the scientific information on the causes of recruitment failure and evaluating the current regulatory arrangement with the Fisheries Act and the RMA designed to ensure that the coastal ecosystem remains robust and can support the ongoing viability of the scallop fishery.

MPI's efforts should be aimed at cleaning up the pollution to the eco-system created by the presently uncontrolled run off into our river systems that flow into Tasman and Golden Bay. This uncontrolled run-off is seriously damaging the nutrient loading in the ocean. For example a compulsory re-vegetation around the rivers would have a major impact on the quality of the run-off.

There needs to be a concerted effort initiated by MPI to ensure that run-off from both agriculture and forestry surrounding activity does not go straight into creeks directly from fertilized fields.

Better upstream management of rivers will ensure improvement in Scallop spat recruitment and survival.

This would be a better utilization of MPI resources than focusing its resources on stock management where no intervention is needed.

Scallop Spat Enhancement Programme

Enhancement (Process Description)

Enhancement of the fishery is achieved by providing settlement material inside mesh bags suspended in the water column. The spat catching gear is set in December in Tasman and Golden Bays; scallop larvae then settle on the material inside the bags and metamorphose into juvenile scallops which are known at this stage as "spat". By the time the juveniles detach from the settlement material they are too large to escape the mesh bag. They are held in the bags, generally until late March or early April when the bags are collected and, the juvenile scallops removed. The scallops are then quickly transported to areas of the fishery where scallop numbers have been depleted and released back onto the seabed.

Some larvae attach themselves to the outside of the bags and to other parts of the supporting lines and buoys. These later detach in the normal manner and fall to the seabed where they grow. Scallop concentrations on the seabed under the spat catching structures can get very high but as they scallops grow they start to compete with each other for space and food. These scallops are regularly monitored and once they have on-grown for a few months, they are captured and transferred to other areas of the fishery as a further source of enhancement.

"Primary spat" is that sourced from inside the bags; that captured below spat catching sites is referred to as "secondary spat". Secondary spat, having survived the first 3 to 6 months of living on the seabed, usually has a higher survival rate than primary spat.

Once the scallops are reseeded into the fishery and have grown above the minimum size limit they are available to commercial, recreational and customary fishers to harvest.

The commercial scallop fishing industry pays the full costs of enhancement with no contribution from other non-commercial harvesters or the Government.

In the 20 year life of the Challenger Scallop Enhancement Company Ltd a total of \$6.5 million has been spent solely on catching Scallop spat and re-seeding both commercial and recreational fishing areas.

(In 1994 the shareholders spent \$1,200,000 on enhancement activities).

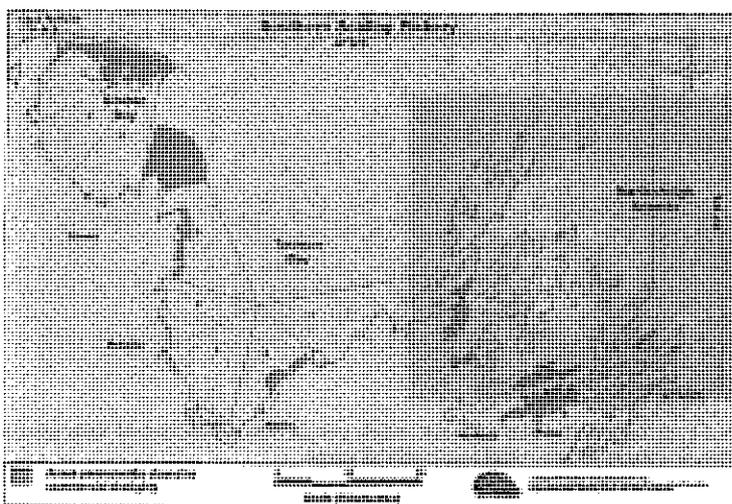
On average Scallop fishers contribute 20% of their gross catch value to the spat enhancement operation. The funds are collected on a voluntary basis and it is of significant interest to note that over the 20 years that the scheme has been operating we have had 100% of contribution from the fishermen out on the water. This factor is a very important indication of the level of support that the scheme enjoys.

Scallop enhancement is working and must be continued as a Industry operated/funded and controlled scheme.

It would be an economically impossible task for the state via MPI to manage this very worthwhile enhancement scheme.

The enhancement scheme, the re-seeding of rotational fishing beds and the management of the TACC are all interlinked. To try and separate out the setting of the annual TACC from the currently integrated management structure would be the death knell of the enhancement scheme. Under the enhancement programme the commercial fishery is controlled by a 'harvest strategy', determined by the results of the annual biomass survey. The fishery also operates under regulatory constraints including a 90mm minimum legal size, maximum dredge size and number, number of days fished, fishing only in day light hours and a commercial season from 15 July to 14 February.

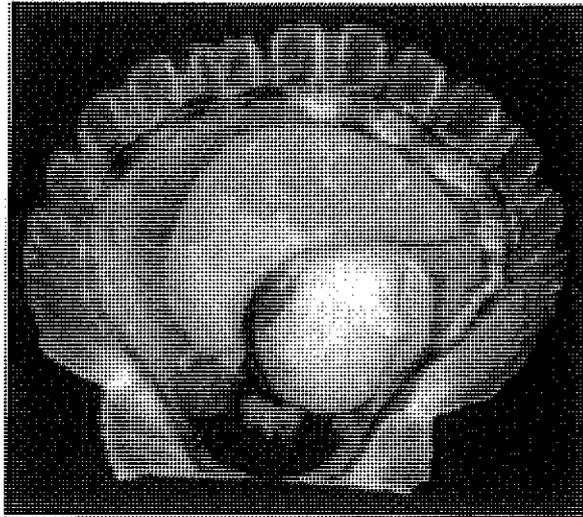
The Southern Scallop Fishery is located at the top of the South Island and incorporates the waters of Golden Bay, Tasman Bay and the majority of the Marlborough Sounds. It is the most productive of New Zealand's scallop fisheries; average commercial harvest since the early 1980s is approximately 400 tonnes meatweight (3,200 tonnes greenweight) annually. The fishery is shared with recreational and customary fishers but no comparable catch records exist.



Map of Southern Scallop Fishery, permanent commercial fishing closures and reporting / rotational harvest areas.

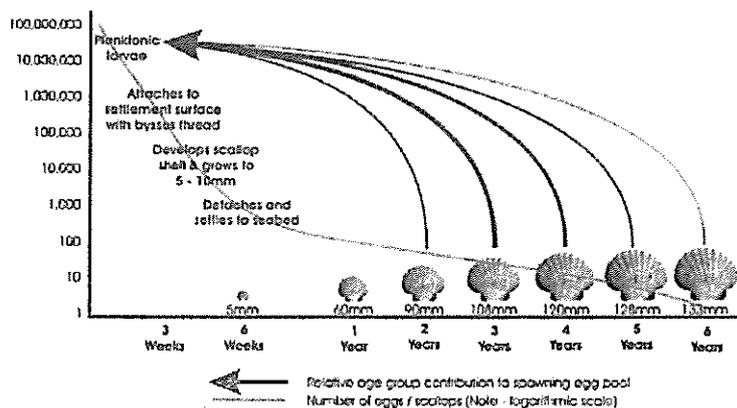
Biology – Life-cycle of the New Zealand Scallop

The New Zealand Scallop, *Pecten novaezelandiae* is a functional hermaphrodite that spawns serially from July to February. Most juvenile scallops have well developed gonads but contribute little to the spawning pool until the end of their second year when they are estimated to contribute 7 million eggs, rising to 100 million eggs from 6 year old scallops.



Adult scallop with right shell, mantle and gill removed showing the white adductor muscle, cream (sperm) and orange (eggs) coloured gonad

Scallop larvae spend approximately three weeks in the plankton then attach themselves to seaweed or some other fine filamentous material with fine threads (byssus). Over the next 3 – 6 weeks they develop the characteristic shell then discard the byssus thread and settle to the seabed at between 5 and 10mm shell size.



Life stage and reproductive cycle

For every 100 million eggs released during spawning, approximately 100 scallops estimated to survive the first year. Of those remaining, 36 are estimated to live to 3 years old and only 2 of those reach 6 years old.

Variation in environmental conditions, food availability, predation and other causes of mortality lead to high variations in scallop survival. In periods when conditions allow higher recruitment, populations are able to increase very quickly. Conversely in unfavourable conditions, recruitment can rapidly fall below the natural mortality rate and populations reduce dramatically.

Scallops are a 'Group 2' fish stock within the National Fisheries Plan for inshore shellfish.

Group 2 stocks are classified as fast growing and experience highly variable abundance.

Objectives for Group 2 stocks are to enable annual yield from the fishery to be maximized whilst maintaining sustainability.

Scallop populations are also susceptible to catastrophic mortality events as a result of short-lived events such as large storms which raise the level of suspended inorganic sediments in the water column making it muddy (“turbid”). Suspended sediment has the most impact close to the seabed as they concentrate and settle as the upper parts of the water column clear. There is particularly true of juvenile scallops which have fewer energy reserves to call to tide them over until they can successfully feed again.

Primary sources of suspended sediment are rainfall in river catchments causing the rivers to discharge sediment loaded water and storms raising sediment from the bottom (often occurring in conjunction with heavy rainfall). Mobile bottom fishing (trawling and dredging) over soft sediments also raises sediments but fishing is seldom sufficiently intense and widespread to have a significant impact.

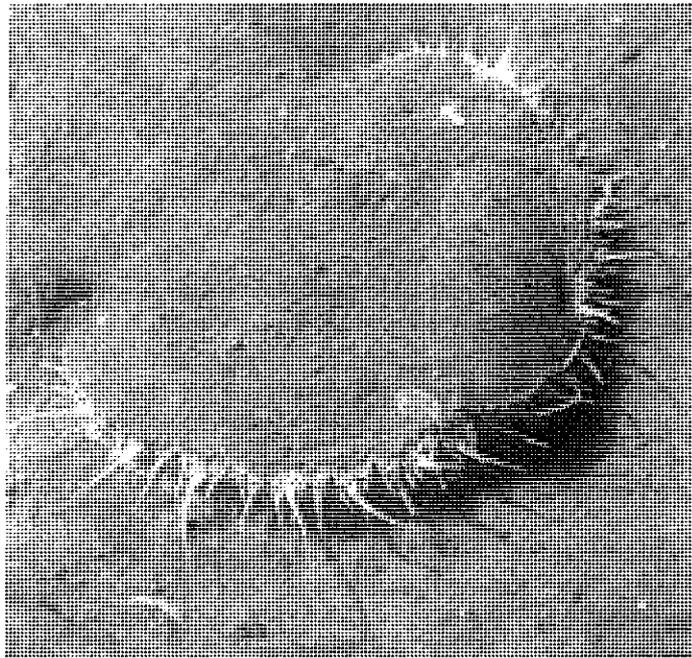
The combination of very high egg production, high natural mortality, correspondingly short life-span and reproductive success being susceptible to environmental variation means the numbers of scallops in any population are naturally high variable from year to year.

Adult Habitat

Scallops lie in small depressions on the seabed, with the strongly convex left valve down, often with a fine layer of silt or sand over the (upper) right valve. Juveniles are strong swimmers but adults, while still able to swim short distances are less prone to doing so.

Scallops feed on algae, bacteria and detritus, often using a small shell clap motion to suspend food items off the seabed before drawing them onto its mantle and gill here cilia transport the food which is trapped in strands of mucous and then transported to the mouth. Inorganic matter such as silt and large food particles are transported past the mouth and are later cleared out of the shell by flapping.

Adult scallops also use the shell flapping movement for other purposes including; turning themselves over if they land on the seabed flat shell down and sometimes to orient themselves in their depression to take advantage of tidal movements to assist feeding.



Adult scallop on silty seabed. Note; extended tentacles and shell gape typical of feeding behaviour, brown algal mat on parts of sea bottom. Animal crossing shell is a sea slug.

Scallops utilize simple eyes arranged around the edge of the shell and tentacles to identify the approach of predators and other dangers. They respond to threats by either closing their shells or by swimming to escape.

Management Model

The Southern Scallop Fishery and the principle of self-management of fisheries has been quoted in wide ranging international literature and studies as one of the most advanced fishery management structures in the world.

The principle fishing plan was developed by the Challenger Scallop Enhancement Company Ltd (Challenger) on behalf of the quota owners in SCA 7, the Southern Scallop Fishery.

Building on Challenger's existing governance structures and record of implementing internalized management arrangements, the plan has an overarching goal of maximizing the long-term value of scallop quota and four objectives for the commercial fishery to deliver on the goal. It develops the key processes for making robust management decisions in consultation with other interested parties and the management measures that will contribute towards achieving the objectives.

The plan is presented for approval by the Minister of Fisheries pursuant to Section 11A of the Fisheries Act it also contains internal measures and actions for the management of the commercial fishery beyond immediate statutory consideration.

SCA 7 ITQ allocated to Maori under the Treaty of Waitangi (Fisheries Claims) Settlement Act 1992 has been fully allocated directly to the eight Iwi which are tangata whenua in the fishery

area. Each Iwi is a shareholder and their commercial interests in the fishery are integrated in the company structure.

Challenger is governed by a board of up to eleven directors, ten are appointed annually by shareholders and the directors may optionally appoint an eleventh who must be a representative of the recreational fishers in the Southern Scallop Fishery.

Challenger's annual business plan and budget are approved annually by shareholders and are funded through the Commodity Levies (Southern Scallops) Levy Order 2007 which replaced the previous order of 1996.

Challenger's shareholders have the capacity to bind participants in the commercial fishery to the management arrangements and harvest rules approved pursuant to a management plan through its annual harvest agreement.

Management Duties aligned with the Self-Management Programme

1) Consultation

Challenger is required to consult on the harvest management arrangements with classes of persons having an interest in the Southern Scallop Fishery.

Consultation Parties

Commercial Interest Representation

- Challenger Board of Directors
- Challenger Shareholders
- Other Southern Scallop Fishery Commercial Participants
- Challenger Oyster Management Company Ltd
- Challenger Finfisheries' Management Company Ltd
- Golden Bay / Motueka Fishermen's Association
- Nelson Fishermen's Association
- Picton Fishermen's Association
- New Zealand Marine Farmers Association

Recreational Representation

- Challenger Scallop and Dredge Oyster Recreational Advisory Group

Customary Fisher Representation

- Te Tau Ihu (Top of the South 8-Iwi) Consultative Committee

Environmental Interest Group Representation

- Friends of Golden Bay
- Friends of Nelson Haven
- Forest and Bird – Golden Bay Branch

- Forest and Bird – Marlborough Branch
- Forest and Bird – Nelson Branch
- Forest and Bird – National Headquarters

Public Interest Groups

- To Ohu Kaimoana Trustee Ltd
- Golden Bay Community Board
- Motueka Community Board
- Marlborough Sounds Fisheries Management Working Group

Central and Local Government

- Ministry of Primary Industries (MPI)
- Department of Conservation
- Marlborough District Council
- Nelson City Council
- Tasman District Council

- 2) Contract annual biomass surveys of proposed fishing areas.
- 3) Manage and implement the Scallop Enhancement Programme via annual collection of Spat and its subsequent reseeded in designated grow-out zones.
- 4) Manage and monitor the environmental effect of fishing.
- 5) Design and implement the compliance regime for the fishery
 - Daily bag limits
 - Monitor dredge design and size
 - Monitor daily landing limits
 - Monitor minimum shell size requirements of 90mm at unloading zone – via employment of independent contracted compliance personnel.
- 6) Manage water quality programmes in all catching zones.
- 7) Arrange for the transfer at sea of under-size scallops during fishing operations to less desirably populated beds (*over populated scallops result in an increase in mortality*).
- 8) Design and implement sub-areas for rotational harvesting strategies.
- 9) Minimize the cost of fishing to ensure maximum economic benefits to be derived from the fishery.
- 10) Other duties include, but not be limited to;
 - Daily and weekly landing limits
 - Any ACE shelving arrangements
 - Area closures (including recreational access areas)
 - A real-time vessel position reporting system

- Any area specific catch limits
- Landing conditions
- Reporting requirements
- Provisions for in-season area closures
- Fishing seasons and variation procedures
- Other fishing rules including size limits
- Dredge design and use restrictions
- Temporal fishing controls (fishing days and times)
- Container labelling requirements
- Shellfish quality assurance rules
- The appointment by Challenger of officers to monitor compliance with the rules and to take such action as is required or authorized by the plan when non-compliance is detected.
- Provision for such powers and authority as may be necessary to facilitate the proper detection and investigation of non-compliance by officers appointed for that purpose.
- Procedures to be followed and damages able to be claimed in the case of breaches of the Harvest Agreement.

Reseeding Activities

Potential impacts arising from reseeded activities are managed under the enhancement plan. The Minister set additional conditions on enhancement activities in the course of approving the plan and Challenger will continue to manage potential impacts from reseeded activities under that plan.

Potential impacts managed under the enhancement plan are;

- Impacts arising from enhanced scallop populations on larval abundance, food availability, levels of metabolic products and production of bio deposits,
- Incidental enhancement of other naturally occurring fisheries including *Chlamys* spp (fan shell), *Perna canaliculus* (green lipped mussel), *Mytilus* spp. (blue or black mussel), *Modiolarca impacta* (nesting mussel), *Tiostrea chilensis* (dredge oyster),
- Secondary enhancement of predators by improving prey numbers and densities,
- Potential overlaps with the dredge oyster fishery habitat, and
- Potential harvest related impacts from reseeded into habitats that may be of particular significance for fisheries management.

Conditions imposed by the Minister on reseeded include a requirement for Ministry of Fisheries' approval before scallops may be seeded into the Marlborough Sounds. This condition represents a further management control but one which is exercised outside of Challenger.

Financial Implications

It is wrong of the authors of the MPI Review paper to promote the belief that by reducing the TACC of the fishery will automatically reduce the amount of Crown Management Levies paid by the industry from \$200,000 per annum to \$15,000 per annum.

Quote – (section 55)

“MPI also notes that decreasing the TACC will reduce the cost recovery levies currently incurred by the commercial sector from approximately \$200,000 to less than \$15,000”.

This is irresponsible and financially misleading information submitted by the Ministry of Primary Industries.

Equity Issues

Scallop quota owners have adopted the Industry wide accounting practice of recording their quota holding as an asset in their annual accounts.

For MPI to promote the reduction in book value of these quota holdings by 94% would result in many of the banks reviewing their lending criteria to those fishers involved in the Area 7 Scallop Fishery.

Already there are financial ripples being created in the Nelson / Marlborough Fishing Industry, call it creative accounting or whatever you like but equity value is a fact that cannot be ignored in this current economic climate.

Recreational Sector

Recreational scallop fishing has increased significantly since the mid 1980's to become one of the major fishing attractions in the region. Within the seasonal constraints, recreational fishers have access to all fishing areas in the Southern Scallop fishery. Their access to the fishery is not constrained by rotational areas, contractual closures or by many of the regulated closures and gear restrictions applying to commercial fishers. Recreational fishers can access areas closed to commercial fishers on a permanent basis; (Inner Queen Charlotte Sound, Part of East Bay, Nydia Bay, Fitzroy Bay, Tennyson inlet, Kenepuru Sounds and an inshore area along the Abel Tasman coast in Tasman Bay). Under the rotational fishing and reseeded regime recreational fishers often gain access to scallops seeded in the fishery in advance (often by a full season) of the commercial fleet.

The recreational sector often has a detrimental effect on the mortality rate of reseeded scallops before they reach maturity. The solution is to also exclude recreational fishing activity from areas closed for rotational re-seeding programmes. This would be an achievable objective especially if we designated some inshore areas as recreational access only. This would be a fair trade off between the commercial user and the recreational sector especially in the knowledge that the enhancement scheme is funded 100% by the commercial sector.

The need to change the legislation governing the starting date for the Southern Scallop Fishery from 15th July until the 15th August to ensure that both the recreational and commercial sectors commence on the same date.

It is essential that the recreational limit is reduced to 40 per person with a maximum landing per vessel of 240 scallops.

If there is a reluctance to reduce the recreational take in an election year a solution could be to leave the Marlborough Sounds recreational limit at 50 per vessel but reduce the 'take' in both Golden Bay and Tasman Bay to 40 per person with a boat limit of 240 scallops. This would be a fair and equitable outcome given the fact that both Golden Bay and Tasman Bay has been totally closed to commercial fishing for a number of years. Tasman Bay closed since 2005 and Golden Bay closed since 2010.

Both Golden Bay and Tasman Bay are showing positive signs of stock rebuilding largely a result of the continued re-seeding programme undertaken by the Industry.

It is entirely manageable to have a different set of recreational limits in a common stock fishery such as Scallop 7, for example the Marlborough Sounds Blue Cod fishery has a different size limit to the Blue Cod fishery in Tasman Bay even though both of these areas are part of the common stock BCO7.

Recommendations

- 1) Reduce TACC from 747 M/T to 576 M/T.

Comments

- When we had 48 boats licenced to operate in the fishery the catch was allocated at 12 M/T per vessel resulting in a TACC of 576 M/T. There is merit in reducing the TACC from its present level of 747 M/T to 576 M/T.

We acknowledge the MPI revised proposal for a TAC of 500 M/T (400 M/T TACC and 100 M/T allowance for recreational and customary fishing).

For the avoidance of doubt we support this MPI initiative for the ongoing management of the SCA 7 fishery.

Prior to the closure of Tasman Bay and Golden Bay the average annual catch in the previous 10 years was 410 M/T. It is therefore imperative that we do everything in our power to bring both Tasman Bay and Golden Bay back into the fishery.

- 2) Reduce recreational daily limits from 50 scallops to 40 scallops per person with a maximum boat limit of 240 scallops per landing in both Golden Bay and Tasman Bay. Retain the Marlborough Sounds 'take' at 50 per person.
- 3) Retain the current Self-Management regime for Scallop (7) Fishery.

Comment

The nature and extent of the management duties undertaken by the Scallop Management Company are both extensive and complex. The Crown could not deliver the required range of management services as cost effectively as the Industries self-management model.

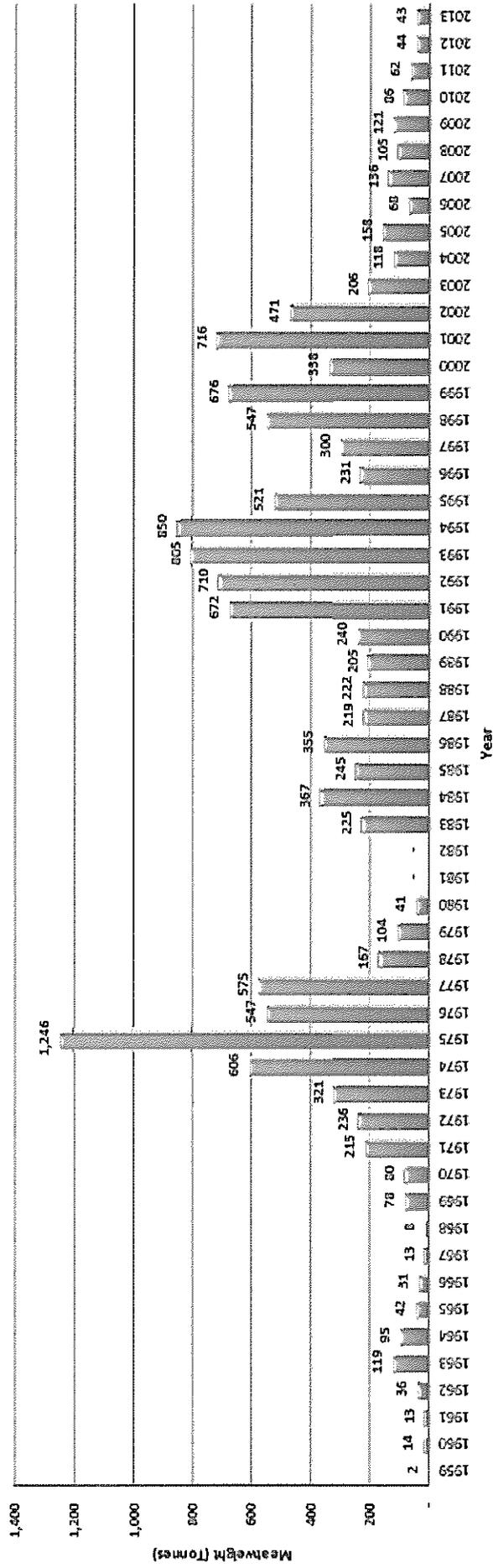
- 4) The enhancement scheme, the spat catching and re-seeding of rotational fishing beds and the management of the TACC are all interlocked. It is not economically possible to separate the operation and funding of the annual enhancement scheme from the annual TACC catching regime – ie: MPI cannot claim the task of setting the TACC each year under a section 14 regime and then expect the Industry to continue to fund and manage the enhancement scheme. For MPI to implement their ideas as outlined in the Shellfish review paper would result in the demise of the Scallop enhancement programme.
- 5) Talley's support Option 1 as outlined in the Shellfish Review paper – ie: Retention of status quo but incorporating an agreed reduction in the TACC from 747 M/T to 576 M/T (ie: 23% reduction).

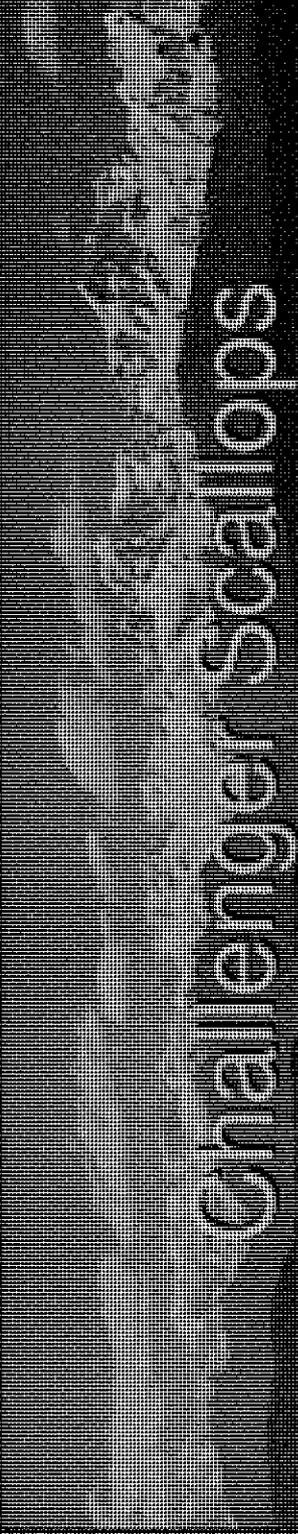
We acknowledge and support the MPI revised proposal for a TAC of 500 M/T (400 M/T TACC and 100 M/T allowance for recreational and customary fishing).

- 6) There are no legal issues around the differential between the annual catch and the current TAC for the Southern Scallop Fishery.

Annual Southern Scallop Catches

(All SSF Catch (Meatweight Tonnes))



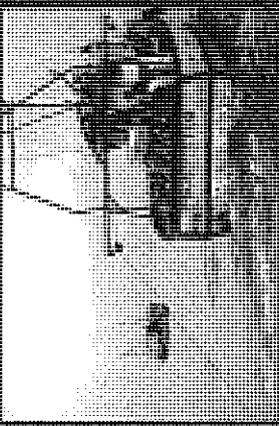
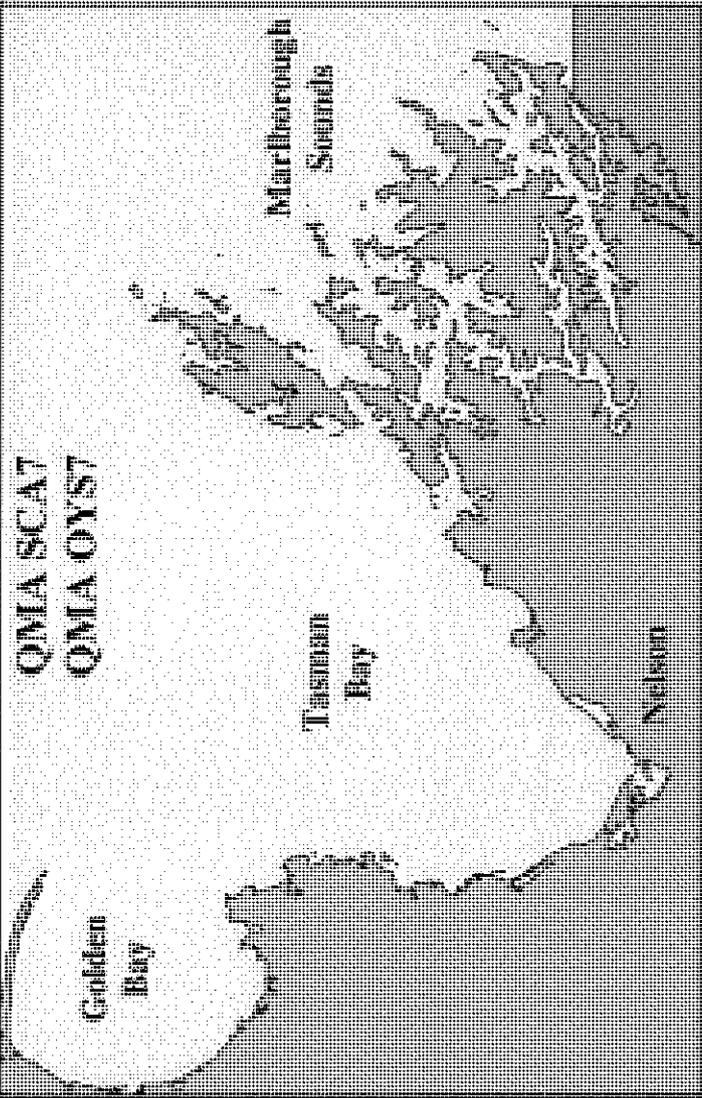


Challenger Scallops

Making a meal of fisheries management

Russell Mincher
Chief Executive Officer
Challenger Scallop Enhancement Company

Location



History of Fishery

Oyster dredging 1845

Green-tipped mussel dredging since 1940's

First commercial scallop landing 1959

Boom 1975

Open access

Over 200 boats

1,248 T landed

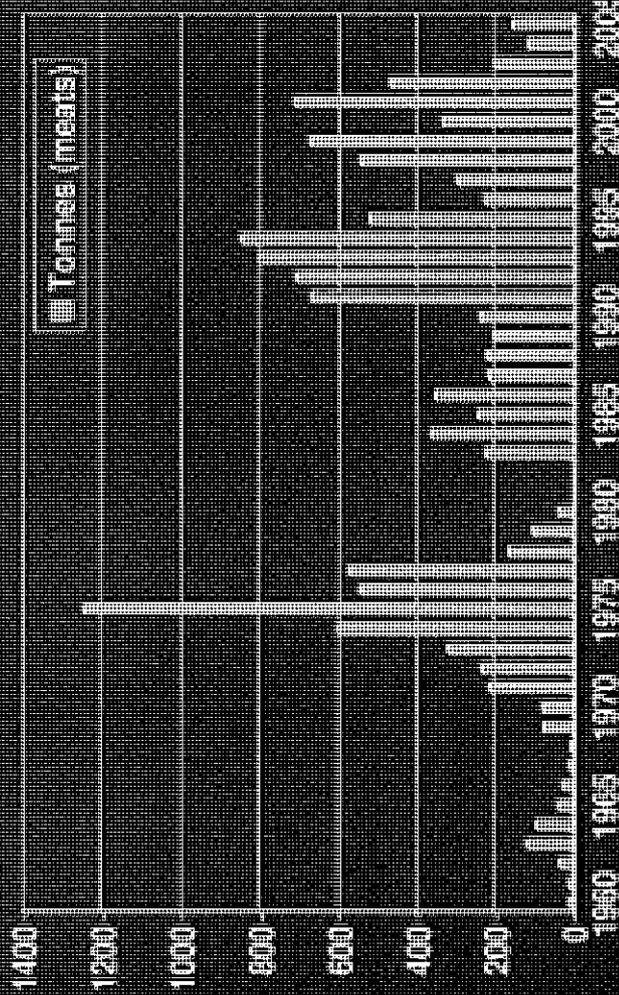
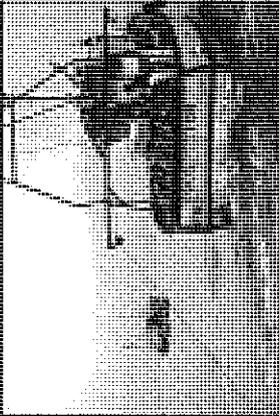
Bust 1980

Controlled Fishery

48 boats permitted

41 T landed

Fishery Closed



Business & Representation

Company Structure

- Unlisted limited liability public company
- Shares exclusive to Scallop 7 quota owners
- Voting on amount of quota owned

Management

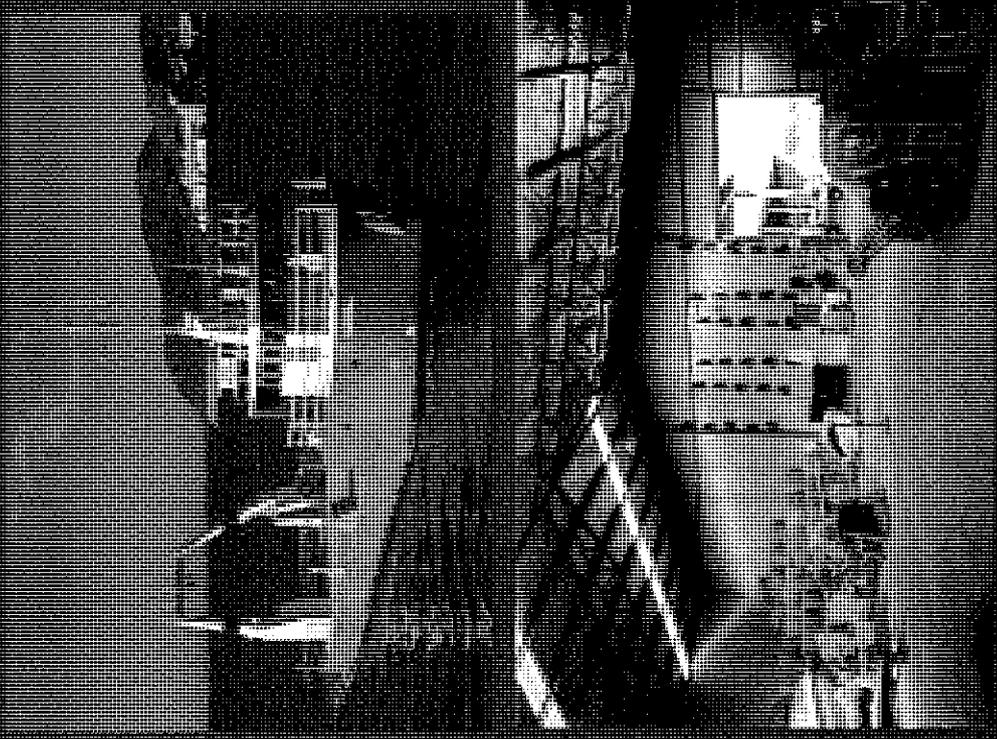
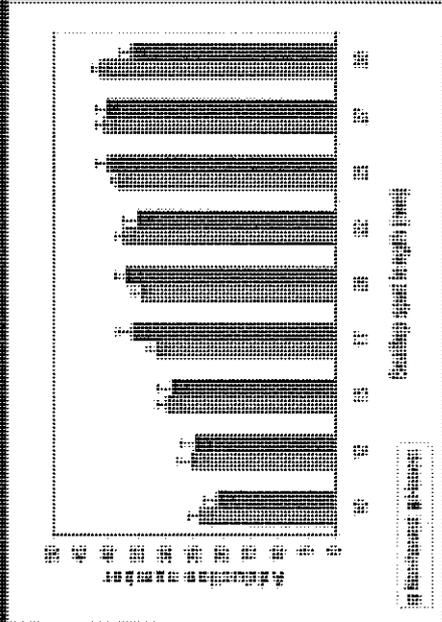
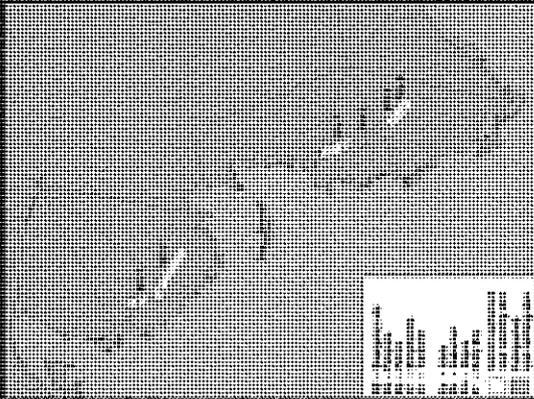
- 10 – 11 member board
- Business plan & budget set at AGM

Funding

- Commodity Levies (Southern Scallops) Order
- Levy set at General Meeting
- Up to 25% of landed value of scallops



Asset Management



Scallop biology

Pecten Novaezelandiae

Bivalve mollusc

Prefers mud or sandy bottom

Functional hermaphrodite

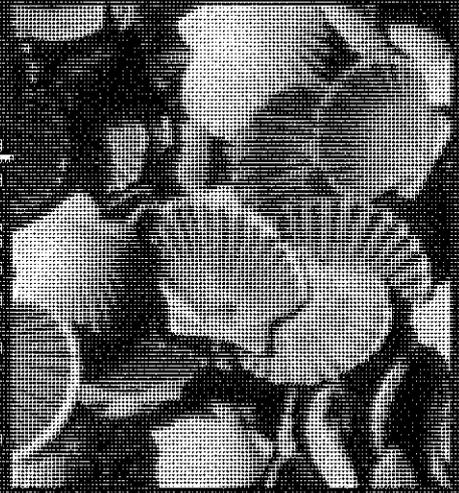
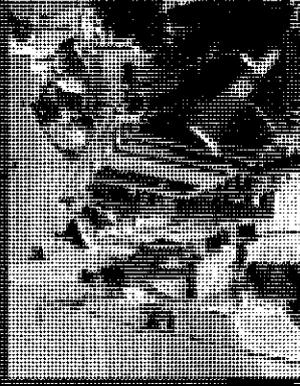
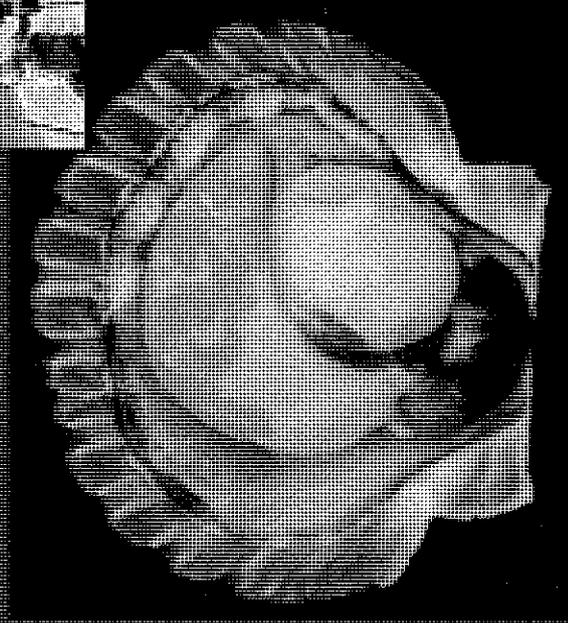
Primary spawning early summer

Pelagic stage

Settles and grows into juvenile scallop

Drops to seafloor

Lives 3 - 5 years



Managing fisher behaviour

Harvest agreement

Agreed rules

100% subscription

Compliance programme

Rules

Catch limits

QMS

Marlborough Sounds

ACE shelving

Vessel numbers

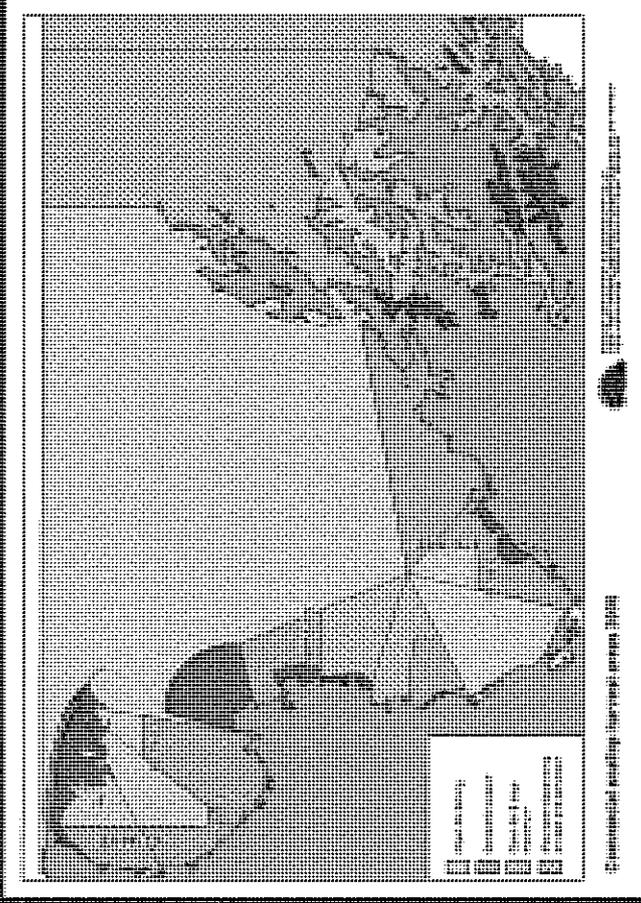
Quality closures

Dredge specification

Fishing times

Rational Fishery

Closed areas



Moving forward

Fisheries Plan

- Strengthen current instruments
- Improve harvester commitment
- Better framework for communication between stakeholders and with Government
- Provide for environmental standards (SMEEF)



New Zealand's Challenger Scallop Enhancement Company: from reseeding to self-governance

R. Mincher

Marine Resource Stakeholder Solutions
19 Edward Street, Nelson, New Zealand
minchers@tasman.net

1. INTRODUCTION

In the late 1970s, catches in the New Zealand twenty-year old Southern Scallop fishery collapsed as a result of overfishing. The government initiated an enhancement programme and controlled entry to the commercial fishery. It soon began shifting the costs of the enhancement programme to its commercial fishing beneficiaries. With the introduction of the Quota Management System for New Zealand fisheries, control of the enhancement programme was devolved to the commercial fishers, who had become the fishery quota owners. Subsequently, a range of other management functions, including harvest rules, providing for recreational fishery access, water quality assurance, research and compliance were progressively devolved. The Challenger Scallop Enhancement Company ("Challenger") was established by the quota owners as a vehicle for collective exercise of management and enhancement activities in the scallop fishery and has become a model for similar organisations in New Zealand.

2. HISTORY OF THE FISHERY PRIOR TO CHALLENGER

2.1 Description

The Southern Scallop fishery, which is also known as the Challenger Scallop fishery, is located at the top of New Zealand's South Island (Figure 1). The Southern Scallop Fishery Management Area covers 9 631 km² of sea space, approximately 2 000 of which are considered to be in harvestable areas. The fishery is managed under New Zealand's Quota Management System (QMS) and is the country's largest producer of the New Zealand scallop (*Pecten novaezelandiae*).

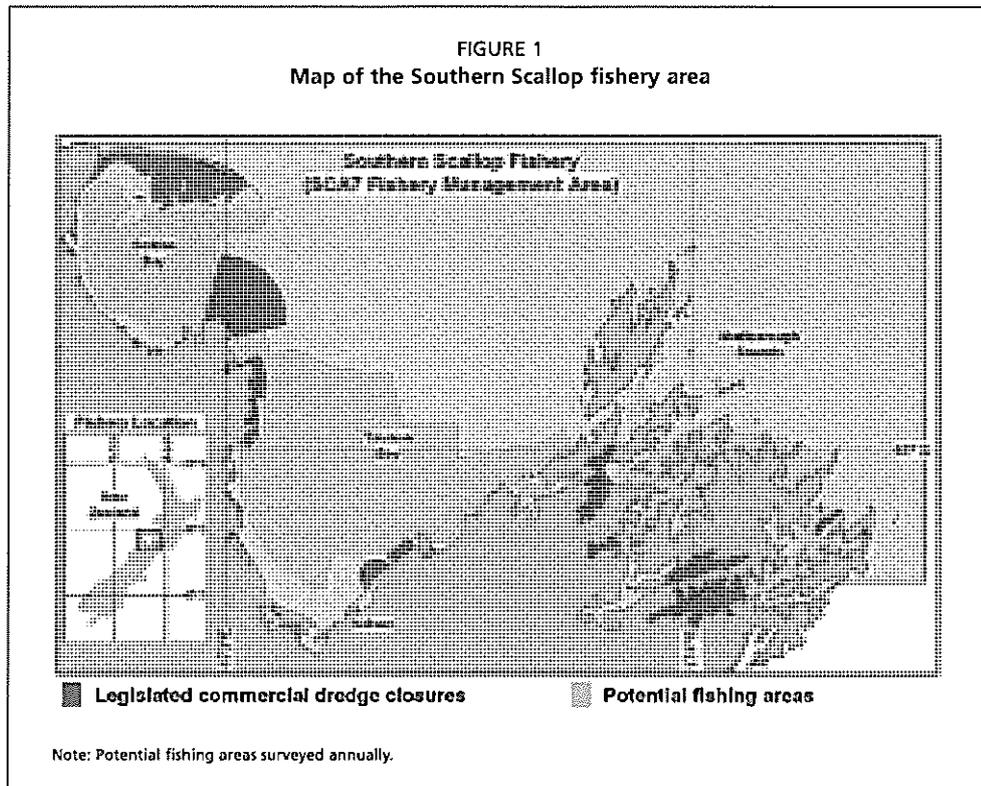
Scallops are harvested with a ring-bag dredge that is not fitted with teeth or a cutter bar and has low impacts on the benthic environment in comparison to many other dredge designs. The fish are harvested and landed the same day, alive and in the shell. Upon landing, they are sold to processors who remove the adductor muscle and gonad, which form the saleable product. With a limited domestic scallop market, the product is largely exported to Europe as frozen "roe-on" scallops.

The Southern Scallop fishery is shared with customary Maori and also recreational fishers who are permitted to harvest by hand (usually with underwater breathing apparatus) and by dredging.

2.2 Development and decline

Tasman Bay and its environs have been commercially dredged since the 1840s. Flat oysters (*Tiostrea chilensis*) were targeted in the 19th and early 20th centuries. In the middle of the 1900s, the green-lipped mussel (*Perna canaliculus*) began to feature in the harvest, as did the horse mussel (*Atrina zelandica*). In light of this dredging activity,

FIGURE 1
Map of the Southern Scallop fishery area

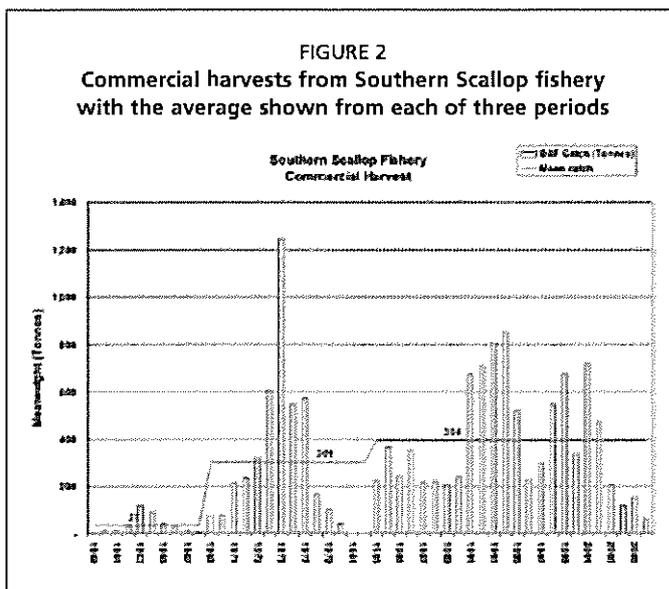


commercial fishers are assumed to have landed scallops as a bycatch prior to official records, but such landings were not recorded.

The first recorded commercial landings of scallops occurred in 1959 during a survey to locate and map the Tasman Bay scallop fishery. Over the ensuing ten years, beds were found to cover grounds in Golden Bay and the Marlborough Sounds (Bull, 1989a). Catches and vessel numbers increased steadily through the 1960s and 70s (see Figure 2 and Table 1). Catch peaked in 1975 at 1 246 mearweight tonnes (adductor muscle and roe; nearly 10 000 tonnes shellweight) and the number of vessels peaked at 245 the following year (King and McKoy, 1984). Various effort controls were placed on fishers

as the fishery was developed. Despite the compounding controls, catches rapidly declined to 41 tonnes in 1980 and 61 vessels and the fishery was closed for the following two years. Figure 3 shows relevant aspects of the fishery.

FIGURE 2
Commercial harvests from Southern Scallop fishery with the average shown from each of three periods



2.3 Recovery and enhancement

Following the closure, the fishery began to recover and was reopened to commercial fishing in 1983. Seasonal catch limits were established and the number of vessels was limited to 48 through non-transferable permits.

Trials of scallop spat-catching and seeding were carried out in the late 1970s by the Ministry of

TABLE 1
Landings, vessels, and TACC for Southern Scallops, 1959–2006

Year	AAC / TACC	Catch (tonnes meatweight)	Vessels landing scallops	Year	AAC / TACC	Catch (tonnes meatweight)	Vessels landing scallops
1959		2	1	1983		225	48
1960		14	6	1984		367	48
1961		13	4	1985		245	48
1962		36	6	1986		355	48
1963		119	17	1987		219	48
1964		95	22	1988		222	48
1965		42	18	1989		205	48
1966		31	21	1990		240	48
1967		13	26	1991		672	48
1968		8	14	1992	1 100	710	48
1969		78	25	1993	1 100	805	60
1970		80	34	1994	850	850	60
1971		215	49	1995	720	521	68
1972		236	67	1996	720	231	64
1973		321	83	1997	720	300	64
1974		606	96	1998	720	547	62
1975		1246	190	1999	720	676	60
1976		547	245	2000	720	338	61
1977		575	189	2001	720	716	57
1978		167	121	2002	747	471	59
1979		104	98	2003	747	206	59
1980		41	61	2004	747	118	40
1981	-	-	-	2005	747	158	36
1982	-	-	-	2006	747	65	31

Agriculture and Fisheries (MAF) in association with private organisations. These trials indicated that bottom seeding of juvenile scallops was likely to be viable. In 1982 Talley's Fisheries Limited and MAF carried out seeding trials in Golden Bay and the Marlborough Sounds. In 1983, MAF and the Overseas Fishery Co-operation Foundation of Japan embarked on a joint, pilot-scale seeding operation in the Golden Bay area (Bull, 1989b). Enhancement trials continued through the 1980s and enhanced scallops have formed a part of the annual commercial catch since 1986.

Juvenile scallops for seeding are recovered from two sources. First, some are captured in bags set on longlines. These are transferred from the bags to the beds in April each year ('primary spat'). Second, some attach themselves to the spat catching equipment outside of the bags and then fall to the sea floor beneath ('secondary spat'). Secondary spat are recaptured with a modified scallop dredge approximately four months after the primary spat harvest. A total of eight, 500 hectares, spat catching sites have been established, four each in Tasman and Golden Bays (see Figure 3) One site in each bay is available for use each year and catching efforts peaked in the 1990s at 90 long-lines of bags in each bay. Each source of juveniles

FIGURE 3
Spat catching sites in Golden and Tasman Bays and statistical reporting areas

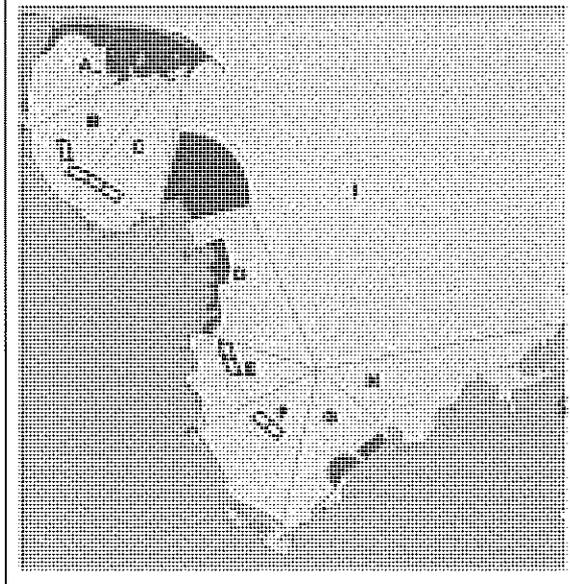


PHOTO 1

Relevant aspects of the Tasman Bay scallop fishery Harvest of primary scallop spat
 The 200 m backbone cable and the vertical dropper ropes, each with ten pairs of green spat catching bags, are raised from the water and the bags cut from the line. The primary spat are then removed for seeding in pre-selected areas.

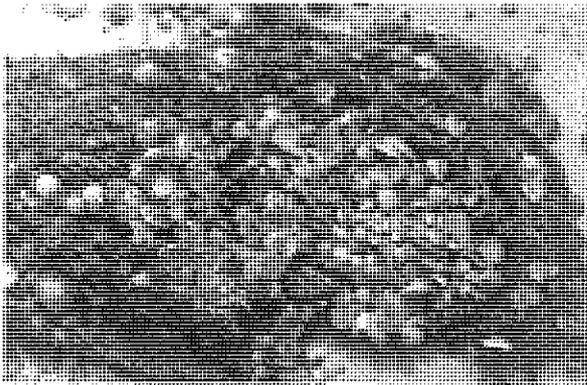


PHOTO 2

View of a harvested spat bag
 This shows a bag that has been washed and opened to show the primary spat contained within. The spat in this bag range from 5 to 15 mm in shell length. Up to 2000 spat may be harvested from each bag.

PHOTO 3

View of the deck of the company's 26 m flat-decked vessel
 During secondary spat harvesting juvenile scallops are dredged from the seabed under the spat catching site, then stored on deck under salt water sprays until the vessel is loaded. They are then transported to the pre-selected seeding sites for released. Up to nine million juvenile scallops may be seeded in a day using this method.

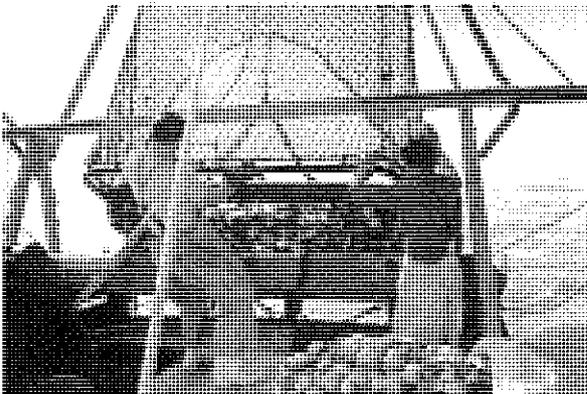
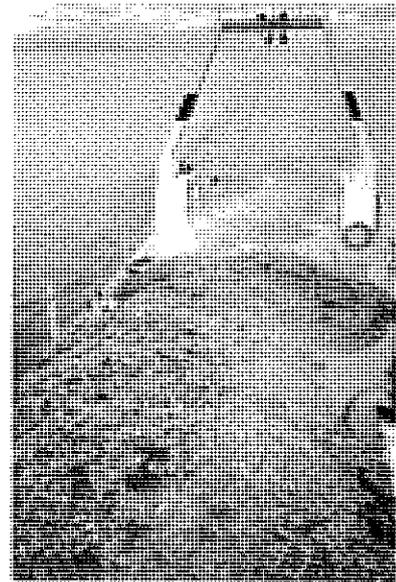


PHOTO 4

Harvesting scallops on a commercial vessel
 One of the two ringbag dredges has been raised above the sorting tray at the rear of the vessel. The dredge is emptied onto the table through its mouth (head-frame) and the scallops are then manually sorted into large 500kg capacity bags – one is visible in the foreground with its top open.

has occasionally failed, but not at the same time and not in both bays at once. Use of both bays and both primary and secondary spat has provided greater surety of successful spat production.

Operational improvements, fluctuations in wild scallop stocks and financial constraints have combined to encourage better tailoring of spat-catching efforts to anticipated needs. The number of lines used in each bay has decreased as the efficiency of spat catching and spat survival has improved. Tasman Bay has had low scallop productivity in recent years and spat catching has been suspended there since 2004. All spat catching efforts have been concentrated in Golden Bay, which went through a short period of poor productivity but is recovering quickly.

This enhancement program, combined with the broader QMS, has resulted in a higher level of sustained harvests. The annual commercial harvest since its introduction into the QMS in 1996 has averaged 468 meatweight tonnes or approximately 3 750 tonnes whole shellweight. This compares to an average of 305 meatweight tonnes during 1982–1991 (under controlled entry, but before QMS) and 301 tonnes average during the boom-and-bust of the pre-1981 fishery.

3. REGULATORY HISTORY LEADING UP TO CHALLENGER

3.1 Overview

New Zealand fisheries legislation has been re-written twice since the start of the commercial Southern Scallop fishery. The fishery was opened under the aegis of the *Fisheries Act of 1908*, which provided primarily for open access to fishing permits and regulatory controls on fishing gear and on times to control extraction. The Quota Management System (QMS) in the *Fisheries Act of 1983* replaced the 1908 Act, although implementation in the scallop fishery did not occur until 1992. The QMS was refined in the current iteration of the Fisheries Act, which was passed into law in 1996. This Act was not fully implemented until October 2001.

3.2 Open access and regulation, 1959 to 1977

In the years 1959 to 1963, access to the fishery was limited by MAF. Controls on the number of permitted vessels were removed in 1964, and the issuance of permits was unrestricted until July 1977. A moratorium on the issue of permits then halted new entrants into the fishery. During 1959 to 1977, regulatory controls were progressively added to manage harvest in the fishery. These controls included:

- i. a 4-inch minimum size limit from 1964,
- ii. a closed season from 1968,
- iii. dredge number and size restrictions from 1971,
- iv. fishing limited to daylight hours from 1975, and
- v. fishing limited to 5 days each week from 1977.

Table 2 details these and other regulatory measures during the open access period.

During this period, commercial fishers were largely uninvolved in the management of the fishery. Decisions were made by the regulating authority with minimal input from the permit holders.

3.3 Restricted licensing and enhancement, 1978 to 1992

In June 1978, the fishery was declared a controlled fishery. Management fell to the Fisheries Licensing Authority, established under Section 101 of the *Fisheries Act of 1908*. Membership of the licensing authority included representatives of the fishers, which provided the first direct involvement of fishers in decision-making about the fishery. A moratorium was placed on the issue of new permits, and existing fishers were required to apply each year for a new permit. Permits were non-transferable. Applications were judged against criteria to test dependence on the fishery. Issued permit numbers rapidly declined from 189 in 1977 to 61 in 1980 (Buzz Falconer,

TABLE 2
Chronology of Regulations, 1959–1983

1959	First commercial landings of scallops.
1964	Control on the numbers of vessels permits removed. Four inch minimum size limit introduced. The size restriction was accompanied by a requirement to land the scallops alive and in a measurable condition which had the effect of prohibiting processing at sea. The use of underwater breathing apparatus was prohibited.
1968	An annual closed season from 1 March to 31 July was introduced.
1969	Fishers limited to using one 8 feet wide dredge or two 4 feet 6 inch wide dredges except in inner Pelorus Sound where fishers were limited to one 4 feet wide dredge.
1971	Locally registered boats permitted to use two 8 feet wide dredges.
1973	Inner Pelorus Sound dredge size raised to 6 feet wide.
1974	Processing restrictions forced a voluntary daily quota of 100 cases (437.5 kg mwt) ¹ per week per boat.
1975	The annual closed season was altered to 15 February to 14 July. Fishing limited to 5 days in each week introduced. Minimum scallop size limit was metricated at 100 mm. 8 feet, 6 feet and 4 feet 6 inch wide dredge sizes metricated to 2.5, 2 and 1.4 m respectively.
1977	The closed season was extended to 31 July. The Southern Scallop Controlled Fishery was declared, new entrants prohibited and permit numbers reduced.
1979	A total season quota of 45 000 sacks (approx 132 tonnes mwt) ² established for the season. A daily vessel quota of 55 sacks (approx 150 kg mwt) established for the season. Size limit removed but processing requirements defined an effective minimum harvest size of 80mm.
1980	The closed season extended from 1 November to 14 August. All boats permitted to use two 2.5 m wide dredges.
1981	Fishery closed to commercial fishing.
1983	Fishery reopened with 48 licences.

¹ 1 case \approx 35 kg shellweight (gwt) \approx 4.375 kg meatweight (mwt) (King & McKoy 1984)

² 1 sack \approx 22 kg shellweight (gwt) \approx 2.75 kg meatweight (mwt) (King & McKoy 1984)

fisherman and Chairman of Challenger Scallops, pers. com.). The majority of the controls on fishing effort established prior to the licensing authority were continued and many of those have survived to the current day. In 1979 and 1980, the size limit on scallops was temporarily removed and the season was shortened (Challenger, 1994a). The processors introduced a minimum size for purchase in an effort to ensure that scallops received from the fishers could be processed and sold.

In 1983, a replacement Fisheries Act passed. The law maintained the controlled fishery management regime for the Southern Scallop fishery and retained the cap of 48 non-transferable fishing licences. The 1983 Act also provided for the introduction of the QMS, but the QMS was not to be implemented in the Southern Scallop fishery for some years. In 1989, a reduced commercial size limit was introduced in conjunction with the establishment of three fishing areas in each of Tasman and Golden Bays, which were to be fished rotationally in successive years. Recreational fishers share the reduced size limit but are not subject to the rotational fishing regime.

Golden and Tasman Bays are managed under a rotational fishing strategy based on the Statistical Reporting Areas (Figure 3). The default strategy is as follows. In Golden Bay, one of the three statistical areas A, B or C is opened each year in turn. The open area is fished between July and February and then is reseeded in April. In Tasman Bay, statistical areas E, F and G/H are fished and reseeded in the same annual rotation. Sectors G and H are treated as one area because productivity tends to be lower and the main bed generally straddles the boundary between them. Sectors D and I are not included in the rotational system, because the bulk of the scallops they produce are slower growing and a lower proportion reach market condition. The default strategy is sometimes modified by Challenger on the basis of annual survey results to capture scallops that are found to be out of phase with the rotation and to provide for non-commercial fishing access.

3.4 Quota Management System, 1992 to present

The period 1992 to 1994 saw major changes in the legislation surrounding the fishery. Agreements reached earlier with industry representatives were codified in the *Fisheries*

Amendment (No. 2) Act of 1992. This act introduced the fishery into a modified form of the QMS under an annual allowable catch of 1 100 tonnes (meatweight). Of this, 576 tonnes were allocated as 12 tonnes of scallop quota to each of the 48 licence holders and 64 tonnes were allocated to Maori on an equal share to each of the 8 tribal groups (Iwi) located within the bounds of the fishery. The remaining 460 tonnes were held by the Crown. In 1994, a further 10 percent of the total quota was allocated to the 8 Iwi from the Crown holdings in accordance with the terms of the Treaty of Waitangi fisheries settlement. Introduction to the QMS removed the fishery from the vessel limitations of the controlled fishery regime. The allocation of new quota to Maori and a period of high catches led to a rapid expansion of the fleet to 60 vessels. The 1992 amendment also established a compulsory levy to fully fund the enhancement programme in accordance with a plan determined by the Minister of Fisheries.

The *Fisheries Amendment Act of 1995* integrated the scallop fishery quota system into the standard QMS provisions, removed the Crown quota, and set a total allowable commercial catch (TACC) of 720 tonnes. The 1992–1995 period also saw restructuring of fisheries administration into the Ministry of Fisheries (MFish) and simultaneous reform of its funding arrangements. This resulted in the current regime, which recovers the government's costs of the fisheries management attributable to commercial fishing through compulsory levies.

The 1992 implementation of the enhancement programme, with costs recovered through a specific levy and service delivered by the Ministry, did not fit into the accountability structures and redefined role of MFish. Contracting the enhancement services out to an external provider was an option consistent with the Ministry's new and wider purchasing roles (Arbuckle, 1999). This reform was to lead directly to the establishment of the Challenger Scallop Enhancement Company Limited ("Challenger").

4. INDUSTRY ROLE IN MANAGEMENT BEFORE CHALLENGER

In 1963, the New Zealand Fishing Industry Board ("NZFIB") was established with statutory powers to levy fishers and the authority to represent fishers to the Government. The Minister was required to consult the NZFIB before making a range of decisions, including the appointment of one of the five members of the Fisheries Licensing Authority and the declaration of a controlled fishery.

The Southern Scallop fishery was declared a controlled fishery in 1977. The appointment of a Southern Scallop permit holder to the Licensing Authority marked the first occasion when Southern Scallop fishers were directly involved in the management of the fishery. At about the same time, scallop fishers developed their own representative body, the Southern Scallop Licence Holders Association. This Association, together with the local Commercial Fishermen's Association, gained recognition by the NZFIB and MAF as representing the voice of the licence holders.

In June 1983, the Scallop Enhancement Steering Committee held its inaugural meeting. The Fisheries Management Division and the Fisheries Research Division of MAF, NZFIB, Scallop Processors Association, Golden Bay/Motueka Commercial Fishermen's Association, and the Southern Scallop Licence Holders Association were represented on that committee (Scallop Enhancement Steering Committee minutes, 1983). The Fishing Industry Board also established the NZFIB Southern Scallop Advisory Committee, which was comprised of representatives of the NZFIB, four local fishers' associations, the scallop processors and the Licence Holders Association.

While the Ministry retained responsibility for the delivery of the enhancement programme, it discussed management of the programme and subsequent harvesting decisions with the Steering Committee. Fishers' vessels and crews were also used by the programme during the annual spat-seeding season. Trial harvests of enhanced stocks began in 1986. By early 1988, the Ministry was pressing for the beneficiaries of the programme to assist with its funding. A voluntary levying system was introduced that year and most

permit holders contributed. The small proportion of fishers who were reluctant to pay a share was identified to other participants, which generally resulted in payment (G.J. Ivey, Administration Manager, Central Region, Ministry of Fisheries, pers. comm.).

The *Fisheries Amendment (No. 2) Act of 1992* replaced the NZFIB Southern Scallop Advisory Committee with a statutory "Southern Scallop Fishery Advisory Committee", which consisted of representatives of scallop quota owners, processors, and Maori interests, together with a representative of the Ministry. The committee was established to advise the Minister of Fisheries on: allowable catches, seasons, exemptions to quota holding limits, the enhancement programme, levies, area and duration of closures, minimum sizes and regulations to be made for the fishery. Allocation of quota to Iwi at this time resulted in Maori representation within the industry representative groups.

5. THE CHALLENGER SCALLOP ENHANCEMENT COMPANY

5.1 Creation of Challenger

With the establishment of the mandatory levy under the 1992 Act, it became apparent to the industry that they would need to provide an alternate funding and administrative structure to protect fishing and management rights. The Challenger Scallop Quota Holders Association was formed for this purpose in December 1993 (Arbuckle, 1999).

In 1993, the Ministry of Fisheries reform was looming. Its new role would not be compatible with direct delivery of enhancement services. The opportunity for the quota holders to be the external contractor to provide those services was established. The quota owners were already paying for the services through a compulsory levy. They believed that they could lower costs so they had incentives to create a structure that could not only deliver those services but also one that would have sufficient credibility and accountability for the Ministry to contract with it.

The structure chosen was a limited liability public company, the Challenger Scallop Enhancement Company Limited, incorporated in May 1994. Its board of directors was drawn from the industry representatives on the statutory Southern Scallop Advisory Committee. Shares in the company were limited to the amount of quota in the fishery and ownership of the shares was constitutionally limited to the owners of Southern Scallop quota at the rate of one share per 100kg of Southern Scallop quota owned. The company's shares were fully subscribed (Challenger, 1994b).

Challenger enhanced its capacity to meet the opportunity for devolution by attracting a Chief Executive (Michael Arbuckle) from within the Ministry of Fisheries. He had been directly involved in creating the framework for service delivery under which Challenger would function. The company moved rapidly to secure a contract to deliver enhancement services as a service provider to the Ministry.

Over the next two years, Challenger developed the devolved fisheries management model by using the framework established specifically for it in the two Fisheries Acts. It developed a formal plan for the enhancement of the scallop fishery, which the Minister of Fisheries approved under the Southern Scallop provisions of the amended 1983 Act. The Minister also appointed Challenger as the organisation to deliver the plan, again under the provisions of the amendment.

5.2 Restructuring in 1996

In early 1996, Challenger redesigned its harvest management strategy by creating a civil contract between itself and every quota owner, permit holder, processor and vessel master. The suite of identical contracts signed each year establishes the rules for fishing, including *inter alia*: earliest start and latest finish dates for the season, area closures, documentary requirements, and limits on daily catches, area catches and scallop sizes.

The rules for each year are developed after information is gathered in the annual biomass survey. Negotiations are also held with recreational fishing groups to establish

areas that might be suitable for recreational harvest. Approval for the annual rules is obtained at a general meeting of the company, to which all prospective participants are invited and granted speaking rights. Until 2000, the Minister of Fisheries endorsed the rules before they were implemented and some of the rules (e.g. earliest and latest dates for fishing, Marlborough Sounds catch limit, and area closures) were implemented by regulation. Since 2000 that process has been changed so that annual endorsement of the Minister is no longer required.

Beginning in 1998, a Memorandum of Understanding (MOU) between the Ministry of Fisheries and Challenger specifies requirements for the provision of information by Challenger to the Minister to "ensure that the Minister receives sufficient information, in a timely manner, on which to base decisions regarding the setting of sustainability and other management measures in the Southern Scallop Fishery." The MOU establishes standards for the information required and an audit process to ensure that the delivery of research information is timely and that the information is of sufficiently high quality (Arbuckle, 2000).

As part of its institutional redesign, Challenger also changed its funding mechanism. New Zealand law provides for commodity levies, a mechanism by which groups of primary producers can establish a levy to fund activities such as marketing and research on their joint behalf. Such commodity levies are designed to provide funding for club benefits and to avoid free-rider problems by requiring all producers of the commodity to pay the levy struck under a commodity levy order. The empowering levy order has a life of 5 years but may be extended if the primary producers required to pay it support its renewal in a ballot held before expiry. Once a commodity levy is authorised, unpaid levies can be made subject to additional levies and are recoverable as a legally enforceable debt. In 1996, the company sought and received the requisite approval of its shareholders to establish a commodity levy on commercially harvested Southern Scallops. The levy may be struck as high as 25 percent of the landed value (ex-vessel or wharf price) of scallops. The levy has varied between 14 percent and 20 percent and was 20 percent for 2006. With the establishment of the commodity levy, the government was able to withdraw its statutory levy set under the scallop-specific amendment. Challenger now sets a business plan and budget annually by majority vote in a general meeting of its shareholders. It then seeks approval to strike a levy rate sufficient to fund that budget, again by simple majority but among all prospective levy payers. These are the same individuals who are qualified by quota ownership to own shares in Challenger. Continuing support for levies has been evident through its renewal in 2002 and again in an expanded form in 2007.

Until the 1996 *Fisheries Act* was implemented, the currency of Southern Scallop ITQs was measured in kilograms of permanent quota. Every sale of quota generated a series of actions by Challenger upon notification of the transaction. If the transfer of shares would change who was qualified to join, Challenger would extend an offer to a newly-qualifying prospective shareholder to accept a shareholding in the company. Challenger would also initiate removal of any no-longer qualifying shareholder. With the implementation of the 1996 Act, the currency of ITQs went from 720 000 kg of quota in the scallop fishery to 100 000 000 quota shares that generated 720 000 kg of annual catch entitlement (ACE) each year. Under the 1996 changes, ACE trades separately from the generating quota shares. ACE could be counted against fish taken by the quota owner or sold to another fisher. This change led to an amendment of Challenger's constitution to provide for one share per quota owner but with voting rights at company meetings tied to quota shares owned on the day of the meeting. Voting rights were later defined as the number of quota shares owned seven days prior to the meeting.

5.3 Further devolution of authority to Challenger

In 1998, Challenger developed a new enhancement plan. Challenger received Ministerial approval as the organisation appointed to implement that new plan under the 1996 Act. Scientific modelling of the fishery that incorporated rotational harvest and enhancement of the fishery came to several conclusions (Breen and Kendrick, 1997). The fishery could be subject to over-fishing under a constant catch strategy. The fishery was more stable, but still susceptible to over-fishing, under a constant proportion of biomass catch strategy. Rotational fishing was highly stabilising, and enhancement together with rotational fishing was considered to be the most stable strategy. That study found that the rotation and enhancement strategy would also withstand the extraction of 10 percent of the recruited biomass under the non-rotational harvests by recreational and customary Maori users.

Breen and Kendrick's (1997) study underpinned the further devolution of harvest management functions to the company. In 2000, the season start and finish dates were set on a permanent basis and the Minister withdrew from regulating the Marlborough Sounds catch limits and rotational area closures. In 2002, a total allowable catch was set at 827 tonnes, with 40 tonnes each allocated to Māori customary fishing and to recreational fishing. Having agreed that the rotational harvest regime rather than the TACC was the proper management tool to ensure sustainability of the fishery, the Minister set the TACC at 747 tonnes, well in excess of the anticipated average annual harvest. The species is also one of only three listed in the Third Schedule of the Fisheries Act that permits adjustments of the TAC within a quota year (1 April to 31 March for this fishery), should information indicate that such a course is desirable.

The Minister's agreement marked a significant change in the role of enhancement in the fishery. Enhancement had originally been the response to a collapsed fishery that delivered sustainability requirements. Now, enhancement was no longer a required activity (Drummond, 2002) but rather one of a range of discretionary tools available to Challenger to achieve its management goals for the fishery.

The Breen and Kendrick findings also underpinned a Ministerial decision to list the fishery in the Sixth Schedule of that Act, which permits the return to the sea of scallops that are likely to survive return, not wanted by the fisher, and would otherwise be required to be kept and sold.

6. CHALLENGER'S COMPREHENSIVE ROLE

Challenger is responsible for delivering most management functions in the Southern Scallop fishery, subject to Ministry of Fisheries oversight though the accounting functions for quota and ACE transactions are performed by FishServe, as described by Harte (this volume).

Challenger finances an annual survey of the biomass of the stock that it manages. The sampling structure for this survey generates data that are over three times as detailed as the preceding government surveys. Each year Challenger selects a science provider to design the survey to meet the requirements of the MOU. Following Ministry agreement on the methodology and design, Challenger undertakes the sampling itself and delivers the raw results to the science provider for analysis and reporting to the level required under the MOU. That report is then delivered to the Ministry. Apart from using the report for its own purposes, the Ministry is asked to confirm that it is satisfied that the report is sufficiently scientifically robust to properly inform decision making in the fishery.

Challenger's managers take more detailed information from the survey and use it together with the report to create a draft harvest strategy for the upcoming season, which is presented to directors for approval. A strategy will include proposals regarding:

- i. areas to be closed to commercial fishing under the rotational fishing programme,

- ii. areas to be closed to commercial fishing to provide for good recreational fishing,
- iii. acatch limit for the Marlborough Sounds (which is not managed under rotation),
- iv. ACE shelving (see discussion below), and
- v. daily and weekly commercial catch limits.

Once the Board has approved the draft strategy, Challenger consults with commercial fishery participants, recreational scalloping representatives, customary Maori fishers, Government agencies, environmental organisations and the general public. The Ministry is also invited to comment on the draft strategy and attends all of the consultation meetings. Copies of the draft harvest strategy and the survey report are made available to interested parties prior to the meetings and detailed tow-by-tow survey information is presented and discussed at the meetings. Discussion of the draft strategy at the meetings, negotiated agreements over recreational access and written comments received are considered by Challenger. Improvements to the harvest strategy are incorporated into the final recommendations and approved by Challenger's directors for presentation to a company meeting with a view to obtaining final shareholder approval for the strategy. Challenger also uses the data to estimate potential annual harvest from the fishery, which informs the annual business planning, budgeting and levy setting.

The biomass survey and estimate of potential harvest are used to implement limits on aggregate catching rights (ACE) in the fishery. Because the TACC does not constrain catch in this fishery in the absence of some other mechanism, the available ACE generally exceeds by a significant margin the capacity of the areas to be fished to produce scallops. This does not present a sustainability problem in a rotational fishery, but many efficiency incentives that otherwise exist are lost. This leads to over-capitalisation and a race to catch at the start of the season. Challenger manages this risk by setting an in-house limit on the catching rights available in the fishery at a level a little below the estimated potential harvest for the year. This is implemented by agreeing on a cap with the quota owners, who then transfer a proportional share of their ACE to Challenger in a process known as "ACE shelving". Challenger holds the ACE on behalf of the quota owners, which makes it unavailable for fishing.

Catch in the fishery seldom approaches the in-house limit until late in the season, when the bulk of the catch has been taken, the costs of fishing have risen significantly and many vessels have left for more profitable opportunities. At this point, the ACE is generally released back to quota owners to reduce the costs of access to ACE when other fishing costs have risen. The quota holders have agreed to this mechanism in their contract with Challenger.

The bottom that is dredged for Southern Scallops is also dredged for oysters. Because oyster dredging would impact Challenger's reseeding and rotation programme, Challenger moved in 1996 to resolve this conflict. Challenger encouraged the oyster dredge quota holders to form the Challenger Oyster Management Company. Because many of the Southern Scallop quota holders also dredge for oysters, strong reasons to cooperate existed. Management of the oyster fishery by a similar organisation provides a framework for delivering broader management objectives, including avoiding unnecessary dredging of scallop grounds.

Challenger has also negotiated an agreement with recreational harvesters of Southern Scallops. Among other terms, that agreement allows recreational harvesters to access areas that are closed to commercial harvesting. A process of consultation and sharing of responsibility for management with the recreational group led to an invitation to its Chairman to become a permanent observer on the Challenger Board. This invitation was accepted. In 2005, Challenger's constitution was modified to provide an additional directorship filled by the recreational representative.

Challenger is also responsible for purchasing and providing services for the monitoring of natural biotoxins. The Southern Scallop fishery biotoxin management plan provides for the collection by Challenger and its subcontractors of water and shellfish samples required for analysis. Challenger directly purchases the analysis services from approved laboratories. The results are forwarded directly to the public health and regulatory authorities responsible for declaring the scallops safe to eat and for audit of the sampling programme. Challenger has been able to make significant cost savings by managing the programme directly and by sampling more frequently during peak harvest times than the regulatory programme requires. This reduces the volume of product at risk of being unsafe to eat should toxins be present.

Challenger has also taken a lead role in protecting the value and extent of ITQ rights in the face of attempts to reallocate fishing space to aquaculture interests. Challenger has successfully argued that the expansion of aquaculture must be integrated with the fisheries. Estimates of the loss of production from the Southern Scallop fishery as a result of fishing areas already reallocated to aquaculture interests amount to between 3 percent and 5 percent and further applications being considered in 2007 and 2008 represent a potential loss of production totalling between 12 percent and 18 percent (Ministry of Fisheries, 2007).

Harvests in the fishery have shown a continuing decline since 2002. This cycle began with large spat falls in 1997/98, which were followed by evidence of shellfish starvation in Tasman Bay and the Marlborough Sounds and then repeated natural spat failures. Both enhanced and unassisted spat that settled in the fishery failed to thrive and harvest condition was consistently poor, particularly in Tasman Bay. Challenger responded by stalling the rotation in Tasman Bay to permit fishing on seeded stock that was growing very slowly and to permit other areas to lie undisturbed for longer than normal. Fishing, when it did occur, was extremely light and in short, controlled periods. Despite these measures, Tasman Bay continued to decline and the scallop biomass in 2006 was the lowest observed in any survey. Only one small area had reasonable numbers of fish in good quality and Challenger agreed not to fish that area to permit recreational access to those fish. In 2005 and 2006 surveys, Golden Bay appeared to be recovering with significant numbers of spat growing. Approximately 50 percent of that fish was a product of reseeded. The first harvest of those scallops is expected in 2007, when a reversal of the declining trend in catches is anticipated. Tasman Bay continues to show no signs of recovery. Challenger has continued to carefully husband the scallop resource and to share it with other users, despite the financial hardships suffered by the company and its shareholders.

The suite of functions performed by Challenger (in conjunction with FishServe) includes almost the entire set of management functions normally provided by fisheries management agencies. It has implemented a sophisticated resource survey, reseeded and rotational program with a degree of efficiency that would be difficult for any government agency. It has negotiated resolutions of conflicts with both recreational users and other commercial users of the same area. These kinds of conflicts are often the most intractable of management problems faced by fisheries management agencies. Challenger shows that with the correct incentive structures in place, devolution of responsibility for management functions can result in efficient and effective management.

7. EVALUATION OF CHALLENGER AS A SELF-GOVERNANCE INSTITUTION

In 2000, before the current stock declines, Arbuckle (2000) identified four indicators that the fishery was performing well under the Challenger management model.

- i. The high level of agreement reached amongst industry participants and between different sectors that utilise the scallop resource.
- ii. Recruited stock biomass indicators show a stabilising and positive trend over time.

- iii. Pre-recruit stock biomass indicators also show a corresponding increase over time.
- iv. The analysis of implicit discount rates in the fishery by Akroyd *et al.* (1999) concluded that their convergence over time with real interest rates (expressed as inflation-adjusted Government 90-day bill rates) compared favourably with the divergence from that rate by another poorly performing New Zealand scallop fishery.

Arbuckle rated the first indicator as by far the best measure of performance and described the other three independent measures as providing further evidence in support of the cross-sector agreement. Note also the comparison of implicit discount rates in the fishery (iv. above) is confounded by distortions in the reported value of ACE as a result of the novel TACC and the related shelving of ACE in some years.

Stock biomass in the Challenger fishery is subject to environmental factors that are beyond the control of either Challenger or the Government and create high variability in both exploited and unexploited fisheries. In the Challenger case, such externalities have resulted in a continuous decline in stock abundance between 2001 and 2006 when the first indication of improving biomass has been observed. Notwithstanding the more recent decline in biomass, average landings have been higher under rotational management. Between the reopening of the fishery in 1982 and the beginning of rotational fishing in 1989, the fishery averaged 272 tonnes of harvest a year. Since rotational harvest began, it has averaged 435 tonnes a year.

The continued, nearly unanimous, support by the quota owners for the levying process and by all fishery participants for the harvest management rules is a strong indicator that the rights' owners value retaining management control within Challenger. Notwithstanding the downturn in the fishery, the unpopular adoption of a real-time harvest vessel location monitoring system by Challenger and high costs associated with defending quota rights, support for levying was re-affirmed in 2006. Votes associated with 95 percent of the participating quota rights were cast in favour of renewal of the levy for a further 5 years.

Support for the management programme is also evident from the recreational groups and the Ministry of Fisheries. External observers also view the model employed by Challenger positively.

8. LESSONS FROM THE CHALLENGER EXPERIENCE

The success of Challenger provides several lessons about the role of government, industry and science in effective self-governance of fisheries. Arbuckle (2000) identified three key government innovations in the framework for management that contributed to the successfully devolved management model. Those innovations were: (a) flexibility over prescription, (b) empowerment over coercion and (c), accountability over control.

Drummond (2002) described the role of stock enhancement in the management framework. He noted five key phases as being distinguishable: (a) applying technology and developing management capability, (b) aligning rotational fishing with enhancement, (c) legislative reform, (d) collective action and (e), a consensus approach. Whereas enhancement had been seen as a response to a collapsed fishery, it subsequently became a supplementary and discretionary component of the management framework.

Successful development of Challenger was built on some strong internal direction by the industry. The long history of increasing industry investment in management contributed a sense of responsibility. A closed group of beneficiaries was created by the introduction of the controlled fishery. The desire to attempt enhancement in a collapsed fishery created a unique opportunity. Strong leadership from within the fishing industry helped to develop the capacity and structures required for devolution of the management from government. The theme of strong and capable leadership was

continued through the Challenger Board and its choice of founding CEO to manage the company and fishery through increasing devolution of management authority.

Communication between government and industry is an integral component of the confidence building that precedes devolution of managerial responsibility. Government requires confidence that the group has a genuine understanding of fisheries management concepts. A pre-requisite for that confidence is successful communication between the government and stakeholder managers. This paper argues that the successful devolution of management for the scallop fishery was contingent on the permit holders (later ITQ rights holders) developing

- i. an understanding of the language and concepts of fisheries management sufficiently well to share meaningful discussions with the government fisheries management body,
- ii. a positive view of the opportunities for improved value that could be obtained from the fishery under a devolved management structure, and
- iii. A willingness to accept the risks inherent in taking responsibility for managing the fishery.

The success of Challenger is not due to any single factor. The biology of the Southern Scallop made re-seeding a strategy that attracted both industry and government attention. Subsequent contributions by science helped establish the role of rotation in efficient management. Industry took an active role in defining a new approach to management and accepted responsibility for implementation. Government brought a flexible approach to management that permitted devolution of responsibility to industry.

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MEMORANDUM OF
UNDERSTANDING
BETWEEN

Ministry of Fisheries

and

The Challenger Scallop
Enhancement
Company Limited

**MEMORANDUM OF UNDERSTANDING BETWEEN
THE MINISTRY OF FISHERIES AND THE CHALLENGER SCALLOP
ENHANCEMENT COMPANY**

Preamble:

This Memorandum of Understanding is intended to contribute to the ability of the Challenger Scallop Enhancement Company Ltd to continue to develop opportunities for responsible self-management of the southern scallop fishery. The Ministry has worked closely with the quota owners in this fishery over some 15 years. Since the Company's inception the Ministry has developed a productive working relationship with the Company. This relationship has been characterised by the high quality of information routinely provided to the Ministry by the Company. In July 1997, the Minister approved in principle the entering into of an Memorandum of Understanding between the Company and the Ministry to cover the provision of such information.

This Memorandum constitutes an agreement between the Chief Executive of the Ministry and the Company regarding the provision of information necessary to manage this fishery. The Chief Executive is authorised to enter into this Memorandum through his powers as the Chief Executive of the Ministry as set out in Part III of the State Sector Act.

The Role of the Ministry

The Ministry of Fisheries wishes to maximise the ability of stakeholders to act in a collective manner and develop opportunities for self-management. Providing such opportunities is consistent with the government's role in enabling efficient resource use by providing the framework to allow the owners of harvesting rights to make decisions regarding the operation of those rights. However, in providing this opportunity the Ministry must also safeguard its ability to deliver on its core responsibilities: ensuring sustainability and fulfilling environmental principles, meeting Treaty of Waitangi and international obligations, enabling efficient resource use and ensuring the integrity of management systems.

The Minister of Fisheries is required to set sustainability and other management measures, and to determine required services, including research. The Ministry advises the Minister on management measures and issues the relevant spat catching and special permits that allow the Company to undertake its activities in accordance with the requirements of the Fisheries Act. In order to fulfil the statutory requirements imposed under the Fisheries Act 1983 and Fisheries Act 1996, and in order for the Ministry to adequately advise the Minister on management measures, the best available information is required.

Specifically, this Memorandum is designed to ensure that the Minister receives sufficient information, in a timely manner, on which to base decisions regarding the setting of sustainability and other management measures in the southern scallop fishery.


C.S.

The Role of the Company

The Company was established in 1994 to provide fishery management services to quota owners in the southern scallop fishery. Shares in the Company are held exclusively by owners of southern scallop quota. Voting rights for appointment of Directors and approval of the Company's annual business plan are held in proportion to quota ownership in the fishery. All services provided to quota owners by the Company are funded by the imposition of a Commodity Levy Order. The Company may, therefore, be said to be representative of the collective interests of quota owners in the southern scallop fishery, and is directly accountable to these quota owners. The Ministry and the Company wish to enter into this Memorandum to set out the respective responsibilities of each in contributing to aspects of the management of the southern scallop fishery.

1 Statement of Purpose

The purpose of this Memorandum is to outline the government's information requirements in relation to the harvesting of adult scallops in the southern scallop fishery.

2 Conduct of Parties

During the term of this Memorandum the parties shall at all times act in good faith towards each other.

During the term of this Memorandum the Ministry shall provide all reasonable assistance to the Company necessary for the carrying out of the Company's obligations under this Memorandum.

3 Fishery Management Framework

The Requirements of the Fisheries Act 1996

All persons exercising or performing functions, duties or powers pursuant to the Fisheries Act 1996 shall, in relation to the utilisation of fisheries resources or ensuring sustainability, take into account the environmental and information principles set out in ss 9 and 10 of the Act. Further, s 5 of the Act provides that all persons exercising or performing functions, duties or powers pursuant to the Fisheries Act 1996, shall act in a manner consistent with New Zealand's international obligations and the provisions of the Treaty of Waitangi (Fisheries Claims) Settlement Act 1992.

In setting sustainability measures under s 11 of the Act, the effects of fishing on the stock and aquatic environment, existing controls on the stock or area and the natural variability of the stock must be taken into account. Regard should also be had under s 11(2) to any relevant regional policy statements, regional plans or proposed regional plans under the Resource Management Act 1991 and any management strategies or management plans under the Conservation Act 1987 that apply to the coastal marine area.

The Ministry notes that s 30(2) of the Resource Management Act read together with s 6(1) of the Fisheries Act 1996 clarifies the responsibilities for the management of fisheries. To the extent that any Regional Council purports to control the use, conservation, enhancement, or development of any fisheries resources controlled under the Fisheries Act 1996 for other than a resource management purpose, the purported rule will be *ultra vires* s 30(2) of the Resource Management Act.

In making decisions on sustainability and other management measures, s 12 of the 1996 Act and s 28D(2) of the 1983 Act require that consultation be undertaken with such persons or organisations whom the Minister considers to be representative of those classes of persons having an interest in the southern scallop fishery or the effects of fishing on the aquatic environment in the area concerned. These groups include Māori, environmental, commercial and recreational interests. When considering sustainability measures, the input and participation of tangata whenua must also be provided for.

Management of the Southern Scallop Fishery

A number of measures are available to decision makers to achieve the purpose of the Act in managing the southern scallop fishery. These measures may include approval of an enhancement plan in the fishery, setting the Total Allowable Catch (TAC), the Total Allowable Commercial Catch (TACC), seasons, daily bag limits, size limits, restrictions on fishing methods, and open areas to be fished in any season.

The southern scallop fishery falls within the 1 April fishing year, and decisions regarding catch limits are made within the fishing year, following the receipt of biomass information. It is because of the rotationally enhanced nature of the fishery that the fishery has been placed on the Third Schedule to the Fisheries Act 1996, and is therefore able to have an alternative Total Allowable Catch set under s 14 of the Fisheries Act 1996. The Fisheries Act requires that a Total Allowable Catch and Total Allowable Commercial Catch be set for the southern scallop fishery. However in the context of this fishery it should be recognised that the operation of the enhancement plan in combination with the rotational fishing of scallops above the minimum size limit also act as sustainability measures. The implementation of these measures enables the Minister to set an alternative Total Allowable Catch for the fishery, and to consider any proposals from the Company that would allow the Company to control the availability of quota in any season. Such an arrangement would allow the Company to provide for the needs of quota holders while not compromising the sustainability of the fishery.

The Minister must approve the enhancement programme in this fishery under s 310 before the programme may be implemented. This enhancement programme deals with activities such as the collection and harvesting of spat and the reseeding of spat onto the seafloor, together with monitoring the survival of seeded scallops, whereas the purpose of this Memorandum is to outline the Ministry's information requirements in relation to the harvesting of adult scallops.

The Ministry notes that in addition to the management measures outlined above, the Company implements shellfish quality assurance programmes in accordance with plans approved by government and also implements its own programme to help ensure compliance with voluntary and wider statutory management rules.



4 Information Requirements

Under this framework, in order to make decisions that fulfil the purpose of the Act, decision makers require information upon which to base such decisions. Any person or organisation submitting proposed management measures to the Minister or Ministry must be able to demonstrate that the proposal meets the requirements of the Act.

Pursuant to s 10 of the Fisheries Act 1996, decision makers are required to base decisions on the best available information, consider any uncertainty in this information, and be cautious where the information is uncertain, unreliable, or inadequate. This section provides legislative authority for what is commonly known as the precautionary approach. It should be noted that this approach will be applied to the consideration of any decision under the Fisheries Act.

5 Provision of Information

The parties therefore agree to the following requirements regarding the provision of information relevant to the southern scallop fishery.¹

The provision of information relating to research

1. A proposed design for a biomass survey in the southern scallop fishery should be submitted to the Ministry at least one month prior to the undertaking of the survey in each year. The Company is required to obtain approval from the Ministry before any biomass survey that is to be considered as part of the management decision making process is implemented. The survey design must be developed in accordance with the attached schedule I.
2. A report detailing the results of this biomass survey is to be submitted to the Ministry by 30 June each year, in the format provided in the attached schedule II.
3. An annual summary of the previous season's biomass survey results for the fishery by stratum and summed by rotational area together with the pre-season predicted yields and a summary of the performance of the fishery by rotational area is to be provided to the Ministry by 31 January each year. This summary information will be submitted to the Manager Science Policy for review by the Science Policy Group and the Shellfish Working Group if required.
4. From time to time the Company and the Ministry may agree to conduct research into the environmental impact of scallop fishing and any such agreement shall be in written form. Such an agreement shall constitute a variation to this Memorandum pursuant to clause 10. Alternatively the Minister may decide to propose such research as a service to which cost recovery levies apply under Part XIV of the Fisheries Act 1996.

¹ The Ministry notes that these information requirements are current at the time this Memorandum is entered into. It is acknowledged that these requirements may change over time, and this Memorandum may accordingly be varied as the parties deem necessary pursuant to clause 10.

The provision of information relating to catch limits and management measures

All reports supplied under the terms of the information requirements outlined below should be supported by details of any consultation the Company has chosen to undertake with the sector groups identified by the Minister as being representative of those persons having an interest in the stock or the effects of fishing on the aquatic environment in the area concerned. Where possible, the Ministry will ensure that the Minister's consultative obligations will be met concurrently with the consultation round conducted by the Company, following receipt of biomass information by the Ministry. To enable this to occur, the Company would need to provide the Ministry with a proposed consultative timetable at least two weeks prior to consultation being undertaken.

Following this statutory consultation process, and the receipt of final recommendations from the Company, the Ministry will provide advice to the Minister of Fisheries regarding sustainability and other management measures required in the fishery for that fishing year. Final decisions from the Minister can be expected approximately three weeks after final submissions are received. It should be noted that some measures determined by the Minister may require implementation by notice in the New Zealand Gazette, and that it is desirable for these notices to have a stand down period of 28 days before they take effect. If upon request by the Company, the Ministry elects to extend the reporting times required by this clause, pursuant to clause 8 of this Memorandum, the timeframes in which management decisions may be implemented may also be extended in order to allow formulation of final advice and consideration by Ministers.

The Company must provide the following information to the Minister by 15 July each year:

1. A rotational fishing plan showing the areas proposed to be fished in any year. This plan should also detail any measures the Company proposes to take in respect of assisting the implementation of any closures by the Ministry.
2. Recommendations on season start and finish dates. These recommendations should also detail any measures the Company proposes to take in respect of assisting the implementation of the season by the Ministry.
3. A plan outlining the provision that is proposed to be made for non-commercial access to the fishery in each year. This plan shall also include any recommendations regarding areas to be closed to commercial fishing, and the manner in which these closures could be enforced. This plan is to be the subject of prior consultation with those non-commercial interests that the Minister considers to be representative under s 12 of the 1996 Act and s 28D(2) of the 1983 Act, such as the Challenger Scallop and Dredge Oyster Recreational Advisory Group and the Top of the South & Iwi Fisheries Consultative Committee.
4. Recommendations on the Total Allowable Catch that may be set or varied under the Fisheries Act 1996 for the fishery.

5. Recommendations regarding the Total Allowable Commercial Catch for the fishery. In relation to the Tasman and Golden Bay sectors of the fishery these recommendations should be supported by biomass and yield assessments of scallops available in those areas. Where appropriate, any proposals allowing the Company to act as a lease-holder and to control the availability of quota should also be addressed.
6. Recommendations proposing a sustainable sub-catch limit for the Marlborough Sounds, together with a plan outlining the proposed methods of monitoring and enforcing such a catch limit. This recommendation is to be supported by biomass information and yield assessments regarding the densities of scallops available in the Marlborough Sounds. The Company should also cover such issues as the managing of fishing effort in the Sounds so as to avoid and mitigate the environmental impacts of dredging, and address any additional sustainability issues as directed by the Minister, or arising from the consultation with stakeholders.

6 Auditing and Monitoring

Where the Ministry has any reasonable concerns as to the adequacy or completeness of the information supplied under the requirements of this Memorandum it may, after consultation with the Company, require auditing and monitoring of this information. This auditing and monitoring may be done either by Ministry staff or by an auditor selected by the Ministry, and may relate to both the design of surveys, and the data collected during these surveys. The costs of this auditing and monitoring will be met directly by the Company.

7 Status of Information

The Ministry acknowledges the commercially sensitive nature of some of the information received under this Memorandum. The Ministry also undertakes to notify the Company of any actions by it in disclosing information supplied under the terms of this Memorandum to a third party. However the Ministry remains subject to the obligations contained in the Official Information Act 1981.

The Ministry acknowledges that the Company may collect a range of fisheries management information for purposes other than fulfilling the requirements of this Memorandum. The Ministry wishes to note that the Company may use this information for its own purposes, provided such purposes do not conflict with the requirements of this Memorandum.

8 Effect of Non-Compliance

As outlined earlier in this document the Minister and Ministry are reliant upon the provision of quality information in order to fulfil their responsibilities under the Fisheries Act. The information principles set out in the Fisheries Act 1996 provide guidance for decision makers when considering information on which management decisions are based. The Ministry acknowledges that this Memorandum does not provide the Minister or the Chief Executive with any additional powers beyond those conferred by the Fisheries Act.

However the Ministry notes that if the information requirements contained in clause 5 of this Memorandum are not met by the Company, the Chief Executive and/or Minister may need to take additional steps to counter any lack of information and to ensure that continuing obligations under the Fisheries Act are able to be met.

For example, the southern scallop season and rotational fishing zones in which commercial fishing takes place may be closed if such a course of action is deemed necessary. The special permit issued to the Company may also be amended in such circumstances.

Further, the exercise of this discretion prior to or during an upcoming commercial season, may potentially be followed by a decision to vary the Total Allowable Commercial Catch for the fishery.

It should also be noted that in the event of the Company failing to supply the information specified, the Minister may elect to directly purchase such information as a required service and recover the relevant costs pursuant to the cost recovery regime established under Part XIV of the Fisheries Act 1996.

The Ministry undertakes to provide written notice to the Company of any failure or omission or perceived failure or omission on the part of the Company that may constitute a breach of this Memorandum prior to taking steps towards the implementation of the measures described above.

The Ministry may, from time to time, agree to extend the reporting times specified in clause 5 of this Memorandum upon written application by the Company. However, as noted in clause 5, this may affect the timeliness of the decisions made by the Minister.

9 Interpretation

In this Memorandum, unless the context otherwise requires:

“Act” means the Fisheries Act 1983 and/or the Fisheries Act 1996 whichever the context requires.

“Challenger Scallop Dredge Oyster Recreational Advisory Group” means the group approved by the Minister of Fisheries as being representative of recreational interests in the southern scallop and Nelson/Marlborough dredge oyster fisheries.

“Chief Executive” means the Chief Executive of the Ministry of Fisheries.

“Company” means the Challenger Scallop Enhancement Company Ltd as incorporated under the Companies Act 1993.

“Memorandum” means this Memorandum of Understanding and includes any variations, schedules and attachments.

“Minister” means the Minister of Fisheries.

“Ministry” means the Ministry of Fisheries.

"Notice" means written notice addressed to the Chief Executive of the Ministry of Fisheries or the Chief Executive of the Challenger Scallop Enhancement Company Ltd.

"Open areas" means the areas open to commercial fishing in any southern scallop season as specified by notice in the New Zealand Gazette under the Fisheries Act.

"Season" means the southern scallop season as set by notice in the New Zealand Gazette under the Fisheries Act.

"Shellfish Working Group" means the group convened by the Ministry of Fisheries to review information on stock structure, productivity and abundance and to update the fishery assessment of shellfish fisheries.

"Southern Scallop Fishery" means those New Zealand Fisheries waters defined as SCA 7 in Part III of the First Schedule to the Fisheries Act 1996.

"Special Permit" means a permit issued under s 64 of the Fisheries Act 1983 or s 97 of the Fisheries Act 1996.

"Total Allowable Catch" means a total allowable catch as set or varied for a stock by notice in the Gazette under the Fisheries Act 1996.

"Total Allowable Commercial Catch" means a total allowable commercial catch specified by notice in the Gazette under the Fisheries Act.

In the construction of this Memorandum, unless the context otherwise requires:

Words importing the singular shall include the plural and vice versa;

Persons shall include companies or any other form of body corporate and vice versa;

References to clauses are references to clauses of this Memorandum; and references to schedules are references to schedules of this Memorandum;

References to the parties means collectively the Ministry of Fisheries and the Challenger Scallop Enhancement Company Ltd; and reference to either one of them includes their respective successors, administrators and permitted assigns; and

Any reference to a statute or statutory requirement includes a reference to regulations or any other form of delegated legislation and includes any such statute or statutory requirement amended and in force from time to time including any substituted provisions that substantially correspond to those statutes or statutory requirements.

10 Commencement Date and Variation

This Memorandum of Understanding shall commence immediately upon its execution by both parties.

This Memorandum may only be varied by written agreement between the parties.

11 Arbitration

In relation to clause 6 of this Memorandum, where any dispute arises between the parties in respect of:

- a) whether reasonable concerns exist regarding the adequacy or completeness of information;
- b) the nature of the required auditing or monitoring; or
- c) the reasonableness of the costs of such monitoring or auditing

the parties shall, without prejudice to any other right or entitlement they may have pursuant to this Memorandum or otherwise, explore whether the dispute can be resolved by agreement between them using informal dispute resolution techniques such as negotiation, mediation, independent expert appraisal or any other alternative dispute resolution technique, and the rules governing any such technique adopted shall be as agreed between the parties.

In the event the dispute is not resolved by such agreement within 14 days of written notice by any party to the other party of the dispute (or such further period as may be agreed between the parties), either party shall refer the dispute to arbitration.

The parties agree that one arbitrator will be chosen. That arbitrator shall be agreed between the parties within 10 days of written notice of referral by the referring party to the other party, or failing agreement, appointed by the President of the Wellington District Law Society. In either case, the arbitrator shall not be a person who has participated in any informal dispute resolution procedure in respect of the dispute.

Within 10 days of the arbitrator being appointed, the parties and the arbitrator shall determine the process to be followed by the parties and the arbitrator. Failing such agreement, the substantive provisions of the Arbitration Act 1996 shall apply.

The arbitrator shall have a discretion to apply considerations of general justice, fairness, equity and good conscience in making any decisions. Any award given by the arbitrator shall be final and binding upon the Parties and shall not be capable of either review or appeal.

12 Termination

In the event that the Company enters into an arrangement or composition with its creditors, or goes into liquidation or bankruptcy or has a receiver or manager of its business or undertaking appointed, or passes a resolution for winding up, or otherwise becomes insolvent or inoperable, the Ministry may terminate this Memorandum forthwith by notice to the Company.

13 Costs

All costs including legal fees and disbursements associated with the completion and performance of this Memorandum shall be borne by each party respectively. However the Crown's costs associated with this Memorandum may be recovered under the provisions of Part XIV of the Fisheries Act 1996.

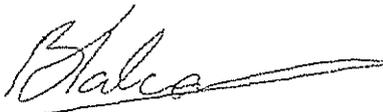
14 Force Majeure

In the event of the Company failing to perform or delaying in the performance of its obligations under this Memorandum caused by circumstances beyond its reasonable control, the parties undertake to enter into negotiations in good faith to resolve such a situation.

Signed for and on behalf of the
Ministry of Fisheries



Signed for and on behalf of the
Challenger Scallop Enhancement
Company Ltd


BRIAN FALCONER
DIRECTOR

C. Sward.
CHRISTOPHER GUARD
DIRECTOR

SCHEDULE 1

1 Project Title

Annual estimation of scallop population structure, distribution, abundance and available take, in part or all of the southern scallop fishery: 1. Survey proposal.

2 Objective

- 2.1 To determine the population structure, distribution and abundance (numbers and biomass) of scallops aged one year and older within areas of Tasman Bay, Golden Bay, and Marlborough Sounds that commercial fishers may seek to harvest during the upcoming season.
- 2.2 Within the Tasman and Golden Bay areas that are proposed to be commercially fished, to estimate the meatweight of commercially sized scallops above a density that would support commercial fishing.
- 2.3 In the Marlborough Sounds areas, to estimate the abundance (numbers, biomass and density) of commercial sized scallops and to use these data to estimate the Current Annual Yield (CAY) for the upcoming season.

3 Rationale

The Ministry is required to approve any biomass survey and design before it is implemented, if such a survey is to be the basis on which decisions on the sustainable utilisation of the fishery are to be made by the Minister. The authority to implement any such survey must be by way of an appropriate permit issued under the Fisheries Act.

The Tasman and Golden Bay sections of the southern scallop fishery are supported by rotational fishing and enhancement programmes. In 'normal' circumstances, the rotational fishing areas are commercially fished once in every three seasons, and after being harvested, the beds are reseeded with scallops caught during spat catching operations. However, in some years, the standard rotations may need to be altered. This step may be necessary if natural scallop settlements have occurred out of sequence with the rotation (between seeding and harvesting), yet are able to be utilised without undermining the sustainability regime. In addition, scallops may accumulate underneath spat catching sites and may need to be fished out to clear the area for further spat catching, or to ensure such scallops are not unnecessarily lost to the fishery.

During years when the normal commercial rotational fishing pattern is to prevail, the biomass survey will include those rotational areas due to be open to fishing on a three year cycle. Modelling studies have shown that this practice is likely to protect sufficient spawning stock to provide for the long term viability of the fishery.

In years when fishing 'out of rotation' is contemplated by the commercial sector, then the biomass survey will need to be more comprehensive, and potentially target all 1+ year old (and older) scallops in the rotational zones. For this reason, the area to be surveyed will usually need to be confirmed with the Ministry before a survey design is developed.

The Marlborough Sounds has yet to be incorporated into the rotational or enhancement programmes, so harvesting in this area is managed under a CAY strategy. Accordingly, the biomass survey is required to estimate the entire population of legal sized scallops that are available in areas of interest to the commercial sector. These fishing grounds overlap significantly with those available to the non-commercial sector. As a consequence, information is required on average scallop densities by stratum within this area, in order for the Minister to be able to ensure that adequate provision has been made for non-commercial access to the fishery.

Since the 1990s, the annual biomass survey of the southern scallop fishery has used a two-phase stratified random dredge survey design, supplemented by dredge efficiency trials undertaken with the assistance of divers. While alternative designs will be considered on their merit by the Ministry, this form of survey is expected to continue.

Survey stratification is based on information collected during previous years, pre-seeding surveys, and monitoring of reseeded stocks. In Tasman and Golden Bays, strata are to be no larger than the size of a rotational zone, and a target CV of between 10-20% should be associated with biomass estimates.

All primary data is to be retained by the Company in a form that is able to be loaded into the Ministry database. The obligations to meet in relation to data format, data validation, data loading, data checking and (if necessary) database creation are briefly outlined in Schedule II to this agreement. In the event that the Ministry requests the primary data for any year(s), the precise standards and specifications for data transfer will be obtainable from the Ministry.

4 Methods, Key Activities, and Performance Indicators

The survey proposal must provide the rationale for, and design of, the proposed research to meet the objectives for each biomass survey. The following subheadings should be used to ensure that all of the issues important for the appraisal of any survey are covered.

General Overview

This section should be used to provide the overall context of the proposed research. An overview should be given stating how the objectives combine to form a unified project. The conceptual framework on which the research is based should be explained, as well as how any survey relates to work previously or currently done.

Specific Objectives

Each objective for any particular year must be listed and how the objective will be met must be described. For each objective the scientific methods and key activities to achieve the objective, the performance indicators required to assess achievement of the objectives, and the associated milestones must be separately described. These must be clearly focused on the research issues that address each objective.

Scientific Methods

The scientific/technical methods or protocols to be used to achieve the objective must be described in detail. The methods must include a description of the experimental design and the principal components of the research, the types of experiments involved, the data to be obtained, and the means of analysing and interpreting the data. The statistical sampling and analysis to be undertaken must be clearly explained. Support must be provided for any new methods and/or techniques to be employed. Potential problems must be identified and addressed where appropriate. The data collection sheets that are proposed to be used during the survey must be submitted with the survey proposal, along with details of how data quality will be ensured.

Key Activities and Performance Indicators

This is a description of 'how' the research is to be done and 'what' results will be produced to achieve the objectives. The description must include the specific outcome of each activity and how it will be used to address the objective. Performance indicators must be identified against which the success of the activity can be measured in terms of achieving the objective.

References

A brief list of key references must be attached to this section.

5 Facilities, Key Research Personnel, and Other Resources

Details of all facilities, key research personnel, and other resources required to successfully complete the project must be provided, including the time frame within which the resources are needed. The availability of these resources during the required time frame must also be specified.

Facilities include all plant and equipment, including items of specialised scientific equipment and vessels, required to successfully complete the project.

Key research personnel include those individuals directly involved in leading, co-ordinating, and undertaking the research, as well as reporting on the outcomes. Their personal contribution is essential to the success of the project, and/or their particular skills are essential to the research, and/or they would be very difficult to replace. Applicants are required to name the key personnel involved in the research.

6 Curriculum Vitae

The CVs of all key research personnel involved in managing and carrying out this research project, including the project leader, must be provided. The CVs must include the following:

- a) Details of the qualifications, training, and technical skills of the key research personnel that are relevant to managing and carrying out the research project;
- b) Details of the experience of the key research personnel that are relevant to managing and carrying out the research project; and
- c) Details of the track record of the key research personnel in carrying out the same or similar research projects in the past.

C.S. #

SCHEDULE II

Project Title

Annual estimation of scallop population structure, distribution, biomass and available take, in part or all of the southern scallop fishery: 2. Survey report and transfer of data.

The final report from the research project must include, in order, the following:

- 1 Date
- 2 Contractor
- 3 Project Title
- 4 Project Code
- 5 Project Leader
- 6 Duration of Project

Start date:

Completion date:

- 7 Executive Summary

A brief summary of the important highlights of the research, including data and methods used, key results, and conclusions.

- 8 Objectives

The Project Objectives and Approved Objectives for each particular year must be repeated. An assessment of the extent to which the objectives were achieved must be provided.

- 9 Methods

The methods used in the research project and key activities to achieve the objectives must be described for each annual Objective separately. Any changes to methods from those described in the approved survey proposal must be highlighted.

C. S. P.
ms

10 Results

Detailed results of the research project, including any statistical analyses, modelling approaches etc, must be provided. The biomass estimates must be provided by strata and, in the case of the Marlborough Sounds, information on scallop densities must be provided in accordance with the breakdown agreed to when the survey design was approved.

11 Conclusions

The main conclusions from the research project must be described.

12 Publications

Details of all scientific publications, reports, Fishery Assessment Research Documents, and Fishery Assessment Working Group Reports resulting from the research project to date that have been published, submitted for publication, or are in press must be provided.

13 Data Transfer

The methods or protocols to be used for data quality management must be described when the survey report is submitted to the Ministry. This includes describing the processes of data entry and data validation which will be used for data collected as part of the project.

At the request of the Ministry, the data collected during the course of biomass research programmes must be supplied to the Ministry's data manager in a form that can be loaded into the research databases. The format of the data and accompanying documentation will be agreed at the commencement of the transfer, however, it is anticipated that the data must be able to be loaded into a relational database using standard SQL statements. The minimum acceptable format will be an ASCII delimited file on floppy disk (or alternative media including transmission via Internet), with documentation explaining data structure, validation, and other relevant information. The cost of providing this data in the required form will be payable by the Company.

C. S.
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The story

Plenty more fish in the sea

Avoiding the 'tragedy of the commons'

Seeds of an idea

Positive intervention in the Southern Scallop Fishery

The Tasman Challenger

The need for capital investment in research and development

Bounty from the bays

The economic and social significance of the Challenger experiment

Widening the net

Applying the cooperative structure model to the dredge oyster and finfish industrie

With the benefit of foresight

Where the next decade will take us.

A cautionary tail

Ensuring the continued success of the cooperative structure model.



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Plenty more fish in the sea

The tragedy of the commons

The Northwest Atlantic is famous for codfish. Newfoundland and Labrador have economies founded on cod. European commercial fishing in the area dates back to the close of the fifteenth century. Over time, fishers improved catching methods, but they made no attempt to invest in sustaining the fishery. And why would they? The bounty seemed endless.

More fishers moved in to harvest Newfoundland Currency. In 1968, fishermen caught more than 1.8 million tonnes of cod in the Northwest Atlantic. Then, in just ten years, landings fell to 48,000 tonnes. The fishery faltered, rallied and then crashed. In 1992, the Canadian fisheries were closed. For the communities that relied on cod, the results were devastating.

If you exploit rather than manage a resource, eventually it comes back to bite you - or your children, or your grandchildren.

The planet has a finite number of natural resources and, as human populations grow, the competition for those resources increases.

The pressure on them is even greater if ownership of resources is absent, or the owners lack the power or ability to manage the resources. Nearly all fisheries in the world fit this description. Globally, fisheries are generally over-exploited or depleted.

Human nature is at the centre of this over-exploitation of poorly managed shared resources: just like children at a lolly scramble, we want to get in before anyone else does and take the best or most valuable resources first. In addition, there is no incentive for an individual to invest in increasing productivity since he or she would have to share, or may even miss out on, the benefits. This behaviour is commonly called "the tragedy of the commons" after a famous 1968 article by the ecologist Garrett Hardin.¹

He asked readers to picture a pasture open to cattle owning herdsmen. He expected each herdsman to keep as many cattle as possible on the 'commons'. Herdsmen would build up their respective herds until eventually the point was reached when the carrying capacity of the pasture would be exceeded. Herdsmen would know that cattle numbers must be reduced but find themselves individually locked into a set of incentives that prevent this action. The costs of reducing his herd are borne solely by him but the benefits of reduced grazing are shared by all. The tragedy is that (in Hardin's apocryphal tale) it is never in the best interests of any individual to reduce his herd so as to avert the ruin of the commons. Indeed if a single herdsman took this action, others would probably expand their herds to take advantage of the grazing opportunity created.

If access to a resource is 'free for all', there is no incentive to invest in future productivity. Whether on land or sea, the temptation is to exploit the resource before someone else does.



¹ The authors note the extensive analysis of Garrett Hardin's 1968 theory of "the Tragedy of the Commons" (see, for example, Feeny D et al., "The Tragedy of the Commons: Twenty-Two Years Later", Human Ecology, Vol 18, No. 1, 1990) and acknowledge the empirical evidence suggesting greater complexity in medieval "commons" management that his theory recognised. Our application of this theory should be read to apply to resource use in such cases where the use is open to everyone and / or is ineffectively constrained by communal or state rules.

The logic of the tragedy of the commons is inexorable. Fortunately, the solution, at least in the case of pastureland, is simple. Fence the pasture into separate lots for each herdsman. Each herdsman now gains the benefit of each new animal, but also pays full price in potential overgrazing. It is to the advantage of each herdsman to maintain a herd consistent with the carrying capacity of the land.²

There has been, until relatively recently, a general understanding that there was a virtually unlimited number of fish in the sea.³ Maybe a case of 'out of sight, out of mind', given we can't easily see the impact on the marine environment of harvesting ever-increasing numbers of fish. As a result traditionally, there has appeared to be no reason to establish more extensive control over the oceans.

Stakes in the ground

The history of fisheries management in New Zealand since European settlement is one of over-exploitation of a poorly managed open access resource.

Before European settlement Maori managed their fisheries by establishing exclusive tribal rights.

"Tribes whose territory impinged upon the ocean held the right of fishing off such a coastline, and any trespass on such a domain by folk of another tribe would be resented."⁴

Stakes driven into the water often marked fishing rights.

Europeans introduced the Roman law tradition: that the sea is by nature common to all. Everyone is free to go fishing and those who take fish simply take ownership of them. The incentive under this system is for each fisher to get in and take as many fish as he or she can, while they can.

Over-fishing of some shellfish species in some areas of the New Zealand coast was reported as early as 1865.⁵ The government moved to counter this with the Oyster Fisheries Act 1886, Fisheries Conservation Act 1884 and the Sea Fisheries Act 1894. Early legislation was consolidated into the Fisheries Act 1908, which remained in effect until 1983.

That 1908 legislation favoured regulatory control of fisheries rather than rights-based management (still no stakes in the ground). In addition, the government

tried to stimulate the development of New Zealand's fisheries with inducements such as loans for capital development and subsidies. Fisheries deregulation and subsidies were a common feature throughout the 60s and well into the 1970s.⁶

Economic growth of New Zealand's fisheries did occur, but by the end of the 1970s inshore fisheries were becoming exhausted. The Southern Scallop Fishery was a notable example.

² Frank Monaldi, *Tragedy of the Commons*, 1977

³ Anthony Scott records that "For centuries there were few changes in the rules for individual access to ocean waters and to the fish therein. Most of the changes here, in the 17th century, were new ideas in the law of nations - changes that led to the doctrine of the freedom of the sea... It is noteworthy that, in the rigorous debate about the freedom of the seas, all parties seem to have agreed that fish stocks were inexhaustible" (in Scott A. *Moving through the Narrows: From Open Access to ITQs and Self-Government*, Proceedings of the FishRights99 Conference, in press).

⁴ Elidon Best, *The Maori* 401, (1974).

⁵ Information on the history of fisheries management in New Zealand was sourced from Ackroyd P., Hyde R. & Sharp, B. (1990) "New Zealand's ITQ System: Prospects for the Evolution of Sole Ownership Corporations" Report to the New Zealand Ministry of Agriculture and Fisheries (Fisheries), 86pp.

⁶ Information on the history of fisheries management in New Zealand was sourced from Ackroyd P., Hyde R. & Sharp, B. (1990) "New Zealand's ITQ System: Prospects for the Evolution of Sole Ownership Corporations" Report to the New Zealand Ministry of Agriculture and Fisheries (Fisheries), 86pp.

Overrun and limit

Commercial dredging for scallops began in Taranaki Bay in 1953. Fishing effort steadily increased during the early 1960s and early 1970s with new areas being worked in the Marlborough Sounds and in Golden Bay. By 1975, a total of about 1,250 tonnes (gross weight) of shell were around 350 vessels were working at sea.

The Ministry of Agriculture and Fisheries introduced a succession of regulatory controls designed to limit fishing effort in an attempt to manage expanding catches. These controls were extensive. They included restrictions on when fishers could harvest scallops and what equipment they could use.

However, these measures ultimately failed, largely because they only partially contained the temptation to exploit the resource before somebody else did.

The increased level of catch under the open-access harvesting regime could not be sustained, and in July 1977 a moratorium on the issue of new scallop permits was introduced.

By July 1977 an agreement had been reached between the Minister of Agriculture and Fisheries and the Minister of Fisheries to establish a controlled fishery. In 1978 the Seafishery Scallop Fishery became New Zealand's first controlled fishery. Licensing limited scallop harvests to 200 in 1979, but these permits were usually passed to one fishery and it remained over-subscribed.

After the second harvest of 1979, the fishery crashed. There were very few scallops left to catch by late July 1980, catches fell to 40 tonnes. The scallop fishery was closed during 1981 and 1982. Only 10 tonnes were harvested in the fishery when it was reopened in 1983.

The main aim of the management of the new fishery, ACF 1983, which provided for a licence to be granted by catch administrators for open access. However, the immediate need to reduce fishing effort and reduce over-catch had not been met. The problem remained that the fishery was open to the sea and the government could not control the harvest. The government plans to address these problems.



One fish, two fish

In 1986, the New Zealand Government took the first major step towards addressing overfishing problems in New Zealand's inshore fisheries.

The government introduced Individual Transferable Quota (ITQ); a system introduced into the deepwater fishery a few years earlier. The ITQ system gave fishing rights to individual commercial fishers, including Maori, and excluded new entry to the fishery. In effect, the fishery became a 'fixed pie' with individual fishers allocated a 'slice' according to their catch history or rights they purchased.

The quota management system wasn't introduced into the Southern Scallop Fishery until 1992 and then only in modified form. Each of the 48 licence holders was provided with a fixed tonnage ITQ allocation of 12 tonnes. An additional 64 tonnes was allocated to Maori in partial settlement of indigenous claims made against the Crown. The Crown held remaining quota pending final settlement of these claims.

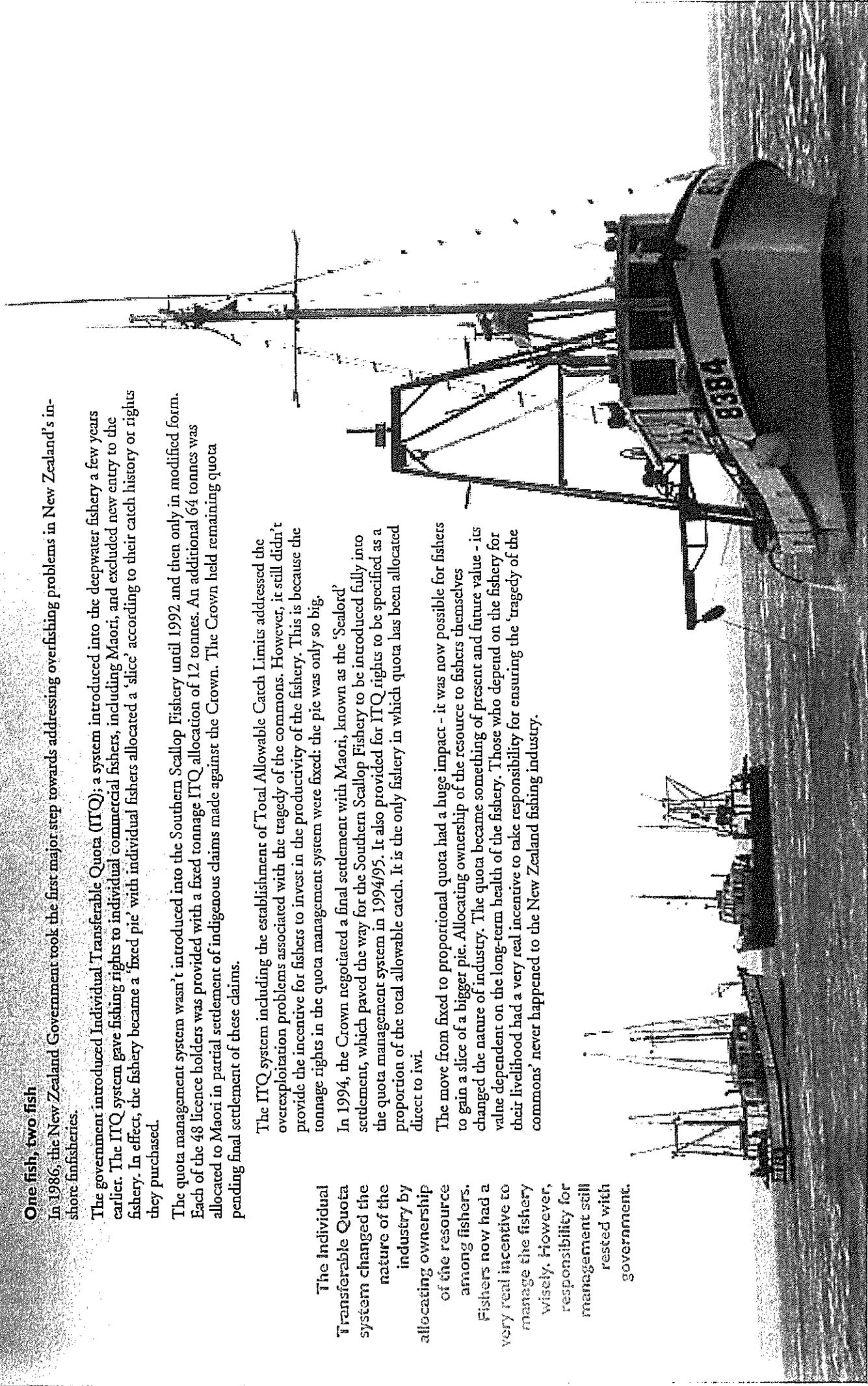
The ITQ system including the establishment of Total Allowable Catch Limits addressed the overexploitation problems associated with the tragedy of the commons. However, it still didn't provide the incentive for fishers to invest in the productivity of the fishery. This is because the tonnage rights in the quota management system were fixed: the pie was only so big.

In 1994, the Crown negotiated a final settlement with Maori, known as the 'Sealord' settlement, which paved the way for the Southern Scallop Fishery to be introduced fully into the quota management system in 1994/95. It also provided for ITQ rights to be specified as a proportion of the total allowable catch. It is the only fishery in which quota has been allocated direct to iwi.

The move from fixed to proportional quota had a huge impact - it was now possible for fishers to gain a slice of a bigger pie. Allocating ownership of the resource to fishers themselves changed the nature of industry. The quota became something of present and future value - its value dependent on the long-term health of the fishery. Those who depend on the fishery for their livelihood had a very real incentive to take responsibility for ensuring the 'tragedy of the commons' never happened to the New Zealand fishing industry.

The Individual Transferable Quota system changed the nature of the industry by allocating ownership of the resource among fishers.

Fishers now had a very real incentive to manage the fishery wisely. However, responsibility for management still rested with government.

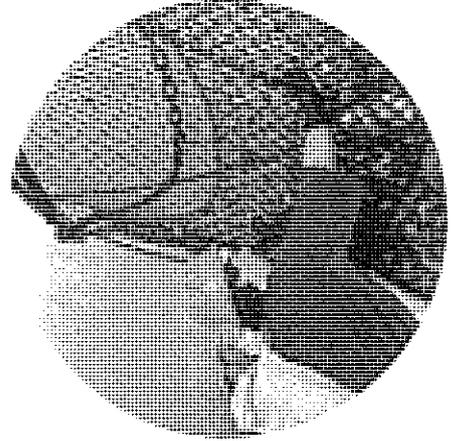


Seeds of an idea

A sustainable resource

Ensuring a sustainable resource means maintaining the fisheries' potential to meet the reasonable foreseeable needs of future generations, and mitigating any adverse effects of fishing on the aquatic environment. This is the aim of the Fisheries Act 1996 under which the Southern Scallop Fishery is administered. It's an aim shared by quota owners.

The Act defines clear 'ground rules' for fisheries management. It also establishes controls to achieve its aims. However, these controls in themselves are not sufficient to achieve the purpose of the Act. It is up to those with an interest and involvement in the fishery, including the Ministry of Fisheries, quota owners and the local community, to manage the fishery wisely and well.



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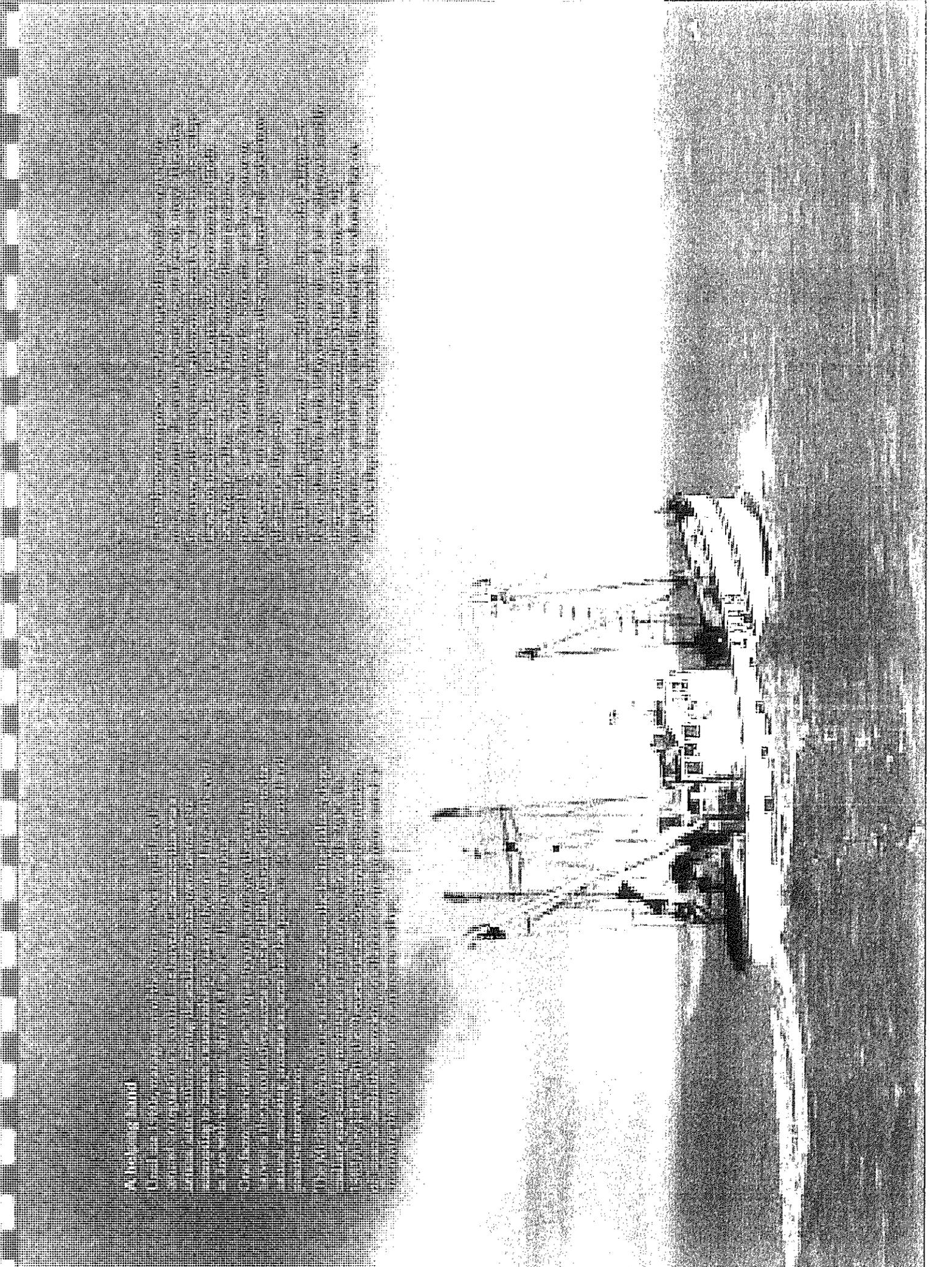
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Around and around

In 1989, the Ministry of Agriculture and Fisheries introduced a rotational fishing regime into the Tasman Bay and Golden Bay sections of the fishery. Scientific modelling studies have shown this is the most effective management tool for ensuring a sustainable resource, with the enhancement programme providing an excellent safety net.

Under the regime, areas of the fishery are closed to commercial fishing, in most cases to allow seeded and naturally settled stock to reach takeable size or to allow the stock to be harvested efficiently.

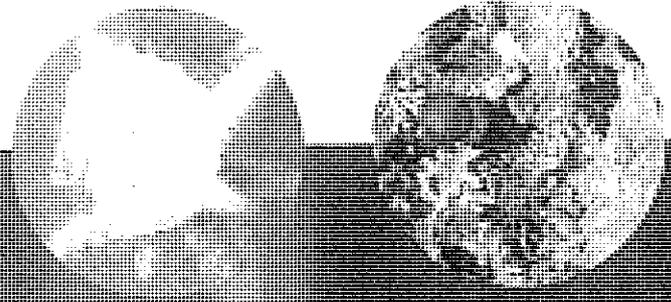
There are nine areas in the region. Each year, management decisions are made on which areas of the fishery are to be opened to commercial fishing, taking into account previous enhancement activities, natural scallop settlements and expected scallop growth and yield.

There are also areas permanently closed to commercial fishing and many of the historical controls, including some voluntary controls such as daily bag limits, remain in force. There is also a size limit of 90 mm.

Over the last decade, the rotational fishing strategy has been developed to the extent that it is now the main measure for ensuring scallop stocks can be sustained.

Before rotational fishing was introduced, the whole quota management area could be fished commercially in any one year, including areas where there were large numbers of juvenile scallops. Intensive fishing in such areas may have resulted in these scallops being taken in dredges and returned to the sea a number of times, increasing the potential for widespread mortality. Closing areas within the fishery also protects breeding stock.

Bryozoan or lace 'corals' of the same species as this Fiordland example are found at Separation Point between Tasman and Golden Bay. Sections of the fishery containing particularly vulnerable or important habitat are protected through specific closures prohibiting fishing.



Taking the idea further

Despite the success of the ITQ system and the management tools of enhancement and rotational fishing, central government control still posed problems for the effective management of the fishery. There were two essential components missing. First, there was limited capability to undertake research and to monitor the ongoing health of the fishery. Second, the management structure lacked the flexibility to act quickly on the needs identified by research and monitoring.

The Fisheries Act requires that decisions made about the fishery be based on the best available information and that decision-makers should be cautious when information is uncertain, unreliable or inadequate. Clearly, improving the quality of data available about the fishery was essential to manage the resource effectively. However, just as there were no public funds available for enhancement, there were no public funds available for stock assessment research. If scallop quota owners wanted the management of their fishery to be based on better stock assessment information they would have to pay for that research themselves.

With the prospect of quota being allocated, investment in scallop enhancement by the 48 licence holders during the early 1990s continued apace. Programme costs were, however, burgeoning as it outgrew its experimental and improvised roots. For instance the programme was reliant on seasonal availability of vessels used in the mussel industry. This meant there were growing problems with the availability of vessels and the capacity and suitability of these early arrangements generally. The need for a purpose-designed research vessel was high on the list of priorities for those involved in the enhancement programme. It was, however, beyond the brief of the Ministry of Fisheries to fund capital expenditure of this kind. Another way would have to be found.

The need for a purpose-designed research vessel was high on the list of priorities for those involved in the enhancement programme. It was, however, beyond the brief of the Ministry of Fisheries to fund capital expenditure of this kind. Another way would have to be found.

The ITQ system went some of the way to addressing the 'tragedy of the commons' dilemma, because it isolated a relatively small group with a direct interest in investing in the fishery. Furthermore, those fishers could see the need for investments in greater stock assessment research, re-seeding and enhancement and in specialised equipment to carry out these tasks. The problem was one of structure and empowerment. The Ministry of Fisheries was equipped to develop fisheries policy and to regulate fisheries use. It was not equipped to deliver the discretionary enhancement activities desired by quota owners - particularly if it meant buying an expensive specialised vessel with fisherman's money. On the other hand the quota owners lacked an organisational structure to do the things that the Ministry could not. Innovative fisheries management was falling into a hole.

Quota owners wanted to invest but there remained the problem of ensuring a direct trade-off between the value of individual's investment in the resource and the benefit they received from that investment. Unlike dividing pastureland into fields in the 'commons' example, it is not possible to divide the wild fishery into self-contained areas. For this reason, a structure was required in which all quota owners agreed to contribute, in proportion to their quota income, to an investment programme.

The challenge was to establish a cost-recovery framework that would provide stable and responsive management over the long-term. The idea for the Challenger Scallop Enhancement Company was born and with it came its flagship research vessel, the FV Tasman Challenger.

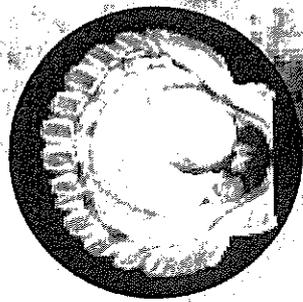
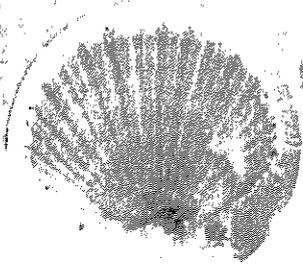


Enhancing the scallop environment

Spat-catching bags made of synthetic material are suspended on longlines. Which areas are chosen for spat catching depends on where larvae tend to collect, the amount of space needed to set gear, the condition of the seabed under each site and the location of planned 'seeding sites'. There are eight sites currently authorised for spat catching in Tasman Bay and Golden Bay and at least one of these from each bay is used each year.

The spat-catching bags are set in about November, the beginning of the peak spawning period. Spat are harvested from the spat-catching gear about three months after the gear is set in the water. Currently the programme has a catching capacity of 182 longlines. About 2,800 bags are set per longline.

Once harvested, the spat are 'seeded' back into the fishery. Seeding densities vary depending on spat size at the time of seeding and expected survival. They are set at a level designed to result in 0.5 to 1.5 scallops per square metre surviving for harvest in 2 to 3 years.



The New Zealand scallop

The New Zealand scallop (*Pecten novaezelandiae*) is the largest of a number of endemic New Zealand 'fan shells' (pectinids). They inhabit semi-estuarine and coastal waters from low-tide level to at least 90 metres. The main beds in the Southern Scallop Fishery are in 10-25 metres of water with a base of sand and silt.

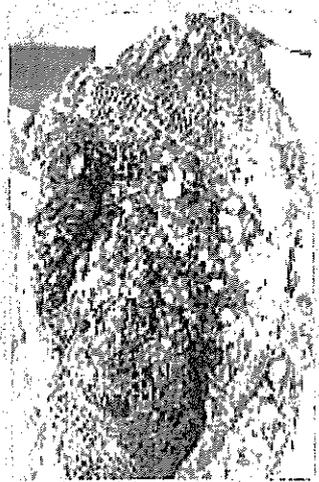
The New Zealand scallop is both male and female. In the Nelson/Marlborough area, spawning occurs from at least August to April, but the peak spawning period is from November to March.

The eggs hatch into planktonic larvae. This stage is thought to last about three weeks. The larvae metamorphose as 'spat', taking on the scallop fan-shell shape. Spat attach themselves to algae, weeds, shell debris and other material on the sea floor, and stay attached until they are at least 5 mm in length.

New Zealand scallops are ready to spawn at about 18 months and at this stage are known as juvenile scallops. Growth rates vary greatly according to locality, environmental variations and scallop density.

In Golden Bay and Tasman Bay, scallops are frequently over 90 mm long by the time they are 2 years old, but some reach this size in 18 months and others are only 9.5 mm after 4 and a half years.⁶

The life span of the species is uncertain, as age cannot be determined from the shells. However, scallop mortality trials conducted in Tasman and Golden Bays indicate an annual mortality rate of about 40% each year for the first two years of growth, increasing to 65% for year three. It is likely that few scallops reach more than 4 or 5 years of age.



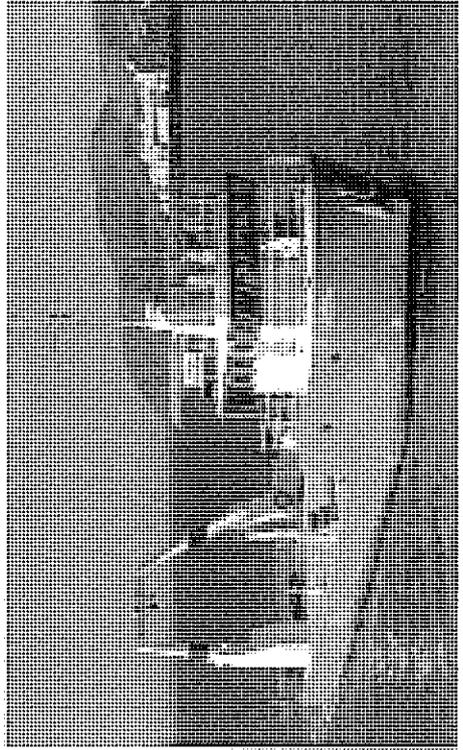
The Tasman Challenger

The Challenger Scallop Enhancement Company

Quota owners in the scallop fishery had already actively worked alongside the Ministry to improve the management of the fishery. Now it was time for a more formal structure: a company that could address the management needs of the fishery at a local level. In 1994, the quota owners established the Challenger Scallop Enhancement Company (Challenger). The Company was set up to pick up from where government left off.

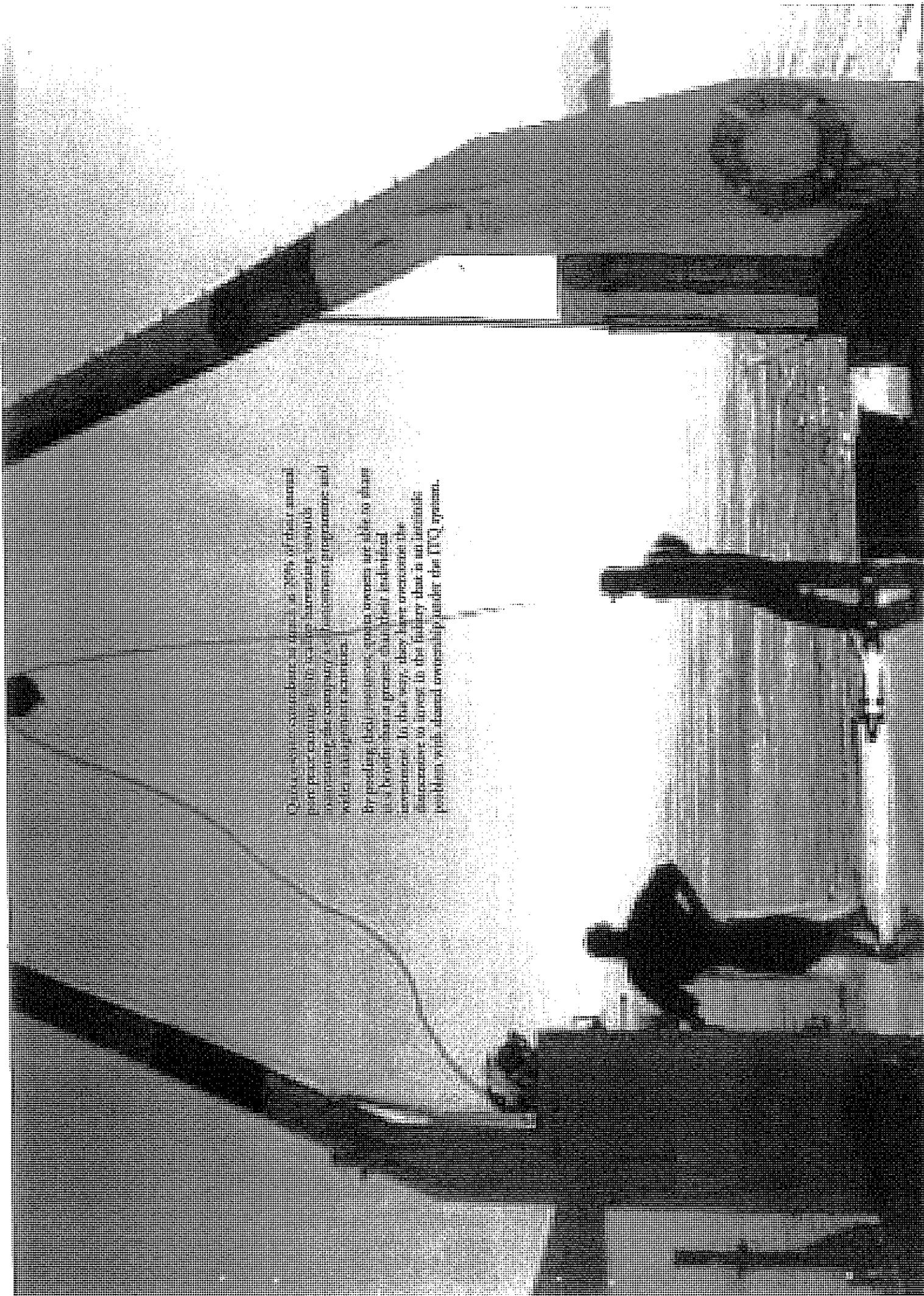
Quota owners only may own shares in the company and voting rights are exercised in proportion to quota ownership.

By its nature the company operates as a cost centre. The quota owners fund the company's activities via a self-imposed levy established under the Commodity Levies Act 1990. A business plan and the levy are set each year by majority shareholder vote at a General Meeting. This process determines the nature and extent of funding committed to managing the fishery each year.



Chemical Processors from an 80% of the annual production capacity. They have also increased their R&D investment and capacity, and have more experience and

experience that increases their costs. The industry has a high level of competition and their production process that is highly intensive. In this way, they have overcome the problem of access to the factory that is an outside problem with chemical processors that use CFC systems.



A backward step

In 1995 and 1996, environmental conditions caused the southern scallop fishery to crash again. This was the result of poor spat survival rates in 1993 and 1994 and virtually no natural sediment. The drop in stock numbers was not as severe as in the early 1980s, due to the enhancement programme and rotational fishing. This highlighted the importance of the programme and the need for improvements.

Challenger invested in research to find ways of improving survival rates of the spat seeded out. The result is that the scallop enhancement programme has changed dramatically both in process and quality. (see side story)

In 1999, Challenger recorded an exceptional spat survival rate with over 50% of its initial seeding of 312 million spat surviving.

And there are good prospects for improving survival rates still further. This year Challenger is trialling ways to increase prospects of spat survival further through techniques such as full immersion rather than the use of sprinkler systems.

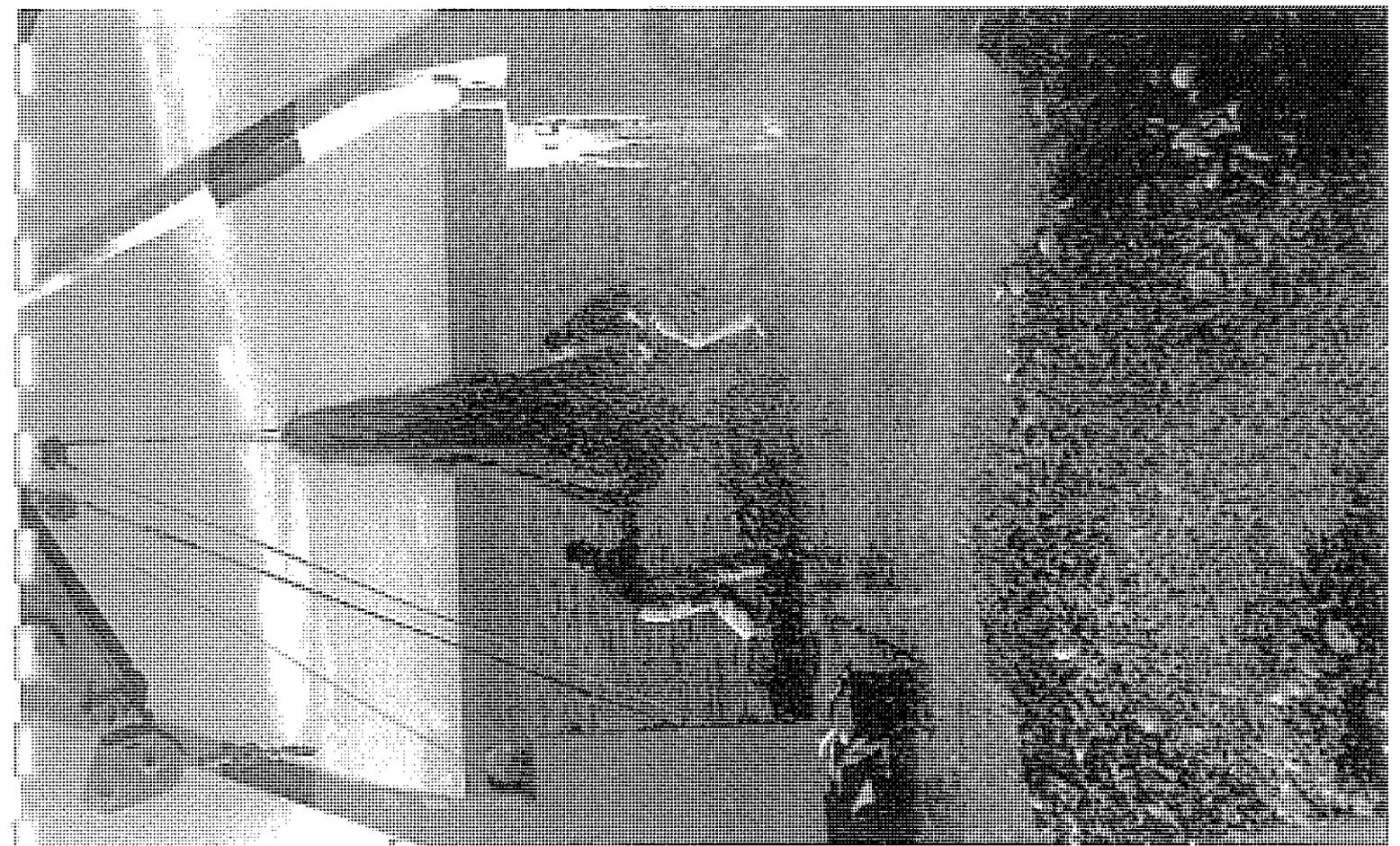
The focus is now on quality rather than quantity and work is underway to find ways to improve the rate of spat surviving to harvest.

When the boat comes in

Greater knowledge of the fishery was central to developing a more responsive management regime. That meant sophisticated equipment - and getting out on the water. The spat-catching and seeding process using standard fishing vessels had proven inefficient and resulted in a high mortality rate. A boat was needed, but not ordinary boat. At the time the company was established, a feasibility study indicated a dedicated purpose-designed vessel was a high priority.

At the same time, the Ministry of Agriculture and Fisheries was being restructured into the Ministry of Fisheries. This involved separating core policy roles from service delivery functions such as enhancement and research. This new structure did not provide a framework within government that could provide scallop enhancement services, let alone be the repository for large industry-funded capital investments.

Over the first two years the company operated under contract to the Ministry of Fisheries to deliver core enhancement services. The commercial nature of these arrangements enabled it to purchase the FV Tasman Challenger.



Cold baths for baby scallops

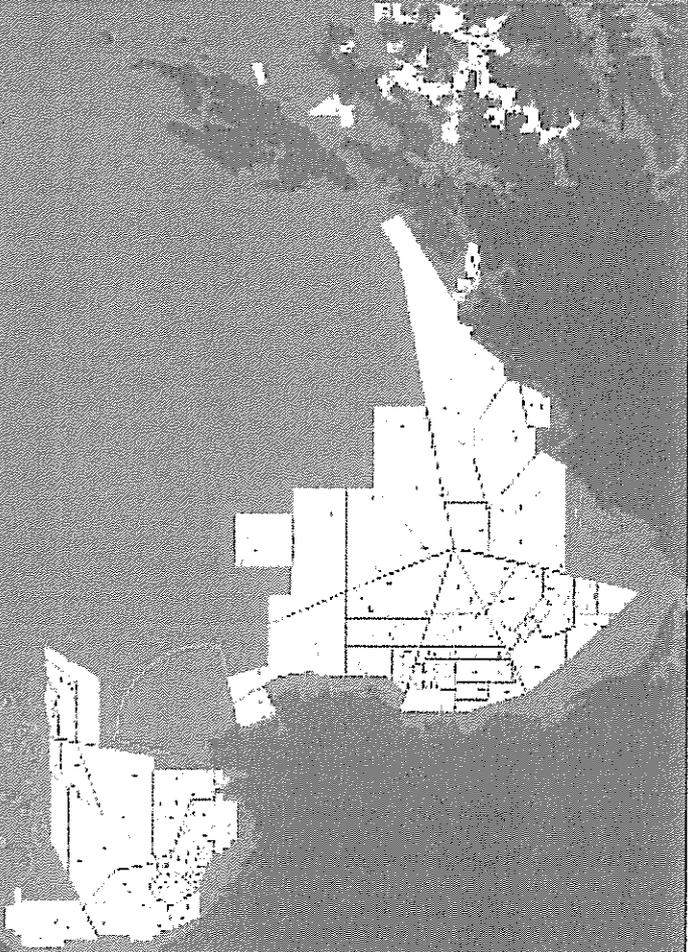
The enhancement programme is now much more scientifically driven as well as technologically based. Challenger routinely monitors spat settlements to assess best catching periods, as well as growth on longlines before harvest. Spat are fully processed into shallow bins onboard the RV *Tasman Challenger*. Processed spat is placed in a submersion system to prevent the spat drying out and then transferred to fast boats to be seeded quickly onto the scallop beds.

It's a vast improvement on the old process whereby harvested spat was transferred in large canvas bags to fishing vessels, which then carried them to the scallop beds. The bags were opened and the spat shaken over the side of the boat. This caused considerable quality issues, such as the loss of spat bags overboard. Moreover, Challenger was competing with the apple industry for seasonal labour.

Studies of this type provide independent analysis of the fishery and guidance as to whether management regimes are 'on track'.

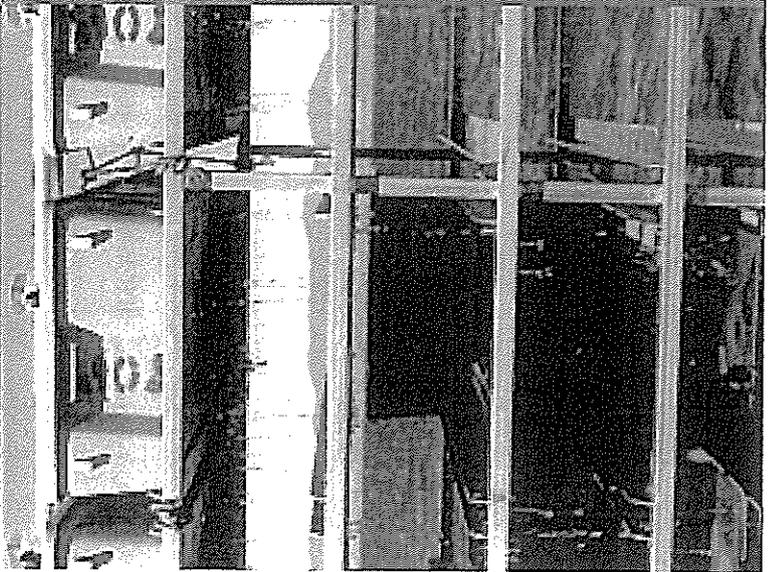
Challenger also operates its own compliance programme to make sure fishers keep to the rules. It's another part of the rotational fishing system in which responsibility has devolved to the industry (effectively creating a 'user pays' scenario). The nature of the Challenger company - providing collective rather than individual benefits - ensures the programme is honest. Ministry audits provide further 'checks and balances'.

Together with the Ministry of Fisheries, Challenger has achieved a major turnaround in the environmental and commercial sustainability of the Southern Scallop Fishery. Rotational fishing and enhancement combine to form a much more effective management regime than simply setting an annual catch limit. The fishery has stabilised and is increasingly providing a viable harvest each year. However, not even the most optimistic fisher, would have predicted the extraordinary results of the company's 1999 biomass survey.



Measuring the harvest

Each year, Challenger commissions a survey of Tasman Bay, Golden Bay and the Marlborough Sounds to determine the ongoing health of the scallop beds. Once gathered, the information is analysed by independent scientists. This biomass survey enables Challenger to measure the number of harvestable and pre-harvestable scallops in a given area, and to develop its harvesting plan. Challenger then recommends to the Minister of Fisheries areas to be allocated to recreational and commercial fishing for the coming season. This is done in consultation with the Challenger Scallop and Dredge Oyster Recreational Advisory Group.



Bounty from the bays

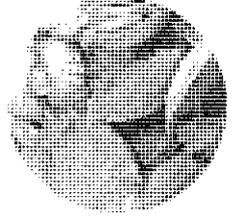
The scallop enhancement programme would not exist in its current form without the quota owner cooperative structure. The new structure has enabled quota owners to invest in enhancing and monitoring the resource for their own benefit and for that of the region.

Challenger has enhanced the scallop fishing prospects not only for its shareholders, but also the recreational and customary users of the scallop resource.

Its 1999 biomass survey pointed to the fourth largest commercial harvest in the forty-year history of the fishery. (It would be higher, but fishers don't take all the scallops at once any more.) The resulting 676 tonne commercial harvest compares with catches of 230 tonnes taken in 1996, 300 in 1997 and 547 in 1998. The catch increase saw millions of dollars injected into the local economy.

The bumper crop in the 1999 season was largely due to the industry's decision to leave extensive beds of scallops, which were legal-sized but only two years old in 1998, to grow through to the 1999 season. It's a practical demonstration of how greater flexibility in fishery management can lead to good outcomes for everyone.

What's more, survival of seeded scallops and natural settlements in the fishery in 1999 were exceptional, assuring excellent scallop catches in the first two years of the new millennium.

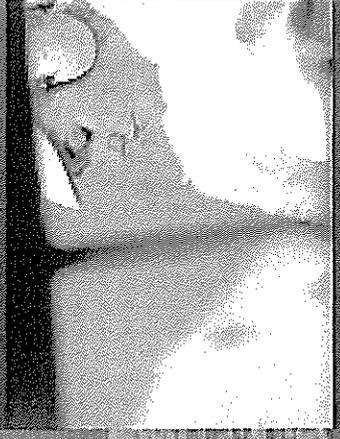
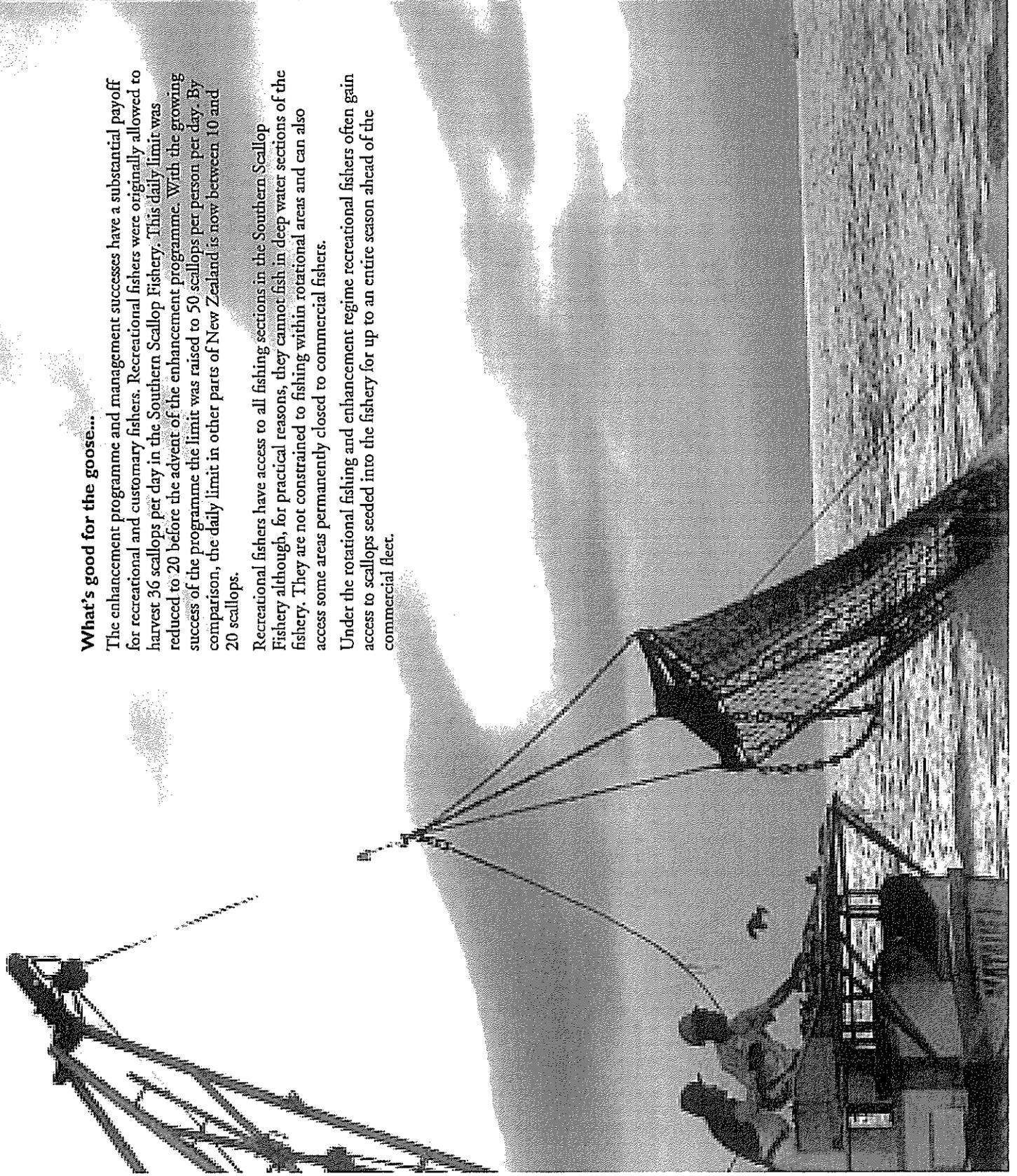


What's good for the goose...

The enhancement programme and management successes have a substantial payoff for recreational and customary fishers. Recreational fishers were originally allowed to harvest 36 scallops per day in the Southern Scallop Fishery. This daily limit was reduced to 20 before the advent of the enhancement programme. With the growing success of the programme the limit was raised to 50 scallops per person per day. By comparison, the daily limit in other parts of New Zealand is now between 10 and 20 scallops.

Recreational fishers have access to all fishing sections in the Southern Scallop Fishery although, for practical reasons, they cannot fish in deep water sections of the fishery. They are not constrained to fishing within rotational areas and can also access some areas permanently closed to commercial fishers.

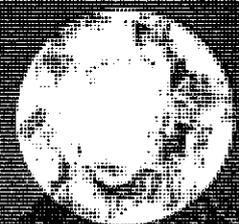
Under the rotational fishing and enhancement regime recreational fishers often gain access to scallops seeded into the fishery for up to an entire season ahead of the commercial fleet.



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With the benefit of foresight

The Challenger Group has a vision for the future. Not too far into the future, either. It's a picture of where fisheries management will be within the next decade, and includes many elements which are already a reality or fast becoming so. It's called the Foresight Strategy and is part of a generic seafood industry strategy to shape a strong fishery benefiting all stakeholders - from communities to commercial fishers.

The Challenger fisheries sector in 2010

It's the year 2010. Take a look at the Challenger fishery:

An integrated management regime

We have a greater understanding of the intricacies of the marine environment. We understand the interdependencies and interactions between fish species, habitats, planktonic marine life, and coastal land use. We know the conditions under which each species flourishes - for example, how fresh water currents affect the productivity and growth rates of shellfish. We continue to use this information to model our integrated management regime within the natural dynamics of the marine environment.

We have established a model for all commercial and recreational use of marine life in the Challenger fisheries management area. From this information, policies and strategies are tested and consequences observed prior to implementation.

As a result, significant economic growth has already been achieved and more is forecast through a combination of improved harvest efficiencies, improved catch rates and economics of harvesting, optimum mix of species and increased overall volume and value of products.

In this way we capture the full productive capacity of the natural waters and habitats.

Administrative updates
The following information was received from the Bureau of the Census, U.S. Department of Commerce, Washington, D.C. 20543, on 10/10/78.
The Bureau of the Census has announced that it will be publishing a new series of data on the number of persons in the United States who are aged 65 and over. This series will be published in the "Monthly Labor Review" beginning in January 1979. The data will be presented in a table which will show the number of persons in the United States who are aged 65 and over, by sex, race, and marital status. The data will also show the percentage of the total population aged 65 and over. The data will be presented in a table which will show the number of persons in the United States who are aged 65 and over, by sex, race, and marital status. The data will also show the percentage of the total population aged 65 and over.

Thinking communities
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A cautionary tail

The future is bright, but not without the odd shark moving through the waters. The great danger is that regional and central government will continue to try and 'carve the ocean into paddocks'. That is, to look at the management of individual species in isolation. Building a future for New Zealand's marine environment that is sustainable commercially, socially and environmentally requires an integrated approach to species management.

We need a framework that supports industry-based management. Working under civil agreements makes us particularly vulnerable. Management by consensus is a challenge we are up to, but checks and balances that prevent one participant from hijacking the whole group are still needed.

We've come a long way, but the fishery sector is still plagued by hundreds of often competing regulations. These regulations distort our industry and are a barrier to self-regulation. The emphasis within fisheries management is nonetheless changing to seek to better define fishing rights rather than erode them. Customary rights are becoming better managed and defined. Even our recreational fishers are lobbying to put their stake in the ground.

The management of other uses of the marine environment need to be integrated with Challenger's management and ITQ rights. Just as New Zealand was at a crossroads in the early 1980s with regulation or rights for fisheries, we are now faced with a choice between regulation and rights for management of the wider marine environment. The mistakes of planning are being repeated. The Resource Management Act was introduced in 1991, but ten years on few workable plans are in effect and government is only just realising the gaps and overlaps. The Department of Conservation's costs of meeting their management objectives are becoming the industry's costs under a conservation levy. Access to coastal space for non-fisheries use is becoming a 'land grab'.

The challenge for our industry's future is to enhance our rights to manage our assets and to have those rights, and the incentives they provide, recognised by regional and central government and the public. Just as Maori placed stakes in the ground to define the extent of their tribal fisheries, so too must our industry demand that our rights are integrated within the management of the environment as a whole.

We need to increase our scientific knowledge of marine ecosystems and use these to model management interventions in all sectors of the fishery. We also need new technology to achieve the potential identified in the modelling process. Increased user investment and involvement will not happen unless government continues to recognise management responsibilities of rights holders.

In short, the ITQ system provides a framework for avoiding the 'tragedy of the commons' scenario. It provides the incentive for responsible management of the fishery. On its own, however, it does not empower quota owners to accept and act on that incentive.

All the Challenger fisheries rights holders co-operate under an appropriate umbrella structure to integrate their species-specific rights. They do this to achieve greater production and value from the Challenger marine ecosystem.

It is a sensible approach. Its success is proven.

It is the future of fisheries management.

Towards writing this book, we would like to thank the many people who have over the years recorded the history of the southern scallop fishery in various plans, reports and papers. In particular we owe our thanks to Kim Drummond for his role in preparing a more detailed paper on the Challenger fisheries management model. This is currently being prepared for publication in proceedings of the FishRights99 conference.

The New Zealand Seafood Industry Council's and Te Ohu Kai Moana's generous financial support, has made this publication possible. Towards the establishment and development of the Challenger Group, we would like to acknowledge the role of the Ministry and Ministers of Fisheries, beginning with the foresight of Doug Kidd, as well as the customary and recreational fishers for looking outside the square and letting good ideas work. The Challenger companies would not, however, exist without the dedication of staff, and without the committed governance and support of Directors and shareholders. It is to the fishermen and industry that the credit should be directed.



Michael Arbuckle is Chief Executive of the Challenger Scallop Enhancement Company. He has a B.Sc. in Terrestrial and Aquatic Ecology and a M.Sc.(Hons) in Resource Management. Michael has worked as a fisheries scientist and a senior policy analyst for the Ministry of Fisheries. He was an establishment Director to the New Zealand Seafood Industry Council from 1997 until 1999.



Michael Metzger is a Wellington-based writer. In addition to writing a wide range of material for private and public-sector organisations, he has written several stage plays and won a national playwright award in 1988. Michael's radio plays have been broadcast by Radio New Zealand and ABC in Australia.

