SETFIA accreditation of Commonwealth Trawl Sector skippers toward improved environmental operation

Simon Boag, Matt Koopman, Ron Stott, Ian Knuckey and Richard Owen

February 2012 FRDC Project 2009/330









SETFIA i FRDC Project 2009/330

SETFIA accreditation of Commonwealth Trawl Sector skippers toward improved

environmental operation

Simon Boag, Matt Koopman, Ron Stott, Ian Knuckey and Richard Owen

FRDC Project 2009/330

Published: South East Trawl Fishing Industry Association

PO Box 1125, Lakes Entrance VIC 3909

© South East Trawl Fishing Industry Association and Fisheries Research and

Development Corporation 2012

This work is copyright. Except as permitted under the Copyright Act 1968 (Cth), no

part of this publication may be reproduced by any process, electronic or otherwise,

without the specific written permission of the copyright owners. Neither may

information be stored electronically in any form whatsoever without such

permission.

DISCLAIMER

The authors do not warrant that the information in this book is free from errors or

omissions. The authors do not accept any form of liability, be it contractual, tortious

or otherwise, for the contents of this report or for any consequences arising from its

use or any reliance placed upon it. The information, opinions and advice contained

in this book may not relate to, or be relevant to, a reader's particular circumstances.

Opinions expressed by the authors are the individual opinions of those persons and

are not necessarily those of the publisher or research provider.

ISBN: 978-0-9808289-8-6

Preferred way to cite:

Boag, S., Koopman, M., Stott, R., Knuckey, I. and Owen, R. (2011).SETFIA

accreditation of Commonwealth Trawl Sector skippers toward improved

FRDC Project environmental operation. 2009/330.South East Trawl Fishing

Industry Association.

TABLE OF CONTENTS

Objectives	6
Non-technical Summary	7
Acknowledgments	9
Background	10
Need "for continuous improvement"	11
Objectives	12
Materials and Methods	12
Results and Discussion	17
Planning	17
Courses	18
Benefits and Adoption	19
Further Development	20
Planned Outcomes vs. Achievement	20
Conclusions	21
References	22
Appendix 1 - Intellectual Property	23
Appendix 2 – Unit of Competence Assessment Criteria	24
Appendix 3 – Improved reporting of discards	26
Appendix 4 - Staff	27
Appendix 5 – Curriculum Steering Committee members	28
Appendix 6 – Session Plans	
Appendix 7 – Assessment Questions	
Appendix 8 – Media Releases and Newsletter Articles	
	······································

List of Tables

Table 1.	Course mod	dules and	name of preser	nter			16
Table 2.	Number of	industry p	participants atte	ending o	each course		19
Table 3 P	lanned outo	comes ver	sus achieveme	nt			21
List of	Figures	1					
Figure	1.	Logo	developed	for	advertising	participation	in

2009/330 SETFIA accreditation of Commonwealth Trawl Sector skippers toward improved environmental operation

Principle Investigator: Mr Simon Boag

Address: PO Box 1125

Lakes Entrance VIC 3909 Telephone: 0428-141591

Objectives

- 1. To initiate a conduit to effectively communicate existing voluntary management arrangements to Industry so these arrangements become enduring
- 2. To initiate a conduit for continual improvement in at sea fishing behaviours
- 3. To initiate a conduit that will enable new projects to be effectively communicated to industry
- 4. To initiate a conduit that provides an operational benefit to participation (i.e. a disadvantage to not being an endorsed operator)

Non-technical Summary

OUTCOMES ACHIEVED

There are two major outcomes from this project; increased environmental stewardship in the CTS and an improved stakeholder perception of the CTS. Increased environmental stewardship will have a direct effect on the management and sustainability of the CTS through reduced interactions with protected species, reduced risk of translocation of foreign aquatic organisms, greater compliance with MARPOL regulations, while improved understanding of reporting requirements and assessment and management strategies will improved the data collected by industry members, acceptance of management decisions and compliance with management directions. Improved stakeholder perception of the CTS is important to maintain the social license that the CTS requires to ensure long-term operation.

The Southern and Eastern Scalefish and Shark Fishery (SESSF) Australia's second largest fishery and supplies much of the fresh fish to our domestic markets. It has been in operation for 98 years. The fishery landed about 20,000 tonnes of fish during 2009, which had a gross value of production worth \$95.5 million in 2008/09. The Commonwealth Trawl Sector (CTS) is a sub-fishery (sector) of the SESSF which uses mainly otter trawl and Danish seine gears. The CTS covers Commonwealth managed waters from Barranjoey Head (north of Sydney) to Cape Jervis in South and encompasses Victoria and Tasmania. Turnover in CTS is in the order of \$47 m per annum. The interests of CTS operators are represented by the South East Trawl Fishing Industry Association (SETFIA), whose members comprise about 85% of all CTS Statutory Fishing Rights (SFRs) holders in the sector.

Recent studies into the performance of and attitudes towards the CTS found them to be lacking in some areas. Brooks (2009) concluded that the CTS has "poor stakeholder and consumer perceptions". Furthermore, in their study to examine changes to reporting rates of protected species interactions by the CTS, Knuckey and Koopman (2011) found wide-spread under-reporting of seal interactions by the majority of the CTS fleet.

SETFIA understands these shortcomings, and has developed a strategic plan (Boag 2011) with the conviction that the sector needs to improve its credibility with stakeholders (decision makers and influencers). By doing so SETFIA believes that there is a higher likelihood that the sector will have greater involvement in management decisions (and that these decisions will be better), and also that management arrangements may then be less precautionary.

In line with their strategic plan, SETFIA is committed to the regular training of fishers in order to improve fishing practices. This project developed a two day training course in accordance with the nationally recognised unit of competence "SFIEMS301A Implement and monitor environmentally sustainable work practices". The modules to be covered by the course were determined at a curriculum steering meeting involving fishery managers, an environment orientated NGO, fisheries scientists, a related NGO's and industry members (see Appendix 5). These modules were then adapted into the frameworks for the units of competence which were then developed into subject plans, content (presentations) and assessment questions for each subject. South East Australian Maritime Education Centre (SEAMEC) was selected as the Registered Training Organisation (RTO) to endorse and accredit the training and assessment.

The training course was originally planned for delivery in Lakes Entrance and Eden, however SETFIA members requested that Portland also be covered. Demand for the course exceeded the number of seats available, and as such a supplementary funding request was approved by the FRDC which meant that a fourth course was run in Wollongong. Total attendance was much greater than expected, with a total of 83 owners, skippers and senior crew receiving accreditation.

The extension of this project was via numerous media releases and newsletters (Appendix 8) and radio interviews. Further recognition of the importance of this project was the receipt of a number of awards including the Seafood Industry Victoria 2011 Training Award.

Keywords: Commonwealth Trawl Sector, Southern and Eastern Scalefish and Shark Fishery, SETFIA, South East Trawl Fishing Industry Association, South East Trawl Fishery, trawl, environment, accreditation, training, TEP species, protected species, social license.

8

Acknowledgments

We wish to thank to all of the owners, skippers and crew of the CTS who gave up their time to enthusiastically participate in these courses. Participation was greater than expected. We are appreciative of John Ford (representing AMCS) and Fiona Ewing (Oceanwatch) for their contributions during the project steering meeting, and of Oceanwatch officers Fiona Ewing (Lakes Entrance), Michael Wooden (Eden and Wollongong) and Nathan Bicknell (Portland) for presenting the module on Introduced Marine Pests. Steve Bolton (AFMA) and Brad Milic (AFMA) are thanked for delivering the module on Stock Rebuilding Strategies and Spatial and Temporal Closures. Thanks too to AFMA's by-catch team, Michael Tudman and Mike Gerner for their contribution to the presentation on seabirds and seals which was part of the Protected Species Module.

Background

The Southern and Eastern Scalefish and Shark Fishery (SESSF) is one of Australia's largest fisheries and supplies much of the fresh fish to our domestic markets. The fishery landed about 20,000 tonne of fish during 2009, which had a gross value of production worth \$95.5 million in 2008/09 (Wilson *et al.* 2009). The Commonwealth Trawl Sector (CTS) is a sub-fishery of the SESSF which uses otter (board) trawl and Danish seine gears. The area of the fishery ranges from Barranjoey Head (north of Sydney) to Cape Jervis in South Australia and encompasses Victoria and Tasmania. The CTS's turnover is in the order of \$47m per annum. The CTS is a multi-species fishery managed through both input controls (such as area closures, gear regulations and limited vessel licences) and output controls (such as quota, prohibited take and trip limits). There are 59 Statutory Fishing Rights (SFRs) within in the fishery, while Total Allowable Catches (TACs) are applied to 34 species or species groups. These quota species comprise about 80% by weight of the 100+ commercial species that are landed.

The South East Trawl Fishing Industry Association (SETFIA) represents CTS operators in south-east Australia. SETFIA was formed in 1988, and is governed by an elected board with the goal of advancing the interests of members. Membership is voluntary and presently comprises about 85% of CTS SFR holders.

Brooks (2009) identified that that "the South East Trawl Fishery has experienced enormous difficulty in stepping out from the shadow of perceived unsustainable and bad practices, which has been reflected in poor stakeholder and consumer perceptions". SETFIA understands these shortcomings, and has developed a strategic plan for the sector (Boag 2010), with the conviction that the sector needs to improve its credibility with stakeholders (decision makers and influencers) — SETFIA's noble purpose is, "Sustainable fishing practices protect our future". By increasing its perception with stakeholders SETFIA believes that there is a likelihood that the sector will have greater involvement in management decisions (meaning that these decisions will be better) and also that management arrangements may then be less precautionary.

SETFIA's strategic plan is based on the Balanced Scorecard framework, and as such, contains goals that build hierarchically across financial, internal culture,

fishing practices and stakeholder perspectives. Financial resources fund internal cultural change which leads to the improvement of fishing practices and ultimately, following communication, to improved stakeholder perceptions. SETFIA is committed to the ongoing training of fishers in order to improve both goals across all four perspectives. Metrics within SETFIA's strategic plan include the reporting of protected species, industry compliance and the number of fishermen trained each year and the frequency stakeholder communication through newsletters and positive media stories.

Need "for continuous improvement"

A weakness of the past SETFIA execution model was that when fishing behaviours were improved, there was no guarantee that those changes would be enduring. This weakness is highlighted in that the CTS historically operated two different industry codes of practice (COPs); a general code of conduct for responsible fishing (SETFIA 2006), and one to minimise interactions with seals (SETFIA, 2007). Both were arguably in need of updating, and there is no assessment of compliance to these COPs. Informal surveys showed that although operators were aware of the existence of the two COPs, they were often not kept on the vessel and that through a combination of time passed since their release and crew turnover, were not able to recount key elements of either COP. This means that some fishers may be conducting aspects of fishing operations that are outside of what the industry has resolved are appropriate or responsible. Inconsistent behaviours are also arising the increasing implementation of self-management arrangements by SETFIA, including voluntary area closures and split stock management (without formal quota areas) — although communications are sent to SETFIA members regarding self-management arrangements, the messages were not always passed from the vessel owners to the skippers and these arrangements are inherently complex. The industry needs a conduit though which to improve compliance to regulations and voluntary undertakings. Clearly there was a need for CTS operators to undergo formal training in some aspects of their fishing behaviours, and knowledge of formal and informal requirements, and for their participation in that training to be recognised by other key stakeholders including consumers.

Objectives

- 1. To initiate a conduit to effectively communicate existing voluntary management arrangements industry so they become enduring
- 2. To initiate a conduit for continual improvement in at sea fishing behaviors.
- 3. To initiate a conduit that will enable new projects to be effectively communicated to industry.
- 4. To initiate a conduit that provides an operational benefit to participation (i.e. a disadvantage to not being an endorsed operator)

Methods

Important to the development of the program, was to engage with key stakeholders to ensure that appropriate modules were being included to provide the most benefit along the aims of the project. A curriculum steering meeting (with participants listed in Appendix 5) was held in Melbourne on 15 July 2010 that was attended by Australian Fisheries Management Authority (AFMA) managers, SETFIA members, fisheries scientists, Oceanwatch (an NGO tasked with extending fisheries projects in State and Commonwealth fisheries) and a representative of Australian Marine Conservation Society (AMCS). The Department of Sustainability, Environment, Water, Population and Communities (SEWPaC) was invited but did not attend.

To provide formal accreditation for participants, training was delivered within the Australian Qualifications Framework (AQF). Consultation with SEAMEC confirmed that the required skills and knowledge identified by the steering committee were described by the Unit of Competency *SFIEMS301A Implement and monitor environmentally sustainable work practices*.(A Unit of Competency is a formal building block for a nationally recognised vocational qualification). *SFIEMS301A* is a unit within the following Seafood Industry qualifications:

```
SFI50411 - Diploma of Fisheries Compliance
```

SFI40611 - Certificate IV in Seafood Industry Sales and Distribution

SFI40511 - Certificate IV in Seafood Processing

SFI40411 - Certificate IV in Fisheries Compliance

SFI40311 - Certificate IV in Seafood Industry (Environmental Management)

SFI40211 - Certificate IV in Fishing Operations

SFI40111 - Certificate IV in Aquaculture

SFI30611 - Certificate III in Seafood Industry (Sales and Distribution)

SFI30511 - Certificate III in Seafood Processing

SFI30211 - Certificate III in Fishing Operations

SFI30111 - Certificate III in Aquaculture

Only a Registered Training Organisation (RTO) can issue a Statement of Attainment to demonstrate that an individual has met all the requirements of the Unit of Competency. East Gippsland TAFE was the RTO selected as a co-investigator because they are local to SETFIA's base in Lakes Entrance and specialise in maritime and fishing training through their SEAMEC campus in Lakes Entrance. It was also important that the selected RTO be willing to work with the industry to ensure that the training and assessment met the identified needs. SEAMEC staff worked with the steering committee to adapt the training and resources and assess the knowledge and skills of participants. While the training was delivered by experts from industry and management agencies, SEAMEC training staff supported these individuals during each session

A Unit of competence describes a suite of skills and associated underpinning knowledge that relate to a specific job function. From an educational point of view, a Unit of Competence describes what competence looks like but does not specify how training if delivered. A range of contexts and conditions may be used when training for, and assessing competency. Training was therefore tailored to issues relevant to the South East Trawl Fishery.

Each Unit of Competence contains Elements and Performance Criteria. Elements are roles or tasks that are performed in the workplace. Beneath each Element sit Performance Criteria. Performance Criteria are guiding statements indicating that the Element has been achieved.

In total SFIEMS301A contains four Elements and 19 Performance Criteria against which participants were assessed. These are shown in Appendix 2.

The course was delivered over two days with training broken down into eight modules which were formally assessed. This method was considered appropriate because it ensured that participants were all presented with the same information, that they actively participated in all modules, demonstrated that they had retained the knowledge

in a formal assessment, and that the participants received recognised certification if they successfully completed the assessment.

The final curriculum was agreed upon during the meeting. The course would comprise of eight modules that are listed in Table 1. The steering committee resolved that the course would have an introductory and concluding sessions with the other seven modules positioned between them.

The introductory session (module 1) worked in an interactive way through a Porter's 5 Forces strategic snapshot model. This showed candidates that inputs into the fishing model included fuel, wages, consumables, non-fish species with which to unintentionally interact (birds and seals), quota and fishing grounds. Also that increases in the price of fuel, wages and consumables could, to some extent, be offset against rises in fish prices but that the sector relied on the Australian community to allow a minimal level of interaction with non-fish species and for access to fishing grounds. That aquaculture was now the majority supplier of seafood globally and offered consumers a supply choice to wild caught seafood that was also generally cheaper but did not have the same health, taste, sanitation and sustainability benefits.

This introduction intended to have candidates reach their own conclusions about what consumers demand and create a desire for them to see this as an opportunity rather than a burden.

The seven modules that followed were then ordered building on each other (in the order listed in Table 1). Participants were taught about reporting (module 2) and then during the module on fishery assessments (module 3) realised that poor reporting lead to poorer assessments. Knowledge gained from understanding how stock assessments worked led into strategies to rebuild depleted stocks (module 4). These strategies include spatial closures (module 5). Protected species (module 6), marine debris and pollution (module 7) and foreign aquatic organisms (module 8) finished the assessed modules.

The final module presented participants with a choice on leaving the course that is best summarised in the final two slides of the course (figure 1).

CTS operators were invited to participate at one of the four courses, where they undertook each module, and were assessed in a written exam to test their recall of key

points. Participants were also given information folders containing sections on each module and were encouraged to store these on their vessel following the course.

It was important to this project to ensure wide-spread knowledge of it existence, and of the high participation rates amongst CTF operators. A branding logo was developed that can be used to identify vessels with accredited skippers (Figure 2). Scientists, managers and NGOs were briefed of the project during various SEMAC, ShelfRAG and SlopeRAG meetings. The Humane Society International (HSI) were directly briefed of the contents on of the course and participation rates (27 April 2011). Further extension was achieved through inclusion in the SETFIA newsletter that was distributed to over 1,000 fishing industry subscribers, and through radio interviews on ABC (21 March 2011 and 28 July 2011) and 3 Triple R's Radio Marinara (15 May 2011). The importance of this project was also acknowledged with receipt of the Seafood Industry Victoria 2011 training award, and this itself generated wider publicity.



Figure 2. Logo developed for advertising participation in course.

Documentation of the training program enables it to be updated, and rolled out again after some time to capture new entrants into the fishery, and refresh the memory of past participants. This initial unit also lays a framework for related future units. Potentially a participant might undertake further training to achieve a full qualification or skill set.





Figure 1 Final two slides of course

Table 1. Course modules and name of presenter(s).

Session name	Presenter
1. Introduction, the opportunity for industry: a snapshot of	Simon Boag (SETFIA)
the sector's strategic environment	
2. Commercial Logbook Reporting	Matt Koopman (Fishwell)
3. Stock assessment processes	Matt Koopman (Fishwell)
4. Stock rebuilding strategies	Steve Bolton (AFMA)
5. Spatial and temporal closures	Steve Bolton (AFMA)
6. Protected species mitigations and reporting	Matt Koopman (Fishwell)&
	AFMA By-catch team.
7. Marine debris and pollution	Ron Stott (SEAMEC)
8. Translocation of Foreign aquatic organisms (Introduced	SEANET/Oceanwatch
marine pests)	
9. Conclusion: what can fishers do to embrace the challenge	Simon Boag (SETFIA)
from purchasers	

It was anticipated that about 50 skippers (out of about 56 in total) would be accredited by the end of the course. In addition to achieving the project objectives the success of this project would be evaluated using two different measures: (1) the number of skippers that were successfully accredited; and (2) through a participant feedback survey.

Results and Discussion

Planning

This Unit selected (SFIEMS301A) addresses the knowledge, processes and techniques necessary to implement and monitor environmentally sustainable work practices in the fishing industry, including the development of processes and tools. It applies to those who have responsibility for a specific area of work or who lead a work group or team.

The following describes the curriculum developed for this Unit specific to the South East Trawl Fishery, with examples relevant to course that was delivered.

1. Investigate current practices in relation to resource usage

- Regulations(e.g. MARPOL)
- Setting TAC's (Fisheries Management Act)
- Compliance to environmental regulations(EPBC Act)
- Information collection and recording (e.g. Vessel logbooks)
- Work practices/processes (e.g. seal or seabird interactions, discarded quota or non-quota)

2. Set targets for improvements

- Stock rebuilding
- Interactions with protected species (seabird management plans and seal code of conduct)
- Logbook reporting and reporting of discards

3. Implement performance improvement strategies

- Interactions with protected species (seabird management plans and seal code of conduct)
- Logbook reporting and reporting of discards

4. Monitor performance

- Observation and recording procedures
- Reporting (interactions and discarding: industry reporting vs. observed data)

Using that framework, each subject was developed into a session plan (Appendix 6) that was used to compile the appropriate information for delivery, and construction of a

PowerPoint presentation within a common template. Assessment questions were also developed for each subject (Appendix 7).

Courses

Attendance at courses was well above expectation, and included owners, skippers and senior deck hands. Overall, at total of 83 industry members participated in the training courses, 33 more than what was anticipated. Active participation varied between members, but in general, was very good. All participants attained accreditation.

Feedback received from participants was excellent (Table 2). Satisfaction ratings for the three courses from which feedback was received ranged 8.3–9.9 out of 10, and averaged 9.3 overall.

Table 2. Number of industry participants attending each course.

Course	Number of	Participant Rating
	Participants	
Lakes Entrance (26–27 October 2010)	30	
		not completed
Eden (23–24 November 2010)	19	9.2/10
Portland (30 November – 1 December	13	8.3/10
2010)		
Wollongong (1–2 March 2011)	21	
		9.9/10
Total (weighted average)	83	9.3/10

Benefits and Adoption

It was anticipated that about 50 CTS skippers would attend training courses delivered by this project. Participation far exceeded expectations with 83 owners, skipper or senior crew attending, and all receiving nationally recognised accreditation. Participants included one each from the SESSF Gillnet, Hook and Trap Fishery and from the Small Pelagic Fishery who attended with a view to running similar courses in their fishery. The Conservation Member on the South East MAC also observed one day of the Wollongong course.

The benefits of this project are two-fold; to the environment, and to the CTS. Increased understanding of main environmental issues within the fishery will likely lead to reduced impact on the environment (for example, fishing behaviours in line with the COP to reduce the incidental capture of seals). While many of the practices are difficult to measure there are some hard measures available:

- 1. In their review of seal interaction reporting rates, Knuckey and Koopman (2011) concluded that a large increase in reporting rates of seal interactions during late 2010 was likely a result of the this (2009/330) project. They found that reports of seal interactions during the last quarter of 2010 were 41% higher than for any other quarter during July 2007 December 2010. This improved reporting rate will assist management by providing a more realistic understanding of the extent and distribution of seal interactions.
- 2. There has been a large increase in the reporting of "discards" (fish that is discarded and legally should be reported as such), with 80% of vessels now reporting discards

(pers. comm. Brad Milic, AFMA, see Appendix 3). This could enable fisheries assessments to obtain more accurate estimates of fishing mortality and catch rates. Both are critical for stock assessments.

If these two measures are an indication of improvement in fishing practices in all aspects covered by the course, then clearly this project has had beneficial outcomes for the environment. Benefits to industry are through improved stakeholder perception of the industry from seeing them being pro-active in addressing environmental concerns.

Further Development

The majority of CTF skippers and many owners and crew have participated in, and been accredited, during the SETFIA improved environmental operations course. However, over time there will be turnover of skippers and crew, creating the need to retrain fishers. It is intended to re-run this course at least every two years in some form to cover new entrants into the fishery, and also to retrain past participants to refresh the memory or to provide updated information. Funding applications for a 2012 course are currently being discussed with private industry and AFMA.

Planned Outcomes

There are two major outcomes from this project; increased environmental stewardship in the CTS and an improved stakeholder perception of the CTS. Increased environmental stewardship will have a direct effect on the management and sustainability of the CTS through reduced interactions with protected species, reduced risk of translocation of foreign aquatic organisms, greater compliance with MARPOL regulations, while improved understanding of reporting requirements and assessment and management strategies will improved the data collected by industry members, acceptance of management decisions and compliance with management directions. Improved stakeholder perception of the CTS is important to maintain the social license that the CTS requires to ensure long-term operation.

The outcomes achieved during this project are shown against objectives in Table 3.

.

Table 3.Planned outcomes versus achievement

Project Objective	Degree of Achievement		
To initiate a conduit to effectively	Achieved, highly successful.		
communicate existing voluntary management			
arrangements to Industry so these			
arrangements become enduring			
To initiate a conduit for continual	Somewhat achieved but ongoing funding		
improvement in at sea fishing behaviours	remains an issue. SETFIA has funding		
	approved in principle for the 2012 re-fresher.		
To initiate a conduit that will enable new	Achieved subject to ongoing funding.		
projects to be effectively communicated to	to		
industry			
To initiate a conduit that provides an	Achieved (evidenced by feedback scores).		
operational benefit to participation (i.e. a	. a SETFIA obtained several members following		
disadvantage to not being an endorsed	ed the course.		
operator)			

Conclusions

- A training course based on the Unit of Competence SFIEMS301A Implement and monitor environmentally sustainable work practices was developed to educate CTS skippers, owners and crews on improved environmental operations.
- The syllabus was set with input from managers, scientists, environmental NGOs and industry members.
- The course comprised 8 modules delivered over two days at each of four locations;
 Lakes Entrance, Eden, Portland and Wollongong.
- A total of 83 participants (versus a plan of 50) were trained and accredited. They included owners, skippers and senior crew.
- These 83 participants received a nationally recognised statement of attainment.
- The project increased the reporting of seal interactions by 41% and increased the reporting of discarded fish whereby 80% of vessels not report discards.
- Wide extension of this project was achieved through media release, briefing at relevant meetings and to environmental NGOs, radio interviews and industry newsletters.
- This project was awarded the Seafood Industry Victoria 2011 Training Award.

References

Boag, S. (2011). How can SETFIA, a fishing industry association, operationalise its strategic goals so that strategic outcomes are achieved within three years? Mt Eliza Business School MBA thesis.

Brooks, K. (2009). Understanding Government and environmental NonGovernment Organisations' perceptions and attitudes toward the South East Trawl fishing industry. FRDC Report No. 2008/316. South East Trawl Fishing Industry Association, Melbourne, November 2009.

Knuckey, I and Koopman, M. (2011). Evaluation of an Industry-based Program to Monitor Seal Interactions in the Commonwealth Trawl Sector of the Southern and Eastern Scalefish and Shark Fishery. FRDC Project 2005/049.2 Non-confidential Final Report - for Distribution. Fishwell Consulting 23pp.

SETFIA.(2006). Industry Code of Practice for Responsible Fishing. 16pp.

SETFIA (2007). Industry Code of Practice to Minimise Interactions with Seals. 12 pp.

Wilson, D., Curtotti, R., Beggs, G., and Phillips, K., (eds), (2009), Fishery Status Reports 2008, Department of Agriculture, Fisheries and Forestry, Bureau of Rural Sciences and Australian Bureau of Agricultural and Resource Economics, Canberra.

Appendix 1 - Intellectual Property

There is IP associated with the course content developed during this project. Individual presenters developed and used PowerPoint presentations. Approval has not been sought for these presentations to be released into the public domain. These presentations are viewed as FRDC IP category B. These presentations were not project objectives.

Appendix 2 – Unit of Competence Assessment Criteria

SFIEMS301A Implement and monitor environmentally sustainable work practices



-	onmental Work Practices Assess	ment Instrume	nt and Plan
Applicant Last Name			
First Name		Date of B	irth
Telephone	Email		
Street/PO Box			
City/Town		Post Cod	le
Assessment R	ecord		Date Completed
	onstration and application		Date completed
Written Exam			
Participations in gr	oup discussions briefings and debriefin	ngs	
Carry out checks a	nd record keeping		
	Not Competent:	Co	mpetent:
If not yet compet	ent, further action required:		
TE autus annus !	quired please fill in overleaf		
II extra space is re			
Assessor Nam	e		Date
			Date Date

Improved environmental work practices Assessment instrument and plan

SFIEMS301A Implement and monitor environmentally sustainable work practices



Improved Environmental Work Practices Record of Evidence

The candidate consistently

	ssment Criteria	СМ	NC	Comments
	Element 1. Investigate current practices in relation to resource usage			
1.1	Environmental regulations applying to the enterprise are identified.			
1.2	Procedures for assessing <i>compliance</i> with environmental regulations are evaluated for their effectiveness.			
1.3	Information on environmental and resource efficiency systems and procedures is collected, and when appropriate, provided to the work group.			
1.4	Current resource usage is measured and documented by members of the work group.			
1.5	Current <i>purchasing strategies</i> are analysed and documented			
1.6 impro	Current work processes are <i>analysed</i> to identify areas for ovement.			
2.1	nent 2. Set targets for improvements Input is sought from stakeholders, key personnel and falists.			
2.2 requi	External sources of information and data are accessed as			
2.3	Alternative solutions to workplace environmental issues are evaluated.			
2.4	Efficiency targets are set.			
	nent 3. Implement performance improvement tegies.			
3.1	Techniques and tools are sourced to assist in achieving ency targets.			
3.2	Continuous improvement strategies are applied to own work area and ideas and possible solutions are communicated to the work group and management.			

Improved environmental work practices Assessment instrument and plan

SFIEMS301A Implement and monitor environmentally sustainable work practices



3.3	Environmental and resource efficiency improvement plans for own work group are integrated with other operational activities and are implemented.		
3.4	Suggestions and ideas to improve the management of environmental and resource efficiency are sought from stakeholders and acted upon where appropriate.		
3.5	Costing strategies are implemented to fully value environmental assets.		
Eleme	ent 4. Monitor performance.		
4.1 comm	Outcomes are documented and reports on targets are unicated to key personnel and stakeholders.		
4.2	Strategies are evaluated.		
4.3	New targets are set and new tools and strategies are investigated and applied.		
4.4	Successful strategies are promoted and, where possible, participants are rewarded.		

Appendix 3 – Improved reporting of discards

simon boag

From: MILIC Brad [Brad.Milic@afma.gov.au]
Sent: Friday, 29 April 2011 2:10 PM
To: simonboag@setfia.org.au
Cc: SHEPHERD Anne; GIBSON Beth

Subject: Improved reporting [SEC=UNCLASSIFIED]

Simon.

Just a message to let you know that recording of discards on the SET logbooks has seen a large improvement over the last 2 months. Of the SET logbooks entered during March approximately over 80% contained some amount of discarding; this is a huge difference in reporting compared to prior months.

When all the fishing year data has been entered we will complete a table and compare the last two years. I will request you wait for these figures for putting any figures in your newsletter.

Any questions let me know.

Regards,

Brad Milic Manager Commonwealth & Great Australian Bight Trawl Demersal & Midwater Fisheries Australian Fisheries Management Authority

Appendix 4- Staff

Name	Organisation	Project Involvement
Simon Boag	SETFIA	Principle Investigator
Ian Knuckey	Fishwell Consulting	Co-Investigator
Matt Koopman	Fishwell Consulting	Scientist
Ron Stott	East Gippsland Institute of	Course facilitator
	TAFE	
Richard Owen	East Gippsland Institute of	Course facilitator
	TAFE	

Appendix 5 – Curriculum Steering Committee members

Organisation
SETFIA
Fishwell Consulting
Fishwell Consulting
SEAMEC
SEAMEC
AFMA
AFMA
Ocean Watch
CTF Fisherman
AMCS

Appendix 6 – Session Plans

Topic: Commercial Logbook Reporting

Presenter: Matt Koopman

Time	Contents	Resources for	Handouts for
frame		trainer	participants
E min	Current practice in relation to environmental operation	Power point presentation	DEWHA report of TEP interactions
5 mins	Summary of reporting and data use		
	Regulations		
10 mins	Fisheries Management Act 1991 – Section 42-1 and Section 95-1g EPBC Act 1999 Part 3 section 18 and 19 Part 13 MOU between AFMA and DEWHA		
	Industry compliance		
10 mins	EFT01B and SESS2A How to fill each field Importance of completing each field Examples of miss reporting		
5 mins	Recording of compliance		
	Feed back from AFMA		
	Targets for improvement	Power point	
5 mins	Correctly fill in each field – response to AFMA	presentation	
	Realistic targets		
	Feedback from industry on current logbooks		
	Performance improvement	Discussion	
	strategies		
10 mins	Implementation of improvements		
10 1111115	Discuss reasons for shortfalls in		

	current logbook reporting practices Discuss possible improvements to logbooks Discuss other ways to ensure better logbook reporting		
	Monitoring of environmental operations Process for review and evaluation	Power point presentation/ discussion	
5 mins	Comments from AFMA What are the benefits to the industry or individuals? Cost saving Stock assessments Quotas Legal Industry accreditation		

$\label{topic:topic:topic:topic:Threatened Endangered or Protected species mitigations and \\ \textbf{reporting}$

Presenter: Matt Koopman

Time	Contents	Resources for	Handouts for
frame		trainer	participants
	Current practice in relation to environmental operation	Power point Examples of TEP issues that	AFMA TEP guide
5 mins	What is a TEP species?	have closed	
	What is an interaction?	fisheries down.	AFMA fact sheets
	The regulations?		Gulpershark ID guide
10 mins	EPBC Act 1999 Part 3 section 18 and 19		
	MOU between AFMA and DEWHA Fisheries Management Plan SETFI Seal code		
20 mins	Current work practices		
	For each main species group: • What are the issues • Current mitigations in the		

	SESSF		
	Targets for improvement	Power point	Handout with
20 mins	Acknowledgement of a problem What other techniques are out there Improved mitigation techniques Experimentation Improved reporting Handling	example of relevant part of Vessel Manag't Plan. What method would work best on your boat??	list of TEP mitigation techniques and description Guidelines for
		,	handling and reporting of seal interactions
	Performance improvement strategies	Power point	
10 mins	Implementation of improvements		
	Implement simple mitigation measures What other mitigation measures are suitable for your vessel? Vessel Management Plans		
10 mins	Share your experience	Discussion	
	Monitoring of environmental operations	Power point with comparison of reporting	
	Observation and reporting procedures	rates with / without	
5 mins	Logbooks Observers AFMA reports to DEWHA	observers – what picture does is paint of industry.	
	Process for reviewing and evaluating targets and reporting requirements	Emphasise – not reporting is illegal.	
5 mins	Comparing interactions between trips with observers and not observers	Push to increase observer coverage as a	
	Benefits to the industry or individuals	result. @ \$1,200 per day	
5 mins	Can demonstrate improvements Legitimacy Accreditation	can you afford not to report?	
10mins	Question/answer-10 questions		

Topic: Stock Assessment Processes

Presenter: Matt Koopman

Time frame	Contents	Resources for trainer	Handouts for participants
Tunic	Current practice in relation to environmental operation The regulations	Powerpoint presentation	Why not hand out some typical
10 min	SESSF Management Plan 2003 Brief overview of process		assessment summaries for common species
	Involvement		
5 mins	AFMA comply with the regulations Industry record data and participate in RAGS		
	Compliance recording		
5 mins	Industry fill in logbooks AFMA accountable to DEWHA		
	Targets for improvement	Powerpoint	
	Improved compliance	presentation Data derived	
5 mins	Improved data recording shit in/shit out	from logbooks, ISMP, etc shown	
	Send in logbook complete and on time	in time series picture format.	
15 mins	Assessment process	Use good example like	
	RAG meetings	grenadier.	
	Data summaries Quantitative assessments	Show typical outputs of	
	Review of assessments RBCs	models	
	TACs		
	Undercatch/overcatch		
	Performance improvement strategies	Powerpoint presentation	
5 mins	Implement improvements	Catch rates with and without	
	Increased reporting of discards	discards.	
	Increased accuracy of data	Example of bycatch TAC species and how catch rate will	

		not show recovery.	
	Monitoring of environmental operations	Powerpoint presentation	
	Observation and reporting procedures	In case of uncertainty,	
5 mins	Logbook records	more precautionary	
	What are the benefits to the industry or individuals?	approach taken. Ie. There now is a cost for bad	
	Better stock assessment Sustainable fisheries	info.	

Topic: Stock Rebuilding Strategies

Presenter: **Steve Bolton**

Time	Contents	Resources for	Handouts for
frame		trainer	participants
	Current practice in relation to	Power Point	Harvest
	environmental operation		strategy
		(22 slides)	policy
	What are the regulations?		
	Intro to Commonwealth Harvest		Some copies
	Strategy Policy and how legislated	Some open	of 2008
		discussion	Fishery
	How the regulation works with respect	during slides	Assessment
	to stock rebuilding		Report (BRS)
20mins			
	Higher level of regulation		Stock
			rebuilding
	Ramifications of overfishing		strategies
	Species under rebuilding strategies		
	How does the industry comply? (work		
	practices)		
	Actions from harvest strategy control		
	rules		
	H		
	How is compliance recorded?		
	Fishery monitoring programs		
	Targets for improvement		
	In what ways can compliance be		

5mins	improved? Reporting What targets are realistic? Reference points under harvest strategies	
10mins	Performance improvement strategies How can improvements be implemented? Industry initiatives under stock rebuilding strategies	
10mins	Monitoring of environmental operations What are the Observation and reporting procedures? What is in fishery monitoring programs? What are the reporting requirements? Already covered in above What is the process for reviewing and evaluating targets and reporting requirements? Stock assessments and RAGs What are the benefits to the industry or individuals? Results from making improvements in reporting and other contributions	

Topic: Marine Debris and Pollution

Presenter: Ron Stott

Time frame	Contents	Resources for trainer	Handouts for participants
	Current practice in relation to environmental operation	Power point presentation	Print out from AMSAR
5min	Outline history and reason for regulation		website.

10min			
10min	Regulations Discuss Marpol Nav. Act 1912 Marine act 1988 MSV EPA Port Authorities Industry compliance Eg. Types of pollution (fishing especially) Distances offshore/mainland Treatment or processing Sewerage disposal		Garbage disposal Table summarising regulations for Fishing boats
	Recording Eg. Reporting pollution		
5mins	Targets for improvement Examples of pollution which have been caused by marine vessels Identify areas where the industry could improve its practice Eg. Bilge water disposal	Power point with pictures of pollution	
5mins	Performance improvement strategies Give examples of ways of improving the practices. Eg. Bilge water disposal Garbage disposal		
10mins	Monitoring of environmental operations Reporting requirements Harbour master office MSV incident report If crew affected-report to local police within 24hrs.		Incident report Garbage record book
10mins	Question/answer-10 questions		Questions handout

Topic: Translocation of Foreign Aquatic Organisms

Presenter: Fiona Ewing/Michael Wooden/Nathan Bicknell

Time	Contents	Resources for	Handouts for
frame		trainer	participants
	Current practice in relation		
	to environmental operation	Power point	Print outs from
5min	Outline history and reason for guidelines	presentation (using materials in line with National	Marine Pest website.
5min		System for Marine	
	Regulations	Pest incursions)	
	(As yet, there are no regulations for commercial fishing vessels, but it makes good sense for industry)		
5min	Industry compliance (Good ship keeping)		
	Recording (log any suspected marine pest sightings via vessel management plan?) Question for Simon Boag (is there already a system that the vessels use to report to company?)		
	Targets for improvement		pest impacts
10mins	Examples of introduced marine pest outbreaks and species of concern	Power point with pictures of marine pests outbreaks and species of concern	(pests already in Australia)
	Identify areas where the industry could improve its	in SE Australia	(pests not yet in Australia)
	practice Eg. Bilge water disposal/slipping/good shipkeeping)		National Biofouling Management Guidelines for commercial fishing vessels

5mins	Performance improvement strategies		Keeping Marine Pests out of our fishing grounds (laminated vessel copy) Best Practice Guidelines for domestic commercial fishing vessels to manage marine pests NIMPIS database
	Give examples of ways of improving the practices. Eg. Bilge water disposal Garbage disposal Discussion with participants		
5mins	Monitoring of environmental operations Reporting requirements Eg. Reporting a suspected pest – how to and who to. ID resources for marine pests	Interactive map of marine pests	Incident report (suspected pest)
5mins	Question/answer-(may not be necessary as the session should be conducted in participatory fashion)		

Appendix 7 – Assessment Questions

Improved Environmental Work practices



Underpinning	knowledge	assessment
---------------------	-----------	------------

Candidate Name:	MARITIME EDUCATION
Date:	
Please answer the following questions:	
Topic: Reporting	
Q 1. List 3 things that fishing logbook data are used for?	
1	
2	
3	
Q 2. Which two Acts require you to complete logbooks?	
Q 3. When filling in your logbook, you must separate spec 'mixed fish' if you?	cies from
a) Catch more than 1kg	
b) Catch more than 5kg	
c) Catch more than 10kg	
d) Acknowledge it's a quota species.	

Q 4. When do logbook sheets need to be returned to AFMA?
Topic: Stock assessments (How we set quotas?)
Q 5. What document (plan) specifies the requirement for fisheries stock assessments in the SESSF?
Q 6. List three ways that the fishing industry is involved in stock assessments?
Q 7. (ONLY IF STANDARDISATION COVERED) Which factors are taken into account when analysing catch rates (known as standardisation) in stock assessments? (circle the correct answer or answers)
a) vessel
b) Season
c) Depth
d) Area
e) All of the above.
Q 8.List two ways that Industry can improve stock assessment through changing their practices.

SETFIA improved environmental operation		
Topic: Stock rebuilding		
Q 9. Why is information provided by Skippers on species managed under stock rebuilding strategies so important?		
Q 10. Name all 4 SESSF (SET) species managed under stock rebuilding strategies		
1		
2		
3		
4		
Q 11. What are the two stock reference points (names not numbers) that drive harvest strategies in the fishery?		
1		
2		

Q 12. What reference point triggers a stock rebuilding strategy and what is the %?

Q 18. Is a voluntary closure as important as a regulated closure? If so why is it?
Q 19. If you are fishing in "waters adjacent to Victoria" what is the current rule about snapper?
Q 20. What two things should you do if you catch a gulper shark (upper-slope dogfish)?
1
2
Topic: TEP species (including seabird management plans and seals)
Q 21. What is an interaction?
Q 22. Which TEP species do you need to report interactions with in your logbooks? Which TEP species do you not need to report?
Q 23. What is the most effective method for reducing interactions with seabirds?

		SETFIA improved environmental operation	
-	Q 24. What is the primary consideration in assessing and implementing TEP mitigation techniques?		
Q 25 cond		ake under the SETFIA seal code of	
	Closing the trawl during hauling. Turns when hauling.		
c)	Deck lights when towing		
d)	Offal.	-	
e)	Having gear in the top 150m when shooting.		
Topi	c: Marine Debris		
_	6. What is the convention rol pollution and debris f	n that you operate under to from your vessel.	
Q 27	. What constitutes pollution	from your vessel?	

SETFIA improved environmental operation
Q 28. Who do you report a pollution incident to?
Topic: Introduced Marine Pests
Q 29. How can marine pests be translocated?
Give three examples.
Q 30. Are there any state regulations relating to ballast water on board your fishing vessel?
Q 31. What are some measures you could take to minimise the introduction of marine pests in your fishing operations?

	SETFIA improved environmental operation
Q 32. With regard to ballast wat method of exchange" and why is	· ·
Melbourne?	·
	CM /
NC	
Trainer / Assessor Name	
Trainer / Assessor signature	
Date	

Appendix 8 – Media Releases and Newsletter Articles

Welcome to SETFIA's new newsletter!

March's newsletter reports on the success of the FRDC funded Skipper training, the benefits of country of origin labelling of cooked seafood, the Board's development and puts some facts into the debate about the orange roughy fishery.



80 Crew trained in Lakes Entrance, Eden, Portland and Woolongong

Funded by the Fisheries Research and Development Corporation, SETFIA, in partnership with Fishwell Consulting and the South East Australian Maritime Education Centre has run a nationally accredited training course called Improved Environmental Work Practices. A steering committee including a representative from the Australian Marine Conservation Society set the curriculum. The assessed course society's expectations of the industry, stock assessments, reducing marine pollution, stopping the spread of foreign aquatic organisms, improving reporting, mitigating threatened, endangered and protected species integrations, reducing upper-slope dogfish catches, closures and rebuilding strategies. Graduate Skipper Ben Maas from the trawl vessel Celtic Rose in Portland said, "I think the course was great. Skippers need to become more involved as the industry evolves, we are the people that actually catch the fish".



Country of origin labelling will make Australian fisheries more sustainable

In 2008 the Northern Territory introduced legislation requiring the labelling of seafood in fish and chip shops, restaurants, cafes, bistros, hotels, motels and in supermarkets as Australian or imported. This is currently the only legislation of this type in Australia. In the south east it is already law that fresh seafood must be labelled as Australian or imported. SETFIA believes that consumers should, on principle, have the right to make an informed choice when purchasing seafood. For instance many restaurants advertise "flathead" meals but in many cases this fish is fact an imported species unrelated in any way, an example is "Argentine" flathead. Australian fisheries are amongst the most sustainable in the world but this carries an additional production cost. The consumer must be able to recognise sustainable Australian product or it will be out competed by cheaper less sustainable products. The majority of international fisheries importing fish into Australia are not subject to similar controls and do not face these "costs of sustainability". This creates an unfair playing field. SETFIA is lobbying for similar laws across Australia.





MEDIA RELEASE

SOUTH EAST TRAWL FISHERMEN REACH FINALS IN ENVIRONMENT & SUSTAINABILITY AWARD

5th September, 2011. For immediate release.

The South East Trawl Fishery has reached the finals in Award Australia's 2011 Regional Achievement and Community Awards in the Environment and Sustainability category. This follows a win in this year's Victorian Seafood Industry Awards training category and a highly commended mention in the Sydney Fish Market Seafood Excellence Awards in the sustainability category.

Simon Boag, SETFIA's CEO said, "The trophy cabinet is filling due to the great work in the environment of fishermen in the South East Trawl Fishery. Our members continue to improve their reporting and have taken significant steps to avoid interactions with seabirds and seals. Our fishery has been operating for 98 years and this work contributes to it continuing for generations to come. Fish eaters should buy Australian fish whenever possible and should ask in restaurants if it is not clear where fish is from. Australian fish is sustainable."

Information on the Parks Victoria Regional Achievement and Community Awards can be found by clicking here.

For more information contact Simon Boag, CEO SETFIA on simonboag@setfia.org.au or 0428-141591.



SETFIA Highly Commended for Excellence in Environmental Practice

PRESS RELEASE 22 August, 2011. For immediate release.

South East Trawl fishermen have been recognised for their work in improving their performance while operating in the marine environment. Their work has been highly commended in the Excellence in Environmental Practice category at this year's Sydney Fish Market Seafood Excellence Awards.

Simon Boag, the South East Trawl Fishing Industry Association's (SETFIA's) CEO said, "I am proud to work for such a responsible group. This award is recognition for the training 82 South East Trawl Fishermen completed and an ongoing commitment that has led to improved reporting, the reduced likelihood of seabird and seal interactions as well as codes of conduct to reduce the catch of eastern gemfish and Victorian snapper."

The training course was funded by the Fisheries Research and Development Corporation.

The South East Trawl fishery is managed under the Environmental Protection and Biodiversity Conservation Act (1999) and the Fisheries Management Act (1991). It is a certified Wildlife Trade Operation. Most of the fishery's species are managed under quotas which are set at sustainable levels in line with the Commonwealth Government's Harvest Strategy. The fishery is Australia's second largest fishery and one of Australia's oldest having operated for almost 100 years.

For more information contact Simon Boag, SETFIA's CEO on simonboag@setfia.org.au or 0428-141591.



12 May 2011





Date:

Title: Fishermen help SEAMEC win award

Local trawl fishermen have adopted new practices and significantly improved environmental outcomes, which helped South East Maritime Education Centre (SEAMEC) and South East Trawl Fishing Industry Association (SETFIA) win the top award in the Victorian Scafood Industry awards last week. [6 May]

Victoria's Minister for Agriculture and Food Security. Poter Walsh, presented the Scafood Industry Training Award for the Improved Environmental Operations course to Richard Owen. SEAMEC General Manager, and Simon Boag, SETFIA CEO.

The course addressed community expectations of the fishing industry, including issues such as reporting, mitigating protected species interactions, marine pollution, foreign aquatic organisms and how fishery assessments work. The fully assessed course was certified under the national qualifications framework and was completed by 70 South East Trawl fishermen.

Some of the immediate benefits arising among those who completed the course included dramatically improved reporting levels and seabird management plans being implemented faster than planned.

Mr Boag praised the Fisheries and Research Development Corporation for funding this project, and the fishermen who completed the course and diligently put their training into immediate practice. He said SETFIA offered at least one day's training of South East Trawl fisherman each year.

Mr Owen said the course's success was achieved by efforts of the fishermen who remain committed to improving their industry practices, and to the collaborative planning efforts of the FRDC, SETFIA and SEAMEC.

For further information please contact:

Name:	Richard Owen
Position:	General Manager, SEAMEC
Phone:	03 5155 6836
E-mail:	rowen@egtafe.vic.edu.au

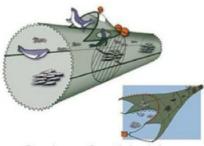
The editorial content provided by East Gippstand Institute of TAFE has been read, approved and permission to print given by those named in its content. For further information or verification of permission, contact Marketing & Corporate Communications on 03 5142 2532.

File name	Caption	Permission Given
Pic to be supplied	TO COME	Yus



May Newsletter

May's newsletter reports on how seal exclusion devices (SED's) are reducing seal interactions, on industry stalwart John Jarvis, on how fisherman Kevin Gray won a PlayStation for correctly identifying shark species and on the recognition that South East Trawl fishermen have achieved for the results of the training program they completed earlier this year.



Seals safer this blue grenadier season on freezer boats

Seals are attracted to fishing vessels by the promise of an easy feed, they often chase fish in trawl nets.

Unfortunately, some seals become disorientated in trawls and drown. Freezer vessels are boats that freeze fish at sea rather than bring fish home fresh. Around half of the South East Trawl blue grenadier catch is taken by freezer vessels. Seals are protected under the EPBC Act, it is not illegal for a fishing vessel to accidently have an interaction with a seal provided the fishery is a certified Wildlife Trade Operation (WTO) and vessels take reasonable steps to avoid interactions.

There are three phases of a fishing operation; shooting (deploying the trawl), fishing and hauling. Seals are only vulnerable when the net is near the surface during shooting and hauling. Before shooting, the net mouth is tied closed with light twine. Only when it is well underwater (too deep for seals to reach), does the spreading force of trawl doors (large metal plates used to open the net) break the twine and the net opens and begins fishing. During fishing the net is too deep for seals to reach. A seal exclusion device or SED helps protect seals during hauling. A SED is a device that allows seals to escape before they reach the cod-



Straight to the trophy room

SETFIA and the South East Maritime Education Centre have won the Seafood Industry Victoria's Seafood Industry Training Award. The award is recognition of the Improved Environmental Operations course completed by 82 South East Trawl fishermen. The award was presented to Richard Owen, SEAMEC's General Manager and Simon Boag, SETFIA's CEO by Victoria's Minister for Agriculture and Food Security the Hon. Peter Walsh. The training course is certified under the national qualifications framework and was fully assessed. The course explained the Australian community's expectations of the fishing industry and then worked through issues such as reporting, mitigating protected species interactions, marine pollution, foreign aquatic organisms and how fishery assessments work. The course has brought about immediate benefits including dramatically improved reporting levels and a faster than planned implementation of seabird management plans. SETFIA would again like to thank the Fisheries and Research Development Corporation for funding this project. SETFIA is committed to at least a single day's training of South East Trawl fisherman each year on an ongoing basis, [Image by Emily Guy]